FORM 10-Q

Quarterly report pursuant to sections 13 or 15(d)

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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

(Mark One)

☑ QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended: June 30, 2019

or

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission File Number 001-38598

BLOOM ENERGY CORPORATION

(Exact name of Registrant as specified in its charter)

Delaware	**77-0565408**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)
4353 North First Street, San Jose, California	**95134**
(Address of principal executive offices)	(Zip Code)

(408) 543-1500

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Securities Exchange Act

Title of Each Class [1]	Trading Symbol	Name of each exchange on which registered
Class A Common Stock $0.0001 par value	BE	New York Stock Exchange

[1] Our Class B Common Stock is not registered but is convertible into shares of Class A Common Stock at the election of the holder.

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☑ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☑ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☐ Accelerated filer ☐ Non-accelerated filer ☑ Smaller reporting company ☐ Emerging growth company ☑

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes ☐ No ☑

The number of shares of the registrant's common stock outstanding as of August 5, 2019 was as follows:

Class A Common Stock $0.0001 par value 69,993,919 shares

Class B Common Stock $0.0001 par value 46,347,002 shares

Bloom Energy Corporation

Quarterly Report on Form 10-Q for the Six Months Ended June 30, 2019

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SPECIAL NOTE ABOUT FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. All statements contained in this Quarterly Report on Form 10-Q other than statements of historical fact, including statements regarding our future operating results and financial position, our business strategy and plans and our objectives for future operations, are forward-looking statements. The words "believe," "may," "will," "estimate," "continue," "anticipate," "predict," "project," "potential," "seek," "intend," "could," "would," "should," "expect," "plan" and similar expressions are intended to identify forward-looking statements.

Forward-looking statements in this Quarterly Report on Form 10-Q include, but are not limited to, our plans and expectations regarding future financial results, expected operating results, business strategies, the sufficiency of our cash and our liquidity, projected costs and cost reductions, development of new products and improvements to our existing products, the impact of recently adopted accounting pronouncements, our manufacturing capacity and manufacturing costs, the adequacy of our agreements with our suppliers, legislative actions and regulatory compliance, competitive position, management's plans and objectives for future operations, our ability to obtain financing, our ability to comply with debt covenants or cure defaults, if any, our ability to repay our obligations as they come due, trends in average selling prices, the success of our PPA Entities, expected capital expenditures, warranty matters, outcomes of litigation, our exposure to foreign exchange, interest and credit risk, general business and economic conditions in our markets, industry trends, the impact of changes in government incentives, risks related to privacy and data security, the likelihood of any impairment of project assets, long-lived assets and investments, trends in revenue, cost of revenue and gross profit (loss), trends in operating expenses including research and development expense, sales and marketing expense and general and administrative expense and expectations regarding these expenses as a percentage of revenue, future deployment of our Energy Servers, expansion into new markets, our ability to expand our business with our existing customers, our ability to increase efficiency of our product, our ability to decrease the cost of our product, our future operating results and financial position, our business strategy and plans and our objectives for future operations.

You should not rely upon forward-looking statements as predictions of future events. We have based the forward-looking statements contained in this Quarterly Report on Form 10-Q primarily on our current expectations and projections about future events and trends that we believe may affect our business, financial condition, operating results and prospects. The outcome of the events described in these forward-looking statements is subject to risks, uncertainties and other factors including those discussed in ITEM 1A - Risk Factors and elsewhere in this Quarterly Report on Form 10-Q. Moreover, we operate in a very competitive and rapidly changing environment. New risks and uncertainties emerge from time to time and it is not possible for us to predict all risks and uncertainties or the extent to which any factor or combination of factors may cause actual results to differ materially from those contained in any forward-looking statements we may make in this Quarterly Report on Form 10-Q. We cannot assure you that the results, events and circumstances reflected in the forward-looking statements will be achieved or occur. Actual results, events or circumstances could differ materially and adversely from those described or anticipated in the forward-looking statements.

The forward-looking statements made in this Quarterly Report on Form 10-Q relate only to events as of the date on which the statements are made. We undertake no obligation to update any forward-looking statements made in this Quarterly Report on Form 10-Q to reflect events or circumstances after the date of this Quarterly Report on Form 10-Q or to reflect new information or the occurrence of unanticipated events, except as required by law. We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements and you should not place undue reliance on our forward-looking statements.

Our actual results and timing of selected events may differ materially from those anticipated in these forward-looking statements as a result of many factors including those discussed under ITEM 1A - Risk Factors and elsewhere in this Quarterly Report on Form 10-Q.

PART I - FINANCIAL INFORMATION

ITEM 1 - FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Bloom Energy Corporation
Condensed Consolidated Balance Sheets
(in thousands)
(unaudited)

	June 30, 2019	December 31, 2018
Assets		
Current assets:		
Cash and cash equivalents[1]	$ 308,009	$ 220,728
Restricted cash[1]	23,706	28,657
Short-term investments	—	104,350
Accounts receivable[1]	38,296	84,887
Inventories	104,934	132,476
Deferred cost of revenue	86,434	62,147
Customer financing receivable[1]	5,817	5,594
Prepaid expense and other current assets[1]	25,088	33,742
Total current assets	592,284	672,581
Property, plant and equipment, net[1]	406,610	481,414
Customer financing receivable, non-current[1]	64,146	67,082
Restricted cash, non-current[1]	39,351	31,100
Deferred cost of revenue, non-current	59,213	102,699
Other long-term assets[1]	60,975	34,792
Total assets	$ 1,222,579	$ 1,389,668
Liabilities, Redeemable Noncontrolling Interest, Stockholders' Deficit and Noncontrolling Interests		
Current liabilities:		
Accounts payable[1]	$ 61,427	$ 66,889
Accrued warranty	12,393	19,236
Accrued other current liabilities[1]	109,722	69,535
Deferred revenue and customer deposits[1]	129,321	94,158
Current portion of recourse debt	15,681	8,686
Current portion of non-recourse debt[1]	7,654	18,962
Current portion of non-recourse debt from related parties[1]	2,889	2,200
Total current liabilities	339,087	279,666
Derivative liabilities, net of current portion[1]	13,079	10,128
Deferred revenue and customer deposits, net of current portion[1]	181,221	241,794
Long-term portion of recourse debt	362,424	360,339
Long-term portion of non-recourse debt[1]	219,182	289,241
Long-term portion of recourse debt from related parties	27,734	27,734
Long-term portion of non-recourse debt from related parties[1]	32,643	34,119

Other long-term liabilities[1]	58,417	55,937
Total liabilities	1,233,787	1,298,958
Commitments and contingencies (Note 13)		
Redeemable noncontrolling interest	505	57,261
Stockholders' deficit	(115,785)	(91,661)
Noncontrolling interest	104,072	125,110
Total liabilities, redeemable noncontrolling interest, stockholders' deficit and noncontrolling interest	$ 1,222,579	$ 1,389,668

[1]We have variable interest entities which represent a portion of the consolidated balances are recorded within the "Cash and cash equivalents," "Restricted cash," "Accounts receivable," "Customer financing receivable," "Prepaid expenses and other current assets," "Property and equipment, net," "Customer financing receivable, non-current," "Restricted cash, non-current," "Other long-term assets," "Accounts payable," "Accrued other current liabilities," "Deferred revenue and customer deposits," "Current portion of non-recourse debt from related parties," "Derivative liabilities, net of current portion," "Deferred revenue and customer deposits, net of current portion," "Long-term portion of non-recourse debt," and "Other long-term liabilities" financial statement line items in the Condensed Consolidated Balance Sheets (see *Note 12 - Power Purchase Agreement Programs*).

The accompanying notes are an integral part of these condensed consolidated financial statements.

Bloom Energy Corporation
Condensed Consolidated Statements of Operations
(in thousands, except per share data)
(unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Revenue:				
Product	$ 179,899	$ 108,654	$ 321,633	$ 229,961
Installation	17,285	26,245	39,543	40,363
Service	23,659	19,975	46,949	39,882
Electricity	12,939	14,007	26,364	28,036
Total revenue	233,782	168,881	434,489	338,242
Cost of revenue:				
Product	131,952	70,802	255,952	151,157
Installation	22,116	37,099	46,282	47,537
Service	19,599	19,260	47,156	43,513
Electricity	18,442	8,949	27,671	19,598
Total cost of revenue	192,109	136,110	377,061	261,805
Gross profit	41,673	32,771	57,428	76,437
Operating expenses:				
Research and development	29,772	14,413	58,631	29,144
Sales and marketing	18,359	8,254	38,822	16,516
General and administrative	43,662	15,359	82,736	30,347
Total operating expenses	91,793	38,026	180,189	76,007
Gain (loss) from operations	(50,120)	(5,255)	(122,761)	430
Interest income	1,700	444	3,585	859
Interest expense	(16,725)	(22,525)	(32,687)	(43,904)
Interest expense to related parties	(1,606)	(2,672)	(3,218)	(5,299)
Other income (expense), net	(222)	(855)	43	(930)
Loss on revaluation of warrant liabilities and embedded derivatives	—	(19,197)	—	(23,231)
Net loss before income taxes	(66,973)	(50,060)	(155,038)	(72,075)
Income tax provision	258	128	466	461
Net loss	(67,231)	(50,188)	(155,504)	(72,536)
Net loss attributable to noncontrolling interests and redeemable noncontrolling interests	(5,015)	(4,512)	(8,847)	(9,143)
Net loss attributable to Class A and Class B common stockholders	$ (62,216)	$ (45,677)	$ (146,657)	$ (63,393)
Net loss per share attributable to Class A and Class B common stockholders, basic and diluted	$ (0.55)	$ (4.34)	$ (1.30)	$ (6.05)
Weighted average shares used to compute net loss per share attributable to Class A and Class B common stockholders, basic and diluted	113,622	10,536	112,737	10,470

The accompanying notes are an integral part of these condensed consolidated financial statements.

Bloom Energy Corporation
Condensed Consolidated Statements of Comprehensive Loss
(in thousands)
(unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	**2018**	**2019**	**2018**
Net loss attributable to Class A and Class B stockholders	$ (62,216)	$ (45,677)	$ (146,657)	$ (63,393)
Other comprehensive income (loss), net of taxes:				
Unrealized gain (loss) on available-for-sale securities	9	100	26	91
Change in derivative instruments designated and qualifying in cash flow hedges	(3,502)	986	(5,693)	3,853
Other comprehensive income (loss), net of taxes	(3,493)	1,086	(5,667)	3,944
Comprehensive loss	(65,709)	(44,591)	(152,324)	(59,449)
Comprehensive (income) loss attributable to noncontrolling interests and redeemable noncontrolling interests	3,340	(984)	5,388	(3,563)
Comprehensive loss attributable to Class A and Class B stockholders	$ (62,369)	$ (45,575)	$ (146,936)	$ (63,012)

The accompanying notes are an integral part of these condensed consolidated financial statements.

Bloom Energy Corporation
Condensed Consolidated Statements of Convertible Redeemable Preferred Stock, Redeemable Noncontrolling Interest, Stockholders' Deficit and Noncontrolling Interest
(in thousands, except share amounts)
(unaudited)

Three Months Ended June 30, 2019

	Convertible Redeemable Preferred Stock		Redeemable Noncontrolling Interest	Class A and Class B Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Gain (Loss)	Accumulated Deficit	Stockholders' Deficit	Noncontrolling Interest
	Shares	Amount	Amount	Shares	Amount					
Balances at March 31, 2019	—	$ —	$ 58,802	113,214,063	$ 11	$2,551,256	$ 5	$ (2,656,711)	$ (105,439)	$ 114,664
Issuance of restricted stock awards	—	—	—	543,636	—	—	—	—	—	—
Exercise of stock options	—	—	—	191,644	—	828	—	—	828	—
Stock-based compensation expense	—	—	—	—	—	51,195	—	—	51,195	—
Unrealized gain on available for sale securities	—	—	—	—	—	—	9	—	9	—
Change in effective and ineffective portion of interest rate swap agreement	—	—	—	—	—	—	(162)	—	(162)	(3,340)
Distributions to noncontrolling interests	—	—	(3,255)	—	—	—	—	—	—	(1,595)
Mandatory redemption of noncontrolling interests	—	—	(55,684)	—	—	—	—	—	—	—
Cumulative effect of hedge accounting standard adoption	—	—	—	—	—	—	—	—	—	—
Net income (loss)	—	—	642	—	—	—	—	(62,216)	(62,216)	(5,657)
Balances at June 30, 2019	—	$ —	$ 505	113,949,343	$ 11	$2,603,279	$ (148)	$ (2,718,927)	$ (115,785)	$ 104,072

Six Months Ended June 30, 2019

	Convertible Redeemable Preferred Stock		Redeemable Noncontrolling Interest	Class A and Class B Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Gain (Loss)	Accumulated Deficit	Stockholders' Deficit	Noncontrolling Interest
	Shares	Amount	Amount	Shares	Amount					
Balances at December 31, 2018	—	$ —	$ 57,261	109,421,183	$ 11	$2,480,597	$ 131	$ (2,572,400)	$ (91,661)	$ 125,110
Issuance of restricted stock awards	—	—	—	3,504,098	—	—	—	—	—	—
ESPP purchase	—	—	—	696,036	—	6,916	—	—	6,916	—
Exercise of stock options	—	—	—	328,026	—	1,405	—	—	1,405	—
Stock-based compensation expense	—	—	—	—	—	114,361	—	—	114,361	—
Unrealized gain on available for sale securities	—	—	—	—	—	—	26	—	26	—
Change in effective and ineffective portion of interest rate swap agreement	—	—	—	—	—	—	(305)	—	(305)	(5,388)
Distributions to noncontrolling interests	—	—	(3,537)	—	—	—	—	—	—	(4,208)
Mandatory redemption of noncontrolling interests	—	—	(55,684)	—	—	—	—	—	—	—
Cumulative effect of hedge accounting standard adoption	—	—	—	—	—	—	—	130	130	(130)

Net income (loss)	—	—	2,465	—	—	—	—	(146,657)	(146,657)	(11,312)
Balances at June 30, 2019	—	$ —	$ 505	113,949,343	$ 11	$2,603,279	$ (148)	$ (2,718,927)	$ (115,785)	$ 104,072

Three Months Ended June 30, 2018

	Convertible Redeemable Preferred Stock		Redeemable Noncontrolling Interest	Common Stock[1]		Additional Paid-In Capital	Accumulated Other Comprehensive Gain (Loss)	Accumulated Deficit	Stockholders' Deficit	Noncontrolling Interest
	Shares	Amount	Amount	Shares	Amount					
Balances at March 31, 2018	71,740,162	$1,465,841	$ 58,176	10,424,982	$ 1	$ 158,604	$ 117	$ (2,348,363)	$ (2,189,641)	$ 149,759
Revaluation of common stock warrants	—	—	—			(66)			(66)	—
Issuance of restricted stock awards	—	—	—	—	—	—	—	—	—	—
Exercise of stock options	—	—	—	145,659	—	623	—	—	623	—
Stock-based compensation expense	—	—	—	—	—	7,642	—	—	7,642	—
Unrealized gain on available for sale securities	—	—	—	—	—		100	—	100	—
Change in effective portion of interest rate swap agreement	—	—	(1)	—	—	—	—	—	—	987
Distributions to noncontrolling interests	—	—	(4,741)	—	—	—	—	—	—	(3,296)
Net income (loss)	—	—	1,506	—	—	—	—	(45,677)	(45,677)	(6,017)
Balances at June 30, 2018	71,740,162	$1,465,841	$ 54,940	10,570,641	$ 1	$ 166,803	$ 217	$ (2,394,040)	$ (2,227,019)	$ 141,433

[1] Common Stock issued and converted to Class A Common and Class B Common effective July 2018.

Six Months Ended June 30, 2018

	Convertible Redeemable Preferred Stock		Redeemable Noncontrolling Interest	Common Stock[1]		Additional Paid-In Capital	Accumulated Other Comprehensive Gain (Loss)	Accumulated Deficit	Stockholders' Deficit	Noncontrolling Interest
	Shares	Amount	Amount	Shares	Amount					
Balances at December 31, 2017	71,740,162	$1,465,841	$ 58,154	10,353,269	$ 1	$ 150,803	$ (162)	$ (2,330,647)	$ (2,180,005)	$ 155,372
Revaluation of common stock warrants	—	—	—	—	—	(66)	—	—	(66)	—
Issuance of restricted stock awards	—	—	—	3,615	—	67	—	—	67	—
Exercise of stock options	—	—	—	213,757	—	743	—	—	743	—
Stock-based compensation expense	—	—	—	—	—	15,256	—	—	15,256	—
Unrealized gain on available for sale securities	—	—	—	—	—	—	91	—	91	—
Change in effective portion of interest rate swap agreement	—	—	2	—	—	—	288	—	288	3,563
Distributions to noncontrolling interests	—	—	(6,213)	—	—	—	—	—	—	(5,362)
Net income (loss)	—	—	2,997	—	—	—	—	(63,393)	(63,393)	(12,140)
Balances at June 30, 2018	71,740,162	$1,465,841	$ 54,940	10,570,641	$ 1	$ 166,803	$ 217	$ (2,394,040)	$ (2,227,019)	$ 141,433

[1] Common Stock issued and converted to Class A Common and Class B Common effective July 2018.

The accompanying notes are an integral part of these condensed consolidated financial statements.

Bloom Energy Corporation
Condensed Consolidated Statements of Cash Flows
(in thousands)
(unaudited)

	Six Months Ended June 30,	
	2019	**2018**
Cash flows from operating activities:		
Net loss	$ (155,504)	$ (72,536)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and Amortization	31,023	21,554
Write-off of property, plant and equipment, net	2,704	661
Write-off of PPA II decommissioned assets	25,613	—
Debt make-whole penalty	5,934	—
Revaluation of derivative contracts	555	28,611
Stock-based compensation	115,100	15,773
Loss on long-term REC purchase contract	60	100
Revaluation of stock warrants	—	(7,456)
Revaluation of preferred stock warrants	—	(166)
Amortization of debt issuance cost	11,255	14,420
Changes in operating assets and liabilities:		
Accounts receivable	46,591	(6,486)
Inventories	27,542	(46,172)
Deferred cost of revenue	19,198	48,760
Customer financing receivable and other	2,713	2,439
Prepaid expenses and other current assets	8,477	4,544
Other long-term assets	1,028	15
Accounts payable	(5,461)	5,217
Accrued warranty	(6,843)	(1,883)
Accrued other current liabilities	7,213	(12,815)
Deferred revenue and customer deposits	(25,411)	(31,817)
Other long-term liabilities	3,419	18,652
Net cash provided by (used in) operating activities	115,206	(18,585)
Cash flows from investing activities:		
Purchase of property, plant and equipment	(18,882)	(1,595)
Payments for acquisition of intangible assets	(970)	—
Purchase of marketable securities	—	(15,732)
Proceeds from maturity of marketable securities	104,500	27,000
Net cash provided by investing activities	84,648	9,673
Cash flows from financing activities:		
Repayment of debt	(83,997)	(9,201)
Repayment of debt to related parties	(1,220)	(627)
Debt make-whole payment	(5,934)	—
Payments to redeemable noncontrolling interests related to the PPA II decommissioning	(18,690)	—

Distributions to noncontrolling and redeemable noncontrolling interests	(7,753)	(11,582)
Proceeds from issuance of common stock	8,321	742
Payments of initial public offering issuance costs	—	(1,160)
Net cash used in financing activities	(109,273)	(21,828)
Net increase (decrease) in cash, cash equivalents, and restricted cash	90,581	(30,740)
Cash, cash equivalents, and restricted cash:		
Beginning of period	280,485	180,612
End of period	$ 371,066	$ 149,872
Supplemental disclosure of cash flow information:		
Cash paid during the period for interest	$ 23,867	$ 16,540
Cash paid during the period for taxes	497	625
Non-cash investing and financing activities:		
Liabilities recorded for property, plant and equipment	4,662	512
Liabilities recorded for intangible assets	—	169
Liabilities recorded for mandatorily redeemable noncontrolling interest	36,994	—
Equity investment in PPA II assets	27,809	—
Issuance of restricted stock	—	532
Accrued distributions to Equity Investors	566	566
Accrued interest and issuance for notes	888	16,920
Accrued interest and issuance for notes to related parties	—	1,195

The accompanying notes are an integral part of these condensed consolidated financial statements.

Bloom Energy Corporation
Notes to Condensed Consolidated Financial Statements

1. Nature of Business and Liquidity

Nature of Business

Throughout this Quarterly Report on Form 10-Q, unless the context otherwise requires, the terms “Bloom Energy,” “we,” “us” and “our” refer to Bloom Energy Corporation and its consolidated subsidiaries.

We design, manufacture, sell and, in certain cases, install solid-oxide fuel cell systems ("Energy Servers") for on-site power generation. Our Energy Servers utilize an innovative fuel cell technology. The Energy Servers provide efficient energy generation with reduced operating costs and lower greenhouse gas emissions. By generating power where it is consumed, our energy producing systems offer increased electrical reliability and improved energy security while providing a path to energy independence. We were originally incorporated in Delaware under the name of Ion America Corporation on January 18, 2001 and on September 16, 2006 were renamed to Bloom Energy Corporation.

Liquidity

We have incurred operating losses and negative cash flows from operations since our inception. Our ability to achieve our long-term business objectives depends upon, among other things, raising additional capital, acceptance of our products and attaining future profitability. We believe we will be successful in raising additional financing from our stockholders or from other sources, in expanding operations and in gaining market share. For example, in July 2018, we successfully completed an initial public stock offering ("IPO") with the sale of 20,700,000 shares of Class A common stock at a price of $15.00 per share, resulting in net cash proceeds of $282.3 million net of underwriting discounts, commissions and offering costs. We believe that our existing cash and cash equivalents and short-term investments will be sufficient to meet our operating and capital cash flow requirements and other cash flow needs for at least the next 12 months from the date of this quarterly report on Form 10-Q. However, there can be no assurance that in the event we require additional financing, such financing will be available on terms which are favorable or at all.

2. Basis of Presentation and Summary of Significant Accounting Policies

We have prepared the condensed consolidated financial statements included herein pursuant to the rules and regulations of the U.S. Securities and Exchange Commission ("SEC"). Certain information and footnote disclosures normally included in the consolidated balance sheets as of June 30, 2019 and December 31, 2018, the consolidated statements of operations, the consolidated statements of comprehensive loss, the consolidated statements of convertible redeemable preferred stock, redeemable noncontrolling interest, stockholders' deficit and noncontrolling interest for the three and six months ended June 30, 2019 and 2018, and the consolidated statements of cash flows for the six months ended June 30, 2019 and 2018, as well as other information disclosed in the accompanying notes, have been prepared in accordance with U.S. generally accepted accounting principles as applied in the United States ("U.S. GAAP") and have been condensed or omitted pursuant to such rules and regulations. However, we believe that the disclosures herein are adequate to ensure the information presented is not misleading. These unaudited condensed consolidated financial statements should be read in conjunction with the audited financial statements and the notes thereto included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2018, as filed with the SEC on March 22, 2019.

We believe that all necessary adjustments, which consisted only of normal recurring items, have been included in the accompanying financial statements to fairly state the results of the interim periods. The results of operations for the interim periods presented are not necessarily indicative of the operating results to be expected for any subsequent interim period or for our fiscal year ending December 31, 2019.

Certain prior year's amounts reported herein have been reclassified to conform to current period presentation.

Principles of Consolidation

These condensed consolidated financial statements reflect our accounts and operations and those of our subsidiaries in which we have a controlling financial interest. We use a qualitative approach in assessing the consolidation requirement for each of our variable interest entities ("VIE"), which we refer to as our power purchase agreement entities ("PPA Entities"). This approach focuses on determining whether we have the power to direct those activities of the PPA Entities that most significantly affect their economic performance and whether we have the obligation to absorb losses, or the right to receive benefits, that

could potentially be significant to the PPA Entities. For all periods presented, we have determined that we are the primary beneficiary in all of our operational PPA Entities other than with respect to PPA II, as discussed below.

We evaluate our relationships with the PPA Entities on an ongoing basis to ensure that we continue to be the primary beneficiary. All intercompany transactions and balances have been eliminated in consolidation. On June 14, 2019, we entered into a transaction with SP Diamond State Class B Holdings, LLC (“SPDS”), a wholly owned subsidiary of Southern Power Company, in which SPDS will purchase a majority interest in PPA II, which operates in Delaware providing alternative energy generation for state tariff rate payers (the "PPA II Project"). PPA II will use the funds received to purchase current generation Bloom Energy Servers in connection with the upgrade of its energy generation assets fleet. In connection with the closing of this transaction, SPDS was admitted as a member of Diamond State Generation Partners, LLC ("DSGP"). DSGP, an operating company, is now owned by Diamond State Generation Holdings, LLC ("DSGH") and SPDS. As a result of the PPA II Project, we determined that we no longer retain a controlling interest in PPA II and therefore DSPG will no longer be consolidated as a VIE into our condensed consolidated financial statements as of June 30, 2019. For additional information, see *Note 12 - Power Purchase Agreement Programs - PPA II Upgrade of Energy Servers*.

Use of Estimates

The preparation of condensed consolidated financial statements in conformity with U.S. GAAP requires us to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and the accompanying notes. Significant estimates include assumptions used to compute the best estimate of selling-prices, the fair value of lease and non-lease components such as estimated output, efficiency and residual value of the Energy Servers, estimates for inventory write-downs, estimates for future cash flows and the economic useful lives of property, plant and equipment, the fair value of investment in PPA Entities, the valuation of other long-term assets, the valuation of certain accrued liabilities such as derivative valuations, estimates for accrued warranty and extended maintenance, estimates for recapture of U.S. Treasury grants and similar grants, estimates for income taxes and deferred tax asset valuation allowances, warrant liabilities, stock-based compensation costs and estimates for the allocation of profit and losses to the noncontrolling interests. Actual results could differ materially from these estimates under different assumptions and conditions.

Concentration of Risk

Geographic Risk - The majority of our revenue and long-lived assets are attributable to operations in the United States for all periods presented. Additionally, we sell our Energy Servers in Japan, China, India, and the Republic of Korea (collectively, our Asia Pacific region). In the three and six months ended June 30, 2019, total revenue in the Asia Pacific region was 17.7% and 20.6%, respectively, of our total revenue. In the three and six months ended June 30, 2018, total revenue in the Asia Pacific region was 0.9% and 9.1%, respectively, of our total revenue.

Credit Risk - At June 30, 2019, customer A and customer B accounted for 38.2% and 13.4%, respectively, of accounts receivable. At December 31, 2018, customer A accounted for 66.8% of accounts receivable. At June 30, 2019 and December 31, 2018, we did not maintain any allowances for doubtful accounts as we deemed all of our receivables fully collectible. To date, we have neither provided an allowance for uncollectible accounts nor experienced any credit loss.

Customer Risk - In the three months ended June 30, 2019, revenue from customer A, customer B and customer C represented 17%, 52%, and 2%, respectively, of our total revenue. In the six months ended June 30, 2019, revenue from customer A, customer B and customer C represented 20%, 40%, and 12%, respectively, of our total revenue. Customer A wholly owns a Third-Party PPA which purchases Energy Servers from us, however such purchases and resulting revenue are made on behalf of various customers of this Third-Party PPA. In the three months ended June 30, 2018, revenue from customer B represented 45% of our total revenue. In the six months ended June 30, 2018, revenue from customer B represented 49% of our total revenue.

Fair Value Measurement

Financial Accounting Standards Board ("FASB") Accounting Standards Codification Topic 820 - *Fair Value Measurements and Disclosures* ("ASC 820"), defines fair value, establishes a framework for measuring fair value under U.S. GAAP and enhances disclosures about fair value measurements. Fair value is defined under ASC 820 as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value under ASC 820 must maximize the use of observable inputs and minimize the use of unobservable inputs. The guidance describes a fair value hierarchy based on three levels of inputs, of which the first two are considered observable and the last unobservable, that may be used to measure fair value:

Level 1 Quoted prices in active markets for identical assets or liabilities. Financial assets utilizing Level 1 inputs typically include money market securities and U.S. Treasury securities.

Level 2 Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities. Financial instruments utilizing Level 2 inputs include interest rate swaps.

Level 3 Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities. Financial liabilities utilizing Level 3 inputs include natural gas fixed price forward contract derivatives. Derivative liability valuations are performed based on a binomial lattice model and adjusted for illiquidity and/or nontransferability and such adjustments are generally based on available market evidence.

Recent Accounting Pronouncements

Accounting Guidance Implemented in Fiscal Year 2019

Other than the adoption of accounting guidances mentioned below, there have been no other significant changes in our reported financial position or results of operations and cash flows resulting from the adoption of new accounting pronouncements. There have been no changes to our significant accounting policies that were disclosed in our Annual Report on Form 10-K for the fiscal year ended December 31, 2018 that have had a significant impact on our condensed consolidated financial statements or notes thereto as of and for the six months ended June 30, 2019.

Hedging Activities - As of January 1, 2019, we adopted Accounting Standards Update ("ASU") 2017-12 *Derivatives and Hedging (Topic 815), Targeted Improvements to Accounting for Hedging Activities* ("ASU 2017-12") to help entities recognize the economic results of their hedging strategies in the financial statements so that stakeholders can better interpret and understand the effect of hedge accounting on reported results. It is intended to more clearly disclose an entity's risk exposures and how we manage those exposures through hedging, and it is expected to simplify the application of hedge accounting guidance. The new guidance is effective for annual periods beginning after December 15, 2018, with early adoption permitted. There was not a material impact to our condensed consolidated financial statements upon adoption of ASU 2017-12.

In April 2019, the FASB issued ASU 2019-04, Codification Improvements to Topic 326, Financial Instruments-Credit Losses; Topic 815, Derivatives and Hedging; and Topic 825, Financial Instruments, that clarifies and improves areas of guidance related to the recently issued standards on credit losses (ASU 2016-13), hedging (ASU 2017-12), and recognition and measurement of financial instruments (ASU 2016-01), respectively. The amendments generally have the same effective dates as their related standards. If already adopted, the amendments of ASU 2016-01 and ASU 2016-13 are effective for fiscal years beginning after December 15, 2019 and the amendments of ASU 2017-12 are effective as of the beginning of a company's next annual reporting period. Early adoption is permitted. As discussed above, we adopted ASU 2017-12 on January 1, 2019 and do not expect the amendments of ASU 2019-04 will have a material impact on our consolidated financial statements.

Income Taxes - During the first three months of fiscal 2019, we adopted ASU 2016-16, *Income Taxes—Intra-Entity Transfers of Assets Other Than Inventory (Topic 740)*, which requires that entities recognize the income tax consequences of an intra-entity transfer of an asset, other than inventory, when the transfer occurs. The standard is effective for us in our Annual Report on Form 10-K for the fiscal year ended December 31, 2019 and is required to be applied on a modified retrospective basis through a cumulative-effect adjustment directly to retained earnings as of the beginning of the adoption period. Adoption of this standard had no impact on our consolidated financial statements.

Income Taxes - During the first three months of fiscal 2019, we adopted ASU 2018-02 *Income Statement—Reporting Comprehensive Income (Topic 220) Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income*

("ASU 2018-02"), which permits reclassification of certain tax effects in Other Comprehensive Income ("OCI") caused by the U.S. tax reform enacted in December 2017 to retained earnings. We do not have any tax effect (due to full valuation allowance) in our OCI account, thus this guidance has no impact on us.

New Accounting Guidance to be Implemented

Revenue Recognition - In May 2014, the FASB issued ASU 2014-14, *Revenue From Contracts With Customers,* as amended ("ASU 2014-14"*)*. The guidance provides principles for recognizing revenue for the transfer of promised goods or services to customers with the consideration to which the entity expects to be entitled in exchange for those goods or services, as well as guidance on the recognition of costs related to obtaining and fulfilling customer contracts. The guidance also requires expanded disclosures about the nature, amount, timing, and uncertainty of revenues and cash flows arising from customer contracts, including significant judgments and changes in judgments. ASU 2014-14 is effective for our annual period beginning January 1, 2019, and for our interim periods beginning on January 1, 2020. ASU 2014-14 can be adopted using either of two methods: (i) retrospective to each prior reporting period presented with the option to elect certain practical expedients as defined within the guidance (“full retrospective method”); or (ii) retrospective with the cumulative effect of initially applying the guidance recognized at the date of initial application and providing certain additional disclosures as defined per the guidance (“modified retrospective method”). We will adopt ASU 2014-14 for our fiscal year ended December 31, 2019 using the modified retrospective method, resulting in a cumulative-effect adjustment to retained earnings on January 1, 2019.

We are currently evaluating whether ASU 2014-14 will have a material impact on our consolidated financial statements and expect its adoption to have an impact related to the costs of obtaining our contracts, customer deposits, and deferred revenue. Most notably, the accounting for incremental costs to obtain customer contracts, which primarily consist of sales commissions, will be allocated to the various elements of the transaction and the portion allocated to obtain extended warranty contracts will be deferred and amortized over the expected service period. Further, in preparation for ASU 2014-14, we are in the process of updating our accounting policies, processes, internal controls over financial reporting, and system requirements.

Leases - In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)*, as amended, which provides new authoritative guidance on lease accounting. Among its provisions, the standard requires lessees to recognize right-of-use assets and lease liabilities on the balance sheet for operating leases and also requires additional qualitative and quantitative disclosures about lease arrangements. In March 2019, the FASB issued further guidance in ASU 2019-01, *Leases (Topic 842)*, which provides clarifications to certain lessor transactions and other reporting matters. This guidance will be effective for us beginning January 1, 2020. Early adoption is permitted. We will adopt this guidance on January 1, 2020, prospectively, and expect to recognize right of use assets and lease liabilities for new contracts recognized as operating leases where we are the lessee.

Cloud Computing - In August 2018, the FASB issued ASU 2018-15, *Intangibles-Goodwill and Other-Internal-Use Software (Subtopic 350-40) Customer’s Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract* ("ASU 2018-15")*,* to clarify the guidance on the costs of implementing a cloud computing hosting arrangement that is a service contract. Under ASU 2018-15, the entity is required to follow the guidance in Subtopic 350-40, *Internal-Use Software*, to determine which implementation costs under the service contract to be capitalized as an asset and which costs to expense. ASU 2018-15 is effective for us for the annual periods beginning in 2021 and the interim periods in 2022 on a retrospective or prospective basis and early adoption is permitted. We are currently evaluating the timing of adoption and impact of ASU 2018-15 on our consolidated financial statements and related disclosures.

3. Financial Instruments

Cash, Cash Equivalents and Restricted Cash

The carrying value of cash and cash equivalents approximate fair value and are as follows (in thousands):

	June 30, 2019	December 31, 2018
As held:		
Cash	$ 168,271	$ 136,642
Money market funds	202,795	143,843
	$ 371,066	$ 280,485
As reported:		
Cash and cash equivalents	$ 308,009	$ 220,728
Restricted cash	63,057	59,757
	$ 371,066	$ 280,485

Restricted cash consisted of the following (in thousands):

	June 30, 2019	December 31, 2018
Current		
Restricted cash	$ 21,858	$ 25,740
Restricted cash related to PPA Entities	1,848	$ 2,917
Restricted cash, current	$ 23,706	28,657
Non-current		
Restricted cash	$ 2,615	$ 3,246
Restricted cash related to PPA Entities	36,736 [1]	27,854
Restricted cash, non-current	39,351	31,100
	$ 63,057	$ 59,757

[1] Non-current restricted cash related to PPA Entities includes $20.0 million reclassified for certain contingent indemnification for SPDS under the PPA II Project in the form of a letter of credit to SPDS. See *Note 12 - Power Purchase Agreement Programs - PPA II Upgrade of Energy Servers* for additional information.

Short-Term Investments

As of June 30, 2019 and December 31, 2018, we had no short-term investments and $104.4 million in U.S. Treasury Bills, respectively.

Derivative Instruments

We have derivative financial instruments related to natural gas forward contracts and interest rate swaps. See *Note 7 - Derivative Financial Instruments* for a full description of our derivative financial instruments.

4. Fair Value

Financial Assets and Liabilities Measured at Fair Value on a Recurring Basis

The tables below sets forth, by level, our financial assets that were accounted for at fair value for the respective periods. The table does not include assets and liabilities that are measured at historical cost or any basis other than fair value (in thousands):

	Fair Value Measured at Reporting Date Using			
June 30, 2019	**Level 1**	**Level 2**	**Level 3**	**Total**
Assets				
Cash equivalents:				
Money market funds	$ 202,795	$ —	$ —	$ 202,795
Interest rate swap agreements	—	12	—	12
	$ 202,795	$ 12	$ —	$ 202,807
Liabilities				
Accrued other current liabilities	$ 1,636	$ —	$ —	$ 1,636
Derivatives:				
Natural gas fixed price forward contracts	—	—	8,769	8,769
Interest rate swap agreements[1]	—	9,158	—	9,158
	$ 1,636	$ 9,158	$ 8,769	$ 19,563

[1]As of June 30, 2019, $0.6 million of the gain on the interest rate swaps accumulated in other comprehensive income (loss) is expected to be reclassified into earnings in the next twelve months.

	Fair Value Measured at Reporting Date Using			
December 31, 2018	**Level 1**	**Level 2**	**Level 3**	**Total**
Assets				
Cash equivalents:				
Money market funds	$ 143,843	$ —	$ —	$ 143,843
Short-term investments	104,350	—	—	104,350
Interest rate swap agreements	—	82	—	82
	$ 248,193	$ 82	$ —	$ 248,275
Liabilities				
Accrued other current liabilities	$ 1,331	$ —	$ —	$ 1,331
Derivatives:				
Natural gas fixed price forward contracts	—	—	9,729	9,729
Interest rate swap agreements	—	3,630	—	3,630
	$ 1,331	$ 3,630	$ 9,729	$ 14,690

The following table provides the fair value of our natural gas fixed price forward contracts (dollars in thousands):

	June 30, 2019		December 31, 2018	
	Number of Contracts (MMBTU)[2]	Fair Value	Number of Contracts (MMBTU)[2]	Fair Value
Liabilities[1]				
Natural gas fixed price forward contracts (not under hedging relationships)	2,581	$ 8,769	3,096	$ 9,729

[1] Recorded in current liabilities and derivative liabilities in the condensed consolidated balance sheets.

[2] One MMBTU, or one million British Thermal Units, is a traditional unit of energy used to describe the heat value (energy content) of fuels.

For the three months ended June 30, 2019 and 2018, we marked-to-market the fair value of fixed price natural gas forward contracts and recorded a loss of $1.1 million and a gain of $0.8 million, respectively, and recorded gains on the settlement of these contracts of $1.1 million and $1.2 million, respectively, in cost of electricity revenue on the condensed consolidated statement of operations. For the six months ended June 30, 2019 and 2018, we marked-to-market the fair value of fixed price natural gas forward contracts and recorded a loss of $0.7 million and a loss of $0.1 million, respectively, and recorded gains on the settlement of these contracts of $1.6 million and $2.3 million, respectively, in cost of electricity revenue on the condensed consolidated statement of operations.

Embedded Derivative on 6% Convertible Promissory Notes - Between December 2015 and September 2016, we issued $260.0 million convertible promissory notes due December 2020 ("6% Notes") to certain investors. The 6% Notes bore a 5% fixed interest rate, payable monthly either in cash or in kind, at our election. We amended the terms of the 6% Notes in June 2017 to reduce the collateral securing the notes and to increase the interest rate from 5% to 6%. The 6% Notes are convertible at the option of the holders at a conversion price of $11.25 per share. Upon the IPO, the final value of the conversion feature was $177.2 million and was reclassified from a derivative liability to additional paid-in capital.

There were no transfers between fair value measurement classifications during the periods ended June 30, 2019 and 2018. The changes in the Level 3 financial assets were as follows (in thousands):

	Natural Gas Fixed Price Forward Contracts	Preferred Stock Warrants	Embedded Derivative Liability	Total
Balances at December 31, 2018	$ 9,729	$ —	$ —	$ 9,729
Settlement of natural gas fixed price forward contracts	(1,610)	—	—	(1,610)
Changes in fair value	650	—	—	650
Balances at June 30, 2019	$ 8,769	$ —	$ —	$ 8,769

	Natural Gas Fixed Price Forward Contracts	Preferred Stock Warrants	Embedded Derivative Liability	Total
Balances at December 31, 2017	$ 15,368	$ 9,825	$ 140,771	$ 165,964
Settlement of natural gas fixed price forward contracts	(1,102)	—	—	(1,102)
Changes in fair value	855	(3,271)	9,732	7,316
Balances at June 30, 2018	$ 15,121	$ 6,554	$ 150,503	$ 172,178

Significant changes in any assumption input in isolation can result in a significant change in fair value measurement. Generally, an increase in the market price of our shares of common stock, an increase in natural gas prices, an increase in the

volatility of ours shares of common stock and an increase in the remaining term of the conversion feature would each result in a directionally similar change in the estimated fair value of our derivative liability. Increases in such assumption values would increase the associated liability while decreases in these assumption values would decrease the associated liability. An increase in the risk-free interest rate or a decrease in the market price of our shares of common stock would result in a decrease in the estimated fair value measurement and thus a decrease in the associated liability.

Financial Assets and Liabilities Not Measured at Fair Value on a Recurring Basis

Customer Receivables and Debt Instruments - We estimate fair value for customer financing receivables, senior secured notes, term loans and convertible promissory notes based on rates currently offered for instruments with similar maturities and terms (Level 3). The following table presents the estimated fair values and carrying values of customer receivables and debt instruments (in thousands):

	June 30, 2019		December 31, 2018	
	Net Carrying Value	Fair Value	Net Carrying Value	Fair Value
Customer receivables:				
Customer financing receivables	$ 69,963	$ 52,517	$ 72,676	$ 51,541
Debt instruments:				
Recourse				
LIBOR + 4% term loan due November 2020	2,376	2,458	3,214	3,311
5% convertible promissory note due December 2020	35,576	33,524	34,706	31,546
6% convertible promissory notes due December 2020	271,503	393,395	263,284	353,368
10% notes due July 2024	96,384	96,859	95,555	99,260
Non-recourse				
5.22% senior secured notes due March 2025	—	—	78,566	80,838
7.5% term loan due September 2028	35,532	41,368	36,319	39,892
LIBOR + 5.25% term loan due October 2020	23,661	25,028	23,916	25,441
6.07% senior secured notes due March 2030	81,223	90,136	82,337	85,917
LIBOR + 2.5% term loan due December 2021	121,952	123,046	123,384	123,040

Long-Lived Assets - Our long-lived assets include property, plant and equipment and equity investments in PPA II assets. The carrying amounts of our long-lived assets are periodically reviewed for impairment whenever events or changes in circumstances indicate that the carrying value of these assets may not be recoverable or that the useful life is shorter than originally estimated.

During the three months ended June 30, 2019, there was a decommissioning in PPA II, including the replacement and scheduled future replacement during 2019 of installed Energy Servers, resulting in charges related to the decommissioning of PPA II Energy Servers on these assets of $8.1 million which was recognized in cost of electricity revenue in our condensed consolidated statement of operations. As a result of the deconsolidation of DSGP, we remeasured our remaining equity interest in DSGP at fair value. The fair value of our interest in DSGP was determined based upon the projected discounted cash flows of DSGP that are attributable to DSGH's remaining interest in DSGP, a level 3 fair value measurement. The most significant inputs into the valuation were a projection of future cash inflows from the PPA II tariff and future cash outflows from operations and maintenance of the Energy Servers not subject to SPDS's purchase interests and the discount rate applied to those cash flows. As a result of our remeasurement, we determined a fair value of $27.8 million as of June 30, 2019, resulting in an immaterial loss relating to the deconsolidation of DSGP for the three and six months ended June 30, 2019. Equity investments in PPA II assets are also financial assets that are not measured on a recurring basis. See *Note 12 - Power Purchase Agreement Programs - PPA II Upgrade of Energy Servers* for additional information.

No material impairment in the fair value assessment of any long-lived assets was identified in the six months ended June 30, 2019 and 2018.

5. Balance Sheet Components

Inventories

The components of inventory consisted of the following (in thousands):

	June 30, 2019	December 31, 2018
Raw materials	$ 42,996	$ 53,273
Work-in-progress	28,313	22,303
Finished goods	33,625	56,900
	$ 104,934	$ 132,476

Prepaid Expense and Other Current Assets

Prepaid expenses and other current assets consisted of the following (in thousands):

	June 30, 2019	December 31, 2018
Government incentives receivable	$ 956	$ 1,001
Prepaid expenses and other current assets	24,132	32,741
	$ 25,088	$ 33,742

Property, Plant and Equipment, Net

Property, plant and equipment, net consisted of the following (in thousands):

	June 30, 2019	December 31, 2018
Energy Servers	$ 431,444	$ 511,485
Computers, software and hardware	19,516	16,536
Machinery and equipment	102,532	99,209
Furniture and fixtures	8,986	4,337
Leasehold improvements	36,092	18,629
Building	40,512	40,512
Construction in progress	9,324	29,084
	648,406	719,792
Less: Accumulated depreciation	(241,796)	(238,378)
	$ 406,610	$ 481,414

Our construction in progress decreased $19.8 million, as compared to December 31, 2018, primarily due to our capitalization of leasehold improvements and furniture and fixtures placed in service during the period related to our move to our new corporate headquarters.

Our PPA Entities' property, plant and equipment under operating leases was $397.5 million and $397.5 million as of June 30, 2019 and December 31, 2018, respectively. The accumulated depreciation for these assets was $90.2 million and $77.4 million as of June 30, 2019 and December 31, 2018, respectively. Depreciation expense related to our property, plant and equipment under operating leases was $6.4 million and $6.4 million for the three months ended June 30, 2019 and 2018, respectively, and $12.7 million and $12.7 million for the six months ended June 30, 2019 and 2018, respectively.

During the three months ended June 30, 2019, there was a decommissioning in PPA II, including the replacement and scheduled future replacement during 2019 of installed Energy Servers, resulting in: (i) charges related to the decommissioning of PPA II Energy Servers of $8.1 million recognized in cost of electricity revenue in our condensed consolidated statement of

operations; (ii) decommissioning and write-off 10 megawatts of PPA II Energy Servers at net book value of $25.6 million recognized in cost of product revenue in our condensed consolidated statement of operations; and (iii) deconsolidation of our remaining interest in DSGP, primarily related to the Energy Server assets held in PPA II of $27.8 million, and recognition as an equity investment included in other long-term assets on our condensed consolidated balance sheet. See *Note 12 - Power Purchase Agreement Programs - PPA II Upgrade of Energy Servers* for additional information.

Customer Financing Leases, Receivable

The components of investment in sales-type financing leases consisted of the following (in thousands):

	June 30, 2019	December 31, 2018
Total minimum lease payments to be received	$ 96,417	$ 100,816
Less: Amounts representing estimated executing costs	(23,862)	(25,180)
Net present value of minimum lease payments to be received	72,555	75,636
Estimated residual value of leased assets	1,051	1,051
Less: Unearned income	(3,643)	(4,011)
Net investment in sales-type financing leases	69,963	72,676
Less: Current portion	(5,817)	(5,594)
Non-current portion of investment in sales-type financing leases	$ 64,146	$ 67,082

The future scheduled customer payments from sales-type financing leases were as follows as of June 30, 2019 (in thousands):

	Remainder of 2019	2020	2021	2022	2023	Thereafter
Future minimum lease payments, less interest	$ 2,882	$ 6,022	$ 6,415	$ 6,853	$ 7,310	$ 39,430

Other Long-Term Assets

Other long-term assets consisted of the following (in thousands):

	June 30, 2019	December 31, 2018
Prepaid and other long-term assets	$ 25,364	$ 27,086
Equity investment in PPA II assets	27,809	—
Equity-method investments	6,026	6,046
Long-term deposits	1,776	1,660
	$ 60,975	$ 34,792

Equity investment in PPA II assets

On June 14, 2019, we entered into a transaction with SPDS for the PPA II upgrade of Energy Servers. In connection with the closing of this transaction, SPDS was admitted as a member of DSGP. DSGP, an operating company, was a wholly owned subsidiary of DSGH prior to June 14, 2019. As a result of the PPA II Project, we determined that we no longer retain a controlling interest in PPA II and therefore DSGP will no longer be consolidated as a VIE into our condensed consolidated financial statements as of June 30, 2019. We determined that we have retained significant influence over DSGP and consequently recognize our remaining interest in DSGP as an equity investment included in other long-term assets on our condensed consolidated balance sheet as of June 30, 2019. See *Note 12 - Power Purchase Agreement Programs - PPA II Upgrade of Energy Servers*.

Equity-method investments

In May 2013, we entered into a joint venture with Softbank Corp. and established Bloom Energy Japan limited which is accounted for as an equity-method investment. Under this arrangement, we sell Energy Servers and provide maintenance services to the joint venture. Accounts receivable from this joint venture was $9,800 and $3.3 million as of June 30, 2019 and December 31, 2018, respectively.

Accrued Warranty

Accrued warranty liabilities consisted of the following (in thousands):

	June 30, 2019	December 31, 2018
Product warranty	$ 9,808	$ 10,935
Operations and maintenance services agreements	2,585	8,301
	$ 12,393	$ 19,236

Changes during the current period in the standard product warranty liability were as follows (in thousands):

Balances at December 31, 2018	$ 10,935
Accrued warranty, net	3,202
Warranty expenditures during period	(4,329)
Balances at June 30, 2019	$ 9,808

Accrued Other Current Liabilities

Accrued other current liabilities consisted of the following (in thousands):

	June 30, 2019	December 31, 2018
Liabilities recorded for mandatorily redeemable noncontrolling interest[1]	$ 36,994	$ —
Compensation and benefits	18,180	16,742
Current portion of derivative liabilities	4,848	3,232
Managed services liabilities	4,922	5,091
Accrued installation	6,595	6,859
Sales tax liabilities	1,525	1,700
Interest payable	6,136	4,675
Other	30,522	31,236
	$ 109,722	$ 69,535

[1] During June 30, 2019, we entered into a PPA II upgrade transaction which included a commitment to mandatorily redeem the noncontrolling interest in DSGH by March 31, 2020 of certain installed PPA II Energy Servers, resulting in the reclassification of mandatorily redeemable noncontrolling interest into accrued other current liabilities on the condensed consolidated balance sheet as of June 30, 2019. See *Note 12 - Power Purchase Agreement Programs - PPA II Upgrade of Energy Servers*.

Other Long-Term Liabilities

Accrued other long-term liabilities consisted of the following (in thousands):

	June 30, 2019	December 31, 2018
Delaware grant	$ 10,469	$ 10,469
Managed services liabilities	29,498	30,362
Other	18,450	15,106
	$ 58,417	$ 55,937

We have entered into managed services agreements that provide for the payment of property taxes and insurance premiums on behalf of customers. These obligations are included in each agreements' contract value and are recorded as short-term or long-term liabilities based on the estimated payment dates. The long-term managed services liabilities accrued were $29.5 million and $30.4 million as of June 30, 2019 and December 31, 2018, respectively.

6. Outstanding Loans and Security Agreements

The following is a summary of our debt as of June 30, 2019 (in thousands):

	Unpaid Principal Balance	Net Carrying Value			Unused Borrowing Capacity
		Current	Long-Term	Total	
LIBOR + 4% term loan due November 2020	$ 2,429	$ 1,681	$ 695	$ 2,376	$ —
5% convertible promissory note due December 2020	33,104	—	35,576	35,576	—
6% convertible promissory notes due December 2020	296,233	—	271,503	271,503	—
10% notes due July 2024	100,000	14,000	82,384	96,384	—
Total recourse debt	431,766	15,681	390,158	405,839	—
7.5% term loan due September 2028	39,317	2,889	32,643	35,532	—
LIBOR + 5.25% term loan due October 2020	24,262	957	22,704	23,661	—
6.07% senior secured notes due March 2030	82,269	2,803	78,420	81,223	—
LIBOR + 2.5% term loan due December 2021	123,664	3,894	118,058	121,952	—
Letters of Credit due December 2021	—	—	—	—	1,220
Total non-recourse debt	269,512	10,543	251,825	262,368	1,220
Total debt	$ 701,278	$ 26,224	$ 641,983	$ 668,207	$ 1,220

The following is a summary of our debt as of December 31, 2018 (in thousands):

	Unpaid Principal Balance	Net Carrying Value			Unused Borrowing Capacity
		Current	Long-Term	Total	
LIBOR + 4% term loan due November 2020	$ 3,286	$ 1,686	$ 1,528	$ 3,214	$ —
5% convertible promissory notes due December 2020	33,104	—	34,706	34,706	—
6% convertible promissory notes due December 2020	296,233	—	263,284	263,284	—
10% notes due July 2024	100,000	7,000	88,555	95,555	—
Total recourse debt	432,623	8,686	388,073	396,759	—
5.22% senior secured term notes due March 2025	79,698	11,994	66,572	78,566	—
7.5% term loan due September 2028	40,538	2,200	34,119	36,319	—
LIBOR + 5.25% term loan due October 2020	24,723	827	23,089	23,916	—
6.07% senior secured notes due March 2030	83,457	2,469	79,868	82,337	—
LIBOR + 2.5% term loan due December 2021	125,456	3,672	119,712	123,384	—
Letters of Credit due December 2021	—	—	—	—	1,220
Total non-recourse debt	353,872	21,162	323,360	344,522	1,220
Total debt	$ 786,495	$ 29,848	$ 711,433	$ 741,281	$ 1,220

Recourse debt refers to debt that Bloom Energy Corporation has an obligation to pay. Non-recourse debt refers to debt that is recourse to only specified assets or our subsidiaries. The differences between the unpaid principal balances and the net carrying values apply to debt discounts and deferred financing costs. We were in compliance with all financial covenants as of June 30, 2019 and December 31, 2018.

Recourse Debt Facilities

LIBOR + 4% Term Loan due November 2020 - In May 2013, we entered into a $5.0 million credit agreement and a $12.0 million financing agreement to help fund the building of a new facility in Newark, Delaware. The $5.0 million credit agreement expired in December 2016. The $12.0 million financing agreement has a term of 90 months, payable monthly at a variable rate equal to one-month LIBOR plus the applicable margin. The weighted average interest rate as of June 30, 2019 and December 31, 2018 was 6.5% and 5.9%, respectively. The loan requires monthly payments and is secured by the manufacturing facility. In addition, the credit agreements also include a cross-default provision which provides that the remaining balance of borrowings under the agreements will be due and payable immediately if a lien is placed on the Newark facility in the event we default on any indebtedness in excess of $100,000 individually or $300,000 in the aggregate. Under the terms of these credit agreements, we are required to comply with various restrictive covenants. As of June 30, 2019 and December 31, 2018, the debt outstanding was $2.4 million and $3.3 million, respectively.

5% Convertible Promissory Notes due 2020 (Originally 8% Convertible Promissory Notes due December 2018) - Between December 2014 and June 2016, we issued $193.2 million of three-year convertible promissory notes ("8% Notes") to certain investors. The 8% Notes had a fixed interest rate of 8% compounded monthly, due at maturity or at the election of the investor with accrued interest due in December of each year.

On January 18, 2018, amendments were finalized to extend the maturity dates for all the 8% Notes to December 2019. At the same time, the portion of the 8% Notes that was held by Constellation NewEnergy, Inc. ("Constellation") was extended to December 2020 and the interest rate decreased from 8% to 5% ("5% Notes").

Investors held the right to convert the unpaid principal and accrued interest of both the 8% and 5% notes to Series G convertible preferred stock at any time at the price of $38.64. In July 2018, upon the Company's IPO, the $221.6 million of principal and accrued interest of outstanding 8% Notes automatically converted into additional paid-in capital, the conversion of which included all the related-party noteholders. The 8% Notes converted to shares of Series G convertible preferred stock and, concurrently, each such share of Series G convertible preferred stock converted automatically into one share of Class B common stock. Upon the IPO, conversions of 5,734,440 shares of Class B common stock were issued and the 8% Notes were retired. Constellation, the holder of the 5% Notes, had not elected to convert as of June 30, 2019. The outstanding unpaid principal and accrued interest debt balance of the5% Notes of $35.6 million was classified as non-current as of June 30, 2019, and the outstanding unpaid principal and accrued interest debt balances of the 5% Notes of $34.7 million as of December 31, 2018.

6% Convertible Promissory Notes due December 2020 - Between December 2015 and September 2016, we issued $260.0 million convertible promissory notes due December 2020 ("6% Notes") to certain investors. The 6% Notes bore a 5% fixed interest rate, payable monthly either in cash or in kind, at our election. We amended the terms of the 6% Notes in June 2017 to reduce the collateral securing the notes and to increase the interest rate from 5% to 6%.

As of June 30, 2019 and December 31, 2018, the amount outstanding on the 6% Notes, which includes interest paid in kind through the IPO date, was $296.2 million and $296.2 million, respectively. Upon the IPO, the debt was convertible at the option of the holders at the conversion price of $11.25 per share into common stock at any time through the maturity date. In January 2018, we amended the terms of the 6% Notes to extend the convertible put option, which investors could elect only if the IPO did not occur prior to December 2019. After the IPO, we paid the interest in cash when due and no additional interest accrued on the consolidated balance sheet on the 6% Notes.

On or after July 27, 2020, we may redeem, at our option, all or part of the 6% Notes if the last reported sale price of our common stock has been at least $22.50 for at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading days ending within the three trading days immediately preceding the date on which we provide written notice of redemption. In certain circumstances, the 6% Notes are also redeemable at our option in connection with a change of control.

Under the terms of the indenture governing the 6% Notes, we are required to comply with various restrictive covenants, including meeting reporting requirements, such as the preparation and delivery of audited consolidated financial statements, and restrictions on investments. In addition, we are required to maintain collateral which secures the 6% Notes in an amount equal to 200% of the principal amount of and accrued and unpaid interest on the outstanding notes. This minimum collateral test is not a negative covenant and does not result in a default if not met. However, the minimum collateral test does restrict us with respect to investing in non-PPA subsidiaries. If we do not meet the minimum collateral test, we cannot invest cash into any non-PPA subsidiary that is not a guarantor of the notes. The 6% Notes also include a cross-acceleration provision which provides that the holders of at least 25% of the outstanding principal amount of the 6% Notes may cause such notes to become immediately due and payable if we or any of our subsidiaries default on any indebtedness in excess of $15.0 million such that the repayment of such indebtedness is accelerated.

In connection with the issuance of the 6% Notes, we agreed to issue to J.P. Morgan and CPPIB, upon the occurrence of certain conditions, warrants to purchase our common stock up to a maximum of 146,666 shares and 166,222 shares, respectively. On August 31, 2017, J.P. Morgan transferred its rights to CPPIB. Upon completion of the IPO, the 312,888 warrants were net exercised for 312,575 shares of Class B Common stock.

10% Notes due July 2024 - In June 2017, we issued $100.0 million of senior secured notes ("10% Notes"). The 10% Notes mature between 2019 and 2024 and bear a 10.0% fixed rate of interest, payable semi-annually. The 10% Notes have a continuing security interest in the cash flows payable to us as servicing, operations and maintenance fees and administrative fees from the five active power purchase agreements in our Bloom Electrons program. Under the terms of the indenture governing the notes, we are required to comply with various restrictive covenants including, among other things, to maintain certain financial ratios such as debt service coverage ratios, to incur additional debt, issue guarantees, incur liens, make loans or investments, make asset dispositions, issue or sell share capital of our subsidiaries and pay dividends, meet reporting requirements, including the preparation and delivery of audited consolidated financial statements, or maintain certain restrictions on investments and requirements in incurring new debt. In addition, we are required to maintain collateral which secures the 10% Notes based on debt ratio analyses. This minimum collateral test is not a negative covenant and does not result in a default if not met. However, the minimum collateral test does restrict us with respect to investing in non-PPA subsidiaries. If we do not meet the minimum collateral test, we cannot invest cash into any non-PPA subsidiary that is not a guarantor of the notes.

Non-recourse Debt Facilities

5.22% Senior Secured Term Notes - In March 2013, PPA II refinanced its existing debt by issuing 5.22% Senior Secured Notes ("5.22% Notes") due March 30, 2025. The total amount of the loan proceeds was $144.8 million, including $28.8 million to repay outstanding principal of existing debt, $21.7 million for debt service reserves and transaction costs and $94.3 million to fund the remaining system purchases. The loan is a fixed rate term loan that bears an annual interest rate of 5.22% payable quarterly. The loan has a fixed amortization schedule of the principal, payable quarterly, which began March 30, 2014 that requires repayment in full by March 30, 2025. The Note Purchase Agreement requires us to maintain a debt service reserve, the balance of which was zero and $11.2 million as of June 30, 2019 and December 31, 2018, respectively, and which was included as part of long-term restricted cash in the condensed consolidated balance sheets. The notes were secured by all the assets of PPA II. These notes were pre-paid in full on June 14, 2019 and all obligations and liabilities related to such 5.22% Notes have been terminated. During the three months ended June 30, 2019, there was a decommissioning in PPA II, including the retirement of the 5.22% Notes outstanding unpaid debt of $76.6 million, which included the accumulated unpaid interest on the debt. See *Note 12 - Power Purchase Agreement Programs - PPA II Upgrade of Energy Servers* for additional information.

7.5% Term Loan due September 2028 - In December 2012 and later amended in August 2013, PPA IIIa entered into a $46.8 million credit agreement to help fund the purchase and installation of Energy Servers. The loan bears a fixed interest rate of 7.5% payable quarterly. The loan requires quarterly principal payments which began in March 2014. The credit agreement requires us to maintain a debt service reserve for all funded systems, the balance of which was $3.8 million and $3.7 million as of June 30, 2019 and December 31, 2018, respectively, and which was included as part of long-term restricted cash in the condensed consolidated balance sheets. The loan is secured by all assets of PPA IIIa.

LIBOR + 5.25% Term Loan due October 2020 - In September 2013, PPA IIIb entered into a credit agreement to help fund the purchase and installation of Energy Servers. In accordance with that agreement, PPA IIIb issued floating rate debt based on LIBOR plus a margin of 5.2%, paid quarterly. The aggregate amount of the debt facility is $32.5 million. The loan is secured by all assets of PPA IIIb and requires quarterly principal payments which began in July 2014. The credit agreement requires us to maintain a debt service reserve for all funded systems, the balance of which was $1.7 million and $1.7 million June 30, 2019 and December 31, 2018, respectively, and which was included as part of long-term restricted cash in the condensed consolidated balance sheets. In September 2013, PPA IIIb entered into pay-fixed, receive-float interest rate swap agreement to convert the floating-rate loan into a fixed-rate loan.

6.07% Senior Secured Notes due March 2025 - In July 2014, PPA IV issued senior secured notes amounting to $99.0 million to third parties to help fund the purchase and installation of Energy Servers. The notes bear a fixed interest rate of 6.07% payable quarterly which began in December 2015 and ends in March 2030. The notes are secured by all the assets of the PPA IV. The Note Purchase Agreement requires us to maintain a debt service reserve, the balance of which was $7.7 million as of June 30, 2019 and $7.5 million as of December 31, 2018, and which was included as part of long-term restricted cash in the condensed consolidated balance sheets.

LIBOR + 2.5% Term Loan due December 2021 - In June 2015, PPA V entered into a $131.2 million credit agreement to fund the purchase and installation of Energy Servers. The lenders are a group of five financial institutions. The loan was initially advanced as a construction loan during the development of the PPA V Project and converted into a term loan on February 28, 2017 (the “Term Conversion Date”). As part of the term loan’s conversion, the LC facility commitments were adjusted. The loan's terms included commitments to a letters of credit ("LC") facility (see below).

In accordance with the credit agreement, PPA V was issued a floating rate debt based on LIBOR plus a margin, paid quarterly. The applicable margins used for calculating interest expense are 2.25% for years 1-3 following the Term Conversion Date and 2.5% thereafter. For the Lenders' commitments to the loan and the commitments to the LC loan, the PPA V also pays commitment fees at 0.50% per annum over the outstanding commitments, paid quarterly. The loan is secured by all the assets of the PPA V and requires quarterly principal payments which began in March 2017. In connection with the floating-rate credit agreement, in July 2015 the PPA V entered into pay-fixed, receive-float interest rate swap agreements to convert its floating-rate loan into a fixed-rate loan.

Letters of Credit due December 2021 - In connection with the June 2015 PPA V credit agreement, we obtained commitments to a LC facility with the aggregate principal amount of $6.4 million, later adjusted down to $6.2 million. The amount reserved under the LC as of June 30, 2019 and December 31, 2018 was $5.0 million. The unused LC borrowing capacity was $1.2 million as of June 30, 2019 and December 31, 2018, respectively.

Debt Repayment Schedule and Interest Expense

The following table presents our total outstanding debt's unpaid principal balance repayment schedule as of June 30, 2019 (in thousands):

Remainder of 2019	$	12,365
2020		379,242
2021		140,334
2022		26,046
2023		29,450
Thereafter		113,841
	$	701,278

Interest expense of $18.3 million and $25.2 million for the three months ended June 30, 2019 and 2018, respectively, was recorded in interest expense on the condensed consolidated statements of operations.

Related Party Debt

Portions of the above described recourse and non-recourse debt is held by various related parties. See *Note 15 - Related Party Transactions* for a full description.

7. Derivative Financial Instruments

Interest Rate Swaps

We use various financial instruments to minimize the impact of variable market conditions on its results of operations. We use interest rate swaps to minimize the impact of fluctuations of interest rate changes on its outstanding debt where LIBOR is applied. We do not enter into derivative contracts for trading or speculative purposes.

The fair values of the derivatives related to interest rate swap agreements applied to two of our PPA companies designated as cash flow hedges as of June 30, 2019 and December 31, 2018 on our consolidated balance sheets were as follows (in thousands):

	June 30, 2019	December 31, 2018
Assets		
Prepaid expenses and other current assets	$ —	$ 42
Other long-term assets	12	40
	$ 12	$ 82
Liabilities		
Accrued other current liabilities	$ 706	$ 4
Derivative liabilities	8,453	3,626
	$ 9,159	$ 3,630

PPA Company IIIb - In September 2013, PPA Company IIIb entered into an interest rate swap arrangement to convert a variable interest rate debt to a fixed rate. We designated and documented our interest rate swap arrangement as a cash flow hedge. The swap's term ends on October 1, 2020, which is concurrent with the final maturity of the debt floating interest rates reset on a quarterly basis. We evaluate and calculate the effectiveness of the hedge at each reporting date. The effective change was recorded in accumulated other comprehensive income (loss) and was recognized as interest expense on settlement. The notional amounts of the swap were $24.3 million and $24.7 million as of June 30, 2019 and December 31, 2018, respectively. We measure the swap at fair value on a recurring basis. Fair value is determined by discounting future cash flows using LIBOR rates with appropriate adjustment for credit risk.

We recorded a loss of $23,000 and a gain of $54,000 during the three months ended June 30, 2019 and 2018, respectively, attributable to the change in swap's fair value. These gains and losses were included in gain (loss) on revaluation of warrant liabilities and embedded derivatives in the condensed consolidated statement of operations.

PPA Company V - In July 2015, PPA Company V entered into zero interest rate swap agreements to convert a variable interest rate debt to a fixed rate. The loss on the swaps prior to designation was recorded in current-period earnings. In July 2015, we designated and documented its interest rate swap arrangements as cash flow hedges. Zero of these swaps matured in 2016, zero will mature on December 21, 2021 and the remaining zero will mature on September 30, 2031. We evaluate and calculate the effectiveness of the hedge at each reporting date. The effective change was recorded in accumulated other comprehensive income (loss) and was recognized as interest expense on settlement. The notional amounts of the swaps were $185.8 million and $186.6 million as of June 30, 2019 and December 31, 2018, respectively.

We measure the swaps at fair value on a recurring basis. Fair value is determined by discounting future cash flows using LIBOR rates with appropriate adjustment for credit risk. We recorded a gain of $36,000 and a gain of $55,000 attributable to the change in valuation during the three months ended June 30, 2019 and 2018, respectively. We recorded a gain of $12,000 and a gain of $109,000 attributable to the change in valuation during the six months ended June 30, 2019 and 2018, respectively. These gains were included in gain (loss) on revaluation of warrant liabilities and embedded derivatives in the condensed consolidated statement of operations.

The changes in fair value of the derivative contracts designated as cash flow hedges and the amounts recognized in accumulated other comprehensive income (loss) and in earnings for the three and six months ended June 30, 2019 and 2018 were as follows (in thousands):

	Three Months Ended		Six Months Ended	
	June 30, 2019	June 30, 2018	June 30, 2019	June 30, 2018
Beginning balance	$ 5,692	$ 2,909	$ 3,548	$ 5,853
Loss (gain) recognized in other comprehensive income (loss)	3,460	(982)	5,590	(3,622)
Amounts reclassified from other comprehensive income (loss) to earnings	42	(85)	103	(297)
Net loss (gain) recognized in other comprehensive income (loss)	3,502	(1,067)	5,693	(3,919)
Gain reclassified from other comprehensive income (loss) to earnings	(48)	(71)	(95)	(163)
Ending balance	$ 9,146	$ 1,771	$ 9,146	$ 1,771

Natural Gas Derivatives

On September 1, 2011, we entered into a fixed price fixed quantity fuel forward contract with a gas supplier. This fuel forward contract is used as part of our program to manage the risk for controlling the overall cost of natural gas. Our PPA Company I is the only PPA Company for which we provided natural gas. The fuel forward contract meets the definition of a derivative under U.S. GAAP. We have not elected to designate this contract as a hedge and, accordingly, any changes in its fair value is recorded within cost of electricity revenue in the condensed consolidated statements of operations. The fair value of the contract is determined using a combination of factors including the counterparty's credit rate and estimates of future natural gas prices.

For the three months ended June 30, 2019 and 2018, we marked-to-market the fair value of our fixed price natural gas forward contract and recorded a loss of $1.1 million and a gain of $0.8 million, respectively. For the six months ended June 30, 2019 and 2018, we marked-to-market the fair value of our fixed price natural gas forward contract and recorded a loss of $0.7 million and a loss of $0.1 million, respectively. For the three months ended June 30, 2019 and 2018, we recorded gains of $1.1 million and $1.2 million, respectively, on the settlement of these contracts. For the six months ended June 30, 2019 and 2018, we recorded gains of $1.6 million and $2.3 million, respectively, on the settlement of these contracts. Gains and losses are recorded in cost of electricity revenue in the condensed consolidated statements of operations.

6% Convertible Promissory Notes

On December 15, 2015, January 29, 2016, and September 10, 2016, we issued $160.0 million, $25.0 million, and $75.0 million, respectively, of 6% Convertible Promissory Notes ("6% Notes") that mature in December 2020. The 6% Notes are contractually convertible at the option of the holders at a conversion price per share equal to the lower of $20.61 or 75% of the offering price of our common stock sold in an initial public offering. Upon the IPO, the options are convertible at the option of the holders at the conversion price of $11.25 per share.

The valuation of this embedded put feature was recorded as a derivative liability in the consolidated balance sheet, measured each reporting period. Fair value was determined using the binomial lattice method. We recorded $0 and a loss of $23.5 million attributable to the change in valuation for the three months ended June 30, 2019 and 2018, respectively. We recorded $0 and a loss of $31.0 million attributable to the change in valuation for the six months ended June 30, 2019 and 2018, respectively. These gains and losses were included within loss on revaluation of warrant liabilities and embedded derivatives in gain (loss) on revaluation of warrant liabilities and embedded derivatives in the condensed consolidated statements of operations. Upon the IPO, the final value of the conversion feature was $177.2 million and was reclassified from a derivative liability to additional paid-in capital.

8. Common Stock Warrants

During 2018, all of the preferred and common stock warrants we issued in connection with loan agreements and a dispute settlement converted to warrants to purchase shares of Class B common stock. As of June 30, 2019, we had Class B common stock warrants outstanding to purchase 481,181and 12,940 shares of Class B common stock at exercise prices of $27.78 and $38.64, respectively. As of December 31, 2018, we had Class B common stock warrants outstanding to purchase 481,182 and 312,939 shares of Class B common stock at exercise prices of $27.78 and $38.64, respectively.

9. Income Taxes

For the three months ended June 30, 2019 and 2018, we recorded a provision for income taxes of $0.3 million on a pre-tax loss of $67.0 million for an effective tax rate of (0.4)%, and a provision for income taxes of $0.1 million on a pre-tax loss of $50.1 million for an effective tax rate of (0.3)%, respectively.

For the six months ended June 30, 2019 and 2018, we recorded a provision for income taxes of $0.5 million on a pre-tax loss of $155.0 million for an effective tax rate of (0.3)%, and a provision for income taxes of $0.5 million on a pre-tax loss of $72.1 million for an effective tax rate of (0.6)%, respectively.

The effective tax impact for the three and six months ended June 30, 2019 and 2018 is lower than the statutory federal tax rate primarily due to a full valuation allowance against U.S. deferred tax assets.

10. Net Loss per Share Attributable to Common Stockholders

Net loss per share (basic) attributable to common stockholders is calculated by dividing net loss attributable to common stockholders by the weighted-average shares of common stock outstanding for the period. Net loss per share (diluted) is computed by using the "if-converted" method when calculating the potential dilutive effect, if any, of convertible shares whereby net loss attributable to common stockholders is adjusted by the effect of dilutive securities such as awards under equity compensation plans and inducement awards under separate restricted stock unit ("RSU") award agreements. Net loss per share (diluted) attributable to common stockholders is then calculated by dividing the resulting adjusted net loss attributable to common stockholders by the combined weighted-average number of fully diluted common shares outstanding.

In July 2018, we completed an initial public offering of our common shares wherein 20,700,000 shares of Class A common stock were sold into the market. Added to existing shares of Class B common stock were shares mandatorily converted from various financial instruments as a result of the IPO.

There were no adjustments to net loss attributable to common stockholders in determining net loss attributable to common stockholders (diluted). Equally, there were no adjustments to the weighted average number of outstanding shares of common stock (basic) in arriving at the weighted average number of outstanding shares (diluted), as such adjustments would have been antidilutive.

Net loss per share is the same for each class of common stock as they are entitled to the same liquidation and dividend rights with the exception of voting rights. As a result, net loss per share (basic) and net loss per share (diluted) attributed to common stockholders are the same for both Class A and Class B common stock and are combined for presentation. The following table sets forth the computation of our net loss per share (basic) and net loss per share (diluted) attributable to common stockholders (in thousands, except per share amounts):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Numerator:				
Net loss attributable to Class A and Class B common stockholders	$ (62,216)	$ (45,677)	$ (146,657)	$ (63,393)
Denominator:				
Weighted average shares used to compute net loss per share attributable to Class A and Class B common stockholders, basic and diluted	113,622	10,536	112,737	10,470
Net loss per share attributable to Class A and Class B common stockholders, basic and diluted	$ (0.55)	$ (4.34)	$ (1.30)	$ (6.05)

The following common stock equivalents were excluded from the computation of net loss per share attributable to common shareholders (diluted) for the periods presented as their inclusion would have been antidilutive (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Convertible and non-convertible redeemable preferred stock and convertible notes	27,253	85,945	27,253	85,945
Stock options to purchase common stock	6,480	2,148	5,811	2,148
Convertible redeemable preferred stock warrants	—	60	—	60
Convertible redeemable common stock warrants	—	312	—	312
	33,733	88,465	33,064	88,465

11. Stock-Based Compensation and Employee Benefit Plan

2002 Stock Plan

Our 2002 Stock Plan (the "2002 Plan") was approved in April 2002 and amended in June 2011. In August 2012 and in connection with the adoption of the 2012 Equity Incentive Plan (the "2012 Plan"), shares authorized for issuance under the 2002 Plan were cancelled, except for those shares reserved for issuance upon exercise of outstanding stock options. As of June 30, 2019, options to purchase 2,033,654 shares of Class B common stock were outstanding and the weighted average exercise price of outstanding options was $22.74 per share.

2012 Equity Incentive Plan

Our 2012 Plan was approved in August 2012. In April 2018 and in connection with the adoption of the 2018 Equity Incentive Plan (the "2018 Plan"), any reserved shares not issued were carried over to the 2018 Equity Incentive Plan. As of June 30, 2019, options to purchase 10,728,356 shares of Class B common stock were outstanding under the 2012 Plan and the weighted average exercise price of outstanding options under the 2012 Plan was $27.14 per share. As of June 30, 2019, we had outstanding RSU awards that may be settled for 11,908,017 shares of Class B common stock under the 2012 Plan.

2018 Equity Incentive Plan

The 2018 Plan was approved in April 2018. The 2018 Plan became effective upon the IPO and will serve as the successor to the 2012 Plan.

The 2018 Plan authorizes the award of stock options, restricted stock awards, stock appreciation rights, RSUs, performance awards and stock bonuses. The 2018 Plan provides for the grant of awards to employees, directors, consultants, independent contractors and advisors provided the consultants, independent contractors, directors and advisors render services not in connection with the offer and sale of securities in a capital-raising transaction. The exercise price of stock options is at least equal to the fair market value of Class A common stock on the date of grant.

As of June 30, 2019, options to purchase 2,150,999 shares of Class A common stock were outstanding under the 2018 Plan and the weighted average exercise price of outstanding options was $19.71 per share. As of June 30, 2019, we had outstanding RSUs that may be settled for 4,022,886 shares of Class A common stock and 19,787,061 shares of Class A common stock were available for future grant.

2018 Employee Stock Purchase Plan

In April 2018, we adopted the 2018 Employee Stock Purchase Plan ("ESPP"). The ESPP is qualified under Section 423 of the Internal Revenue Code. As of June 30, 2019, there were 4,052,804 shares of Class A common stock available for future issuance.

Stock Option Activity

A summary of stock option activity under our stock plans during the six months ended June 30, 2019 is as follows:

	Outstanding Options			
	Number of Shares	Weighted Average Exercise Price	Remaining Contractual Life (Years)	Aggregate Intrinsic Value
				(in thousands)
Balances at December 31, 2018	14,558,420	$ 25.93	6.78	$ 3,084
Granted	981,105	11.44		
Exercised	(328,026)	4.28		
Cancelled	(298,490)	25.37		
Balances at June 30, 2019	14,913,009	25.47	6.53	2,557
Vested and expected to vest at June 30, 2019	14,541,060	25.64	6.47	2,523
Exercisable at June 30, 2019	8,716,781	28.77	4.96	1,764

RSUs Activity

A summary of our restricted stock units ("RSUs") activity and related information during the six months ended June 30, 2019 is as follows:

	Number of Awards Outstanding	Weighted Average Grant Date Fair Value
Unvested Balance at December 31, 2018	16,784,800	$ 18.74
Granted	2,966,254	12.36
Vested	(3,504,098)	20.51
Forfeited	(316,053)	17.38
Unvested Balance at June 30, 2019	15,930,903	17.19

Stock-Based Compensation Expense

We used the following weighted-average assumptions in applying the Black-Scholes valuation model:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Risk-free interest rate	2.4% - 2.5%	2.7% - 2.8%	2.4% - 2.6%	2.5% - 2.8%
Expected term (years)	6.4 - 6.7	6.2 - 6.7	6.4 - 6.7	6.2 - 6.7
Expected dividend yield	—	—	—	—
Expected volatility	47.5%	54.6%	47.5% - 50.2%	54.6% - 55.1%

Stock-based Compensation - No stock-based compensation costs were capitalized in the three months ended June 30, 2019 and 2018. The following table summarizes the components of stock-based compensation expense in the consolidated statements of operations (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Cost of revenue	$ 10,392	$ 1,971	$ 24,764	$ 3,869
Research and development	12,218	1,739	26,448	3,376
Sales and marketing	8,935	1,214	20,447	2,166
General and administrative	19,673	2,894	43,441	6,362
Total stock-based compensation	$ 51,218	$ 7,818	$ 115,100	$ 15,773

During the six months ended June 30, 2019 and 2018, we recognized $115.1 million and $15.8 million of stock-based compensation expense, respectively. Our stock-based compensation expense is associated with stock options, RSUs, and our ESPP.

As of June 30, 2019, there was unrecognized compensation expense related to unvested stock options of $56.8 million. This expense is expected to be recognized over the remaining weighted-average period of 2.6 years. We had no excess tax benefits in the six months ended June 30, 2019 and 2018.

As of June 30, 2019, there was $108.2 million of unrecognized stock-based compensation cost related to unvested RSUs. This expense is expected to be recognized over a weighted average period of 1.1 years.

As of June 30, 2019, there was $6.3 million of unrecognized stock-based compensation cost related to the ESPP. This expense is expected to be recognized over a weighted average period of 0.9 years.

12. Power Purchase Agreement Programs

Overview

In mid-2010, we began offering our Energy Servers through our Bloom Electrons program, which we denote as Power Purchase Agreement Programs, financed via investment entities. Under these arrangements, an operating entity is created (the "Operating Company") which purchases the Energy Server from us. The end customer then enters into a power purchase agreement ("PPA") with the Operating Company to purchase the power generated by the Energy Server(s) at a specified rate per kilowatt hour for a specified term which can range from 10 to 21 years. In some cases similar to direct purchases and leases, the standard one-year warranty and performance guaranties are included in the price of the product. The Operating Company also enters into a master services agreement ("MSA") with us following the first year of service to extend the warranty services and guaranties over the term of the PPA. In other cases, the MSA including warranties and guaranties are billed on a quarterly basis starting in the first quarter following the placed-in-service date of the Energy Servers and continuing over the term of the PPA. The first of such arrangements was considered a sales-type lease and the product revenue from that agreement was recognized up front in the same manner as direct purchase and lease transactions. Substantially all of our subsequent PPAs have been accounted for as operating leases with the related revenue under those agreements recognized ratably over the PPA term as electricity revenue. We recognize the cost of revenue, primarily product costs and maintenance service costs, over the shorter of the estimated useful life of the Energy Server or the term of the PPA.

We and our third-party equity investors (together "Equity Investors") contribute funds into a limited liability investment entity ("Investment Company") that owns and is parent to the Operating Company (together, the "PPA Entities"). The PPA Entities constitute variable investment entities ("VIEs") under U.S. GAAP. We have considered the provisions within the contractual agreements which grant us power to manage and make decisions affecting the operations of these VIEs. We consider that the rights granted to the Equity Investors under the contractual agreements are more protective in nature rather than participating. Therefore, we have determined under the power and benefits criterion of ASC 810 - *Consolidations* that we are the primary beneficiary of these VIEs. On June 14, 2019, we entered into a PPA II upgrade of Energy Servers transaction, and as a result we determined that we no longer retain a controlling interest in PPA II and therefore it will no longer be consolidated as a VIE into our condensed consolidated financial statements as of June 30, 2019. See further discussion below.

As the primary beneficiary of these VIEs, we consolidate in our financial statements the financial position, results of operations and cash flows of the PPA Entities, and all intercompany balances and transactions between us and the PPA Entities are eliminated in the condensed consolidated financial statements.

The Operating Company acquires Energy Servers from us for cash payments that are made on a similar schedule as if the Operating Company were a customer purchasing an Energy Server from us outright. In the condensed consolidated financial

statements, the sales of our Energy Servers to the Operating Company are treated as intercompany transactions after the elimination of intercompany balances. The acquisition of Energy Servers by the Operating Company is accounted for as a non-cash reclassification from inventory to Energy Servers within property, plant and equipment, net on our condensed consolidated balance sheets. In arrangements qualifying for sales-type leases, we reduce these recorded assets by amounts received from U.S. Treasury Department cash grants and from similar state incentive rebates.

The Operating Company sells the electricity to end customers under PPAs. Cash generated by the electricity sales, as well as receipts from any applicable government incentive program, is used to pay operating expenses (including the management and services we provide to maintain the Energy Servers over the term of the PPA) and to service the non-recourse debt with the remaining cash flows distributed to the Equity Investors. In transactions accounted for as sales-type leases, we recognize subsequent customer billings as electricity revenue over the term of the PPA and amortizes any applicable government incentive program grants as a reduction to depreciation expense of the Energy Server over the term of the PPA. In transactions accounted for as operating leases, we recognize subsequent customer payments and any applicable government incentive program grants as electricity revenue over the term of the PPA.

Upon sale or liquidation of a PPA Entity, distributions would occur in the order of priority specified in the contractual agreements.

We have established six different PPA Entities to date. The contributed funds are restricted for use by the Operating Company to the purchase of Energy Servers manufactured by us in our normal course of operations, all six PPA Entities utilized their entire available financing capacity and have completed the purchase of their Energy Servers. Any debt incurred by the Operating Companies is non-recourse to us. Under these structures, each Investment Company is treated as a partnership for U.S. federal income tax purposes. Equity Investors receive investment tax credits and accelerated tax depreciation benefits. In 2016, we purchased the tax equity investor's interest in PPA I, which resulted in a change in our ownership interest in PPA I while we continued to hold the controlling financial interest in this company.

PPA II Upgrade of Energy Servers

Transaction Overview

On June 14, 2019, we entered into a transaction with SP Diamond State Class B Holdings, LLC ("SPDS"), a wholly owned subsidiary of Southern Power Company, in which SPDS will purchase a majority interest in PPA II, which operates in Delaware providing alternative energy generation for state tariff rate payers (the "PPA II Project"). PPA II will use the received funds to purchase current generation Bloom fuel cell energy servers in connection with the upgrade of its energy generation assets fleet.

In connection with the closing of this transaction, SPDS was admitted as a member of Diamond State Generation Partners, LLC ("DSGP"). DSGP, an operating company, is now owned by Diamond State Generation Holdings, LLC ("DSGH") and SPDS. Subject to (i) the satisfaction by Bloom of certain conditions precedent, and (ii) the non-occurrence of certain events outside of our control, SPDS has agreed to make capital contributions to DSGP sufficient for DSGP to purchase up to approximately 18 megawatts of Energy Servers from us in one or more phases following the closing, decommissioning 19 megawatts of our less efficient older generation Energy Servers. Prior to selling the new generation Energy Servers to DSGP in each phase, we will repurchase a proportionate number of DSGP's existing Energy Servers and remove such existing Energy Servers from PPA II's site. In the future, subject to our ability to secure additional capital commitments from sources yet to be identified, the remaining 11 megawatts of existing Energy Servers that constitute PPA II may be repurchased by Bloom and replaced by up to approximately 9 megawatts of new Energy Servers to be sold by us to DSGP. After accounting for the funds committed by SPDS, we estimate that we will need to secure approximately $92 million of additional funding in order to complete the upgrade of the PPA II Project. In the event that we are unable to secure financing to fund the deployment of the additional 9 megawatts of new Energy Servers at the PPA II Project, we expect to continue to operate the existing Energy Servers, in which case we may need to amend certain operating permits for the PPA II Project. We will continue as operator of PPA II, but management of DSGP will transfer to SPDS as of the date we have completed the repurchase of all of the interests of Mehetia, Inc., a wholly-owned subsidiary of Credit Suisse AG ("Mehetia"), in the PPA II Project.

Obligations to the PPA II Financiers

After giving effect to the admission of SPDS as a member of DSGP at the closing and the retirement of the existing debt, there are three investors in the PPA II Project: Bloom Energy, Mehetia, and SPDS.

At closing, we made a partial payment for repurchase of the existing Energy Servers owned by DSGP in the amount of approximately $72.3 million, all of which was used by DSGP (along with additional DSGP's cash reserves) to prepay all of its existing indebtedness associated with PPA II. We also agreed to purchase all of the equity interests in PPA II currently held by Mehetia for an estimated purchase price of $57.5 million. The purchase of Mehetia's equity interests in PPA II will be effected via multiple payments by us with the final payment to be made no later than March 31, 2020.

In connection with the admission of SPDS as a member of DSGP, the DSGP limited liability company agreement was amended to provide, among other things, for the allocation of revenues, benefits and expenses between us, Mehetia and SPDS. Under the amended limited liability company agreement, until such time as all of Mehetia's equity interests in PPA II have been repurchased, Mehetia is entitled to 100% of the revenues generated by the PPA II Project from the operation of the existing Energy Servers and we are entitled to none of such revenues. From and after the date that all of Mehetia's equity interests in PPA II have been repurchased, we will be entitled to 100% of the revenues generated by the PPA II Project from the operation of the existing Energy Servers. Additionally, SPDS is entitled to 100% of the revenues generated by the PPA II Project from the operation of the new Energy Servers. SPDS is also entitled to 100% of any tax attributes, income and loss associated with the new energy servers.

Obligations to DSGP

At closing, we and DSGP entered into two primary commercial contracts: first, a contract for the purchase, sale and installation of the new Energy Servers (the "EPC Agreement"), and second, a contract for the operation and maintenance of the PPA II Project, including both the existing Energy Servers and the new Energy Servers (the "O&M Agreement"). Both the upfront purchase price for the new Energy Servers under the EPC Agreement and the ongoing fees for our operations and maintenance of the PPA II Project under the O&M Agreement are paid on a fixed dollar per kilowatt ($/kW) basis.

Our obligations to DSGP pursuant to the EPC Agreement include: (i) designing, manufacturing, and installing the new Energy Servers, and selling such Energy Servers to DSGP; (ii) obtaining all necessary permits and other governmental approvals necessary for the installation and operation of the new Energy Servers; and (iii) commissioning each of the new Energy Servers upon the completion of installation.

Our obligations to DSGP pursuant to the O&M Agreement include: (i) maintaining all necessary permits and other governmental approvals necessary for the operation of the PPA II Project, and maintaining such permits and approvals throughout the term of the O&M Agreement; (ii) operating and maintaining the PPA II Project in compliance with all applicable laws, permits and regulations; (iii) satisfying the efficiency and output obligations set forth in such O&M Agreement ("Performance Requirements"); and (iv) complying with the requirements of the PPA II Tariff. The O&M Agreement obligates us to repurchase some or all of the Energy Servers constituting the PPA II Project in the event the PPA II Project fails to comply with the Performance Requirements and we fail to remedy such failure after a cure period.

The O&M Agreement for the PPA II Project provides for the following Performance Requirements and indemnity obligations:

Efficiency Guaranty. We warrant to DSGP that the PPA II Project will operate at a cumulative average efficiency level of 50%, including period of operation prior to closing of the PPA II upgrade transaction. If the aggregate average efficiency falls below the specified threshold, we are obligated to make a payment to DSGP equal to the increased expense resulting from such efficiency shortfall, with our aggregate liability for such payments capped at an amount specified in the O&M Agreement. During the period from September 2010 to June 30, 2019, no payments have been made pursuant to the Efficiency Guaranty.

Existing Energy Server Output Warranty. We warrant to DSGP that the remaining existing Energy Servers at the PPA II Project will, in the aggregate, generate a minimum amount of electricity in each calendar quarter, and we are obligated to repair or replace Energy Servers if such Energy Servers fail to satisfy this warranty. If we determine that a repair or replacement is not feasible, we are obligated to repurchase such Energy Servers at the original purchase price. During the period from September 2010 to June 30, 2019, no Energy Servers have been repurchased pursuant to the Existing Energy Server Output Warranty.

New Energy Server Output Warranty. We warrant to DSGP that the new Energy Servers purchased by DSGP in connection with the PPA II Project will, in the aggregate, generate a minimum amount of electricity on a cumulative basis, and we are obligated to repair or replace Energy Servers if such Energy Servers fail to satisfy this warranty. If we determine that a repair or replacement is not feasible, we are obligated to repurchase such Energy Servers at the original purchase price. During the period from the closing of the upgrade to June 30, 2019, no Energy Servers have been repurchased pursuant to the New Energy Server Output Warranty.

New Energy Server Output Guaranty. We warrant to DSGP that the new Energy Servers purchased by DSGP in connection with the PPA II Project will, in the aggregate, generate a minimum amount of electricity on a cumulative basis, and we are obligated to make a payment to DSGP to make DSGP for lost revenues resulting from the shortfall below the guaranteed level if such Energy Servers fail to satisfy this warranty, with our aggregate liability for such payments capped at an amount specified in the O&M Agreement. During the period from the closing of the upgrade to June 30, 2019, no payments have been made pursuant to the New Energy Server Output Guaranty.

Other Obligations

In addition to the rights and obligations set forth above, the transaction documents related to the upgrade of the PPA II Project contain certain representations, warranties and covenants of Bloom, DSGH, DSGP, Mehetia and SPDS, including representations and warranties of Bloom and DSGP relating to the conduct of their respective businesses prior to the closing of the transaction, as well as indemnity obligations related to the breach of such representations, warranties and covenants. In addition, we have agreed to indemnify SPDS for losses that may be incurred in the event of certain regulatory, legal or legislative development in an aggregate amount of up to $97.2 million and we have also agreed to indemnify SPDS for losses that may be incurred in connection with the loss or disallowance of certain tax benefits that we expect the upgrade of the PPA II Project to generate, in an aggregate amount of up to $7.5 million. As of June 30, 2019, we established a cash-collateralized letter of credit of $20.0 million under this obligation, and we committed to fund an additional cash-collateralized letter of credit of $20.0 million subsequent to June 30, 2019. Under the terms of the Equity Capital Contribution Agreement, in some circumstances, including in the event that our shares of common stock are trading at a specified price for a specified period, Southern has the right to require that Bloom either (a) provide supplemental Tariff Damages Collateral (as defined in the agreement) in the amount of the difference between the then-applicable Tariff Damages and the Tariff Damages Collateral then-available to Southern pursuant to the LLC Agreement, or (b) make a payment to Southern in the amount of such difference. Based on current deployments, in the event our shares of common stock are trading at a specified price for a specified period, then based on current deployments we anticipate a potential commitment resulting from the difference between the Tariff Damage Collateral and Tariff Damage to be up to an additional $57.2 million.

Obligations Under the PPA II Tariff Agreement

In the event that DSGP claims that a “Forced Outage Event” has occurred under the PPA II tariff, DSGP is obligated to purchase and deliver replacement renewable energy credits ("RECs") in an amount equal to the number of megawatt hours for which it receives compensation under the ‘forced outage’ provisions of the tariff, but only if such replacement RECs are available in sufficient quantities and can be purchased for less than $45 per REC. A “Forced Outage Event” is defined under the PPA II tariff agreement as the inability of DSGP to obtain a replacement component part or a service necessary for the operation of the Energy Servers at their nameplate capacity. The PPA II tariff agreement provides for payments to DSGP in the event of a Forced Outage Event lasting in excess of 90 days. For the first 90 days following the occurrence of a Forced Outage Event, no payments are made under this provision of the tariff. Thereafter, DSGP is entitled to payments equal to 70% of the payments that would have been made under the tariff but for the occurrence of the Forced Outage Event-that is, the “Forced Outage Event” provision of the PPA II tariff agreement provides for payments to DSGP under the tariff equal to the amount that would be paid were PPA II Project energy servers operating at 70% of their nameplate capacity, irrespective of actual output. The PPA II tariff agreement also provides that the “Forced Outage Event” protections afforded thereunder shall automatically terminate in the event that we obtain an investment grade rating.

Impact of PPA II Project on Consolidated Financial Statements

As described above, the PPA II Project documents contain certain representations, warranties and covenants of Bloom, DSGH, DSGP, Mehetia and SPDS, including representations and warranties of Bloom and DSGP relating to the conduct of their respective businesses prior to the closing of the transaction, as well as indemnity obligations related to the breach of such representations, warranties and covenants. In addition, we have agreed to indemnify SPDS for losses that may be incurred in the event of certain regulatory, legal or legislative development in an aggregate amount of up to $97.2 million. As of June 30, 2019, we believe these events to be remote and therefore, no liability has been recorded on our condensed consolidated financial statements.

As a result of the transaction with SPDS, we reconsidered whether we should continue to consolidate DSGP. We use a qualitative approach in assessing the consolidation requirement for each of our PPA Entities. This approach focuses on determining whether we have the power to direct those activities of the PPA Entities that most significantly affect their economic performance and whether we have the obligation to absorb losses, or the right to receive benefits, that could potentially be significant to the PPA Entities. As a result of the PPA II Project, we determined that we no longer retain a

controlling interest in PPA II and therefore it will no longer be consolidated as a VIE into our condensed consolidated financial statements as of June 30, 2019. We determined that we have retained significant influence over DSGP and consequently recognize our remaining interest in DSGP as an equity-method investment as of June 30, 2019.

The PPA II Project occurs in two phases, phase 1 where initially SPDS had its purchased interest in 9.7 megawatts of Energy Servers installed during June 2019, and its remaining phase 2 purchased interest in 8.0 megawatts of Energy Servers to be installed which is expected to occur during the remainder of 2019. As of June 30, 2019, we have sold 9.7 megawatts of our current generation Energy Servers for $87.8 million to DSGP subsequent to its deconsolidation, which is included in product revenue, and recognized installation services of $3.9 million which is included in installation revenue, in our condensed consolidated statements of operations for the three and six months ended June 30, 2019. Concurrently, we had repurchased and written-off 10.0 megawatts of our earlier generation energy serves for $25.6 million and had installed the 9.7 megawatts of servers at a cost of goods sold of $26.3 million, which is included in cost of product revenue in our condensed consolidated statements of operations for the three and six months ended June 30, 2019. In anticipation of replacing the remaining installed 9.0 megawatts of Energy Servers during 2019 under phase 2 which reduced their previously expected useful lives, we recognized charges related to the decommissioning of PPA II Energy Servers of $8.1 million, which is included in cost of electricity revenue in our condensed consolidated statements of operations for the three and six months ended June 30, 2019. Additionally, in paying-off the outstanding debt and interest of PPA II amounting to $77.7 million, we incurred a debt payoff make-whole penalty of $5.9 million, which is included in general and administrative expense in our condensed consolidated statements of operations for the three and six months ended June 30, 2019. Finally, we had PPA II debt issuance costs written-off of $1.0 million and additional interest expense incurred for PPA 2 debt payoff of $0.1 million, which is included in interest expense in our condensed consolidated statements of operations for the three and six months ended June 30, 2019.

The PPA II Project resulted in the following impacts on our condensed consolidated balance sheet as of June 30, 2019: (i) cash and cash equivalents increased $4.6 million, comprised of $115.6 million cash receipts for the sale of new systems to PPA II, mostly offset by $72.3 million used for the repayment of all PPA II debt plus a make-whole payment fee, a $18.7 million distribution to Credit Suisse, the other investor in PPA II, and a $20.0 million reclassification into restricted cash for certain contingent indemnifications for SPDS under the PPA II Project in the form of a letter of credit to SPDS; (ii) inventories decreased $27.0 million due to the sale of 9.7 megawatts of current generation Energy Servers to PPA II during June 2019; (iii) property, plant and equipment decreased $33.7 million, comprised of $25.6 million due to the repurchase and write-off of 10.0 megawatts of older Energy Servers from PPA II plus $8.1 million of charges related to the decommissioning of PPA II Energy Servers for the second phase of energy server replacement, anticipated to occur during the remainder of 2019; (iv) restricted cash long-term increased $8.7 million, comprised of $20.0 million for certain contingent indemnifications for SPDS under the PPA II Project, partially offset by $11.3 million used for the repayment of debt; (v) current portion of non-recourse debt decreased $12.2 million; (vi) deferred revenue and customer deposits increased $23.8 million related to deposit funding paid by SPDS for new systems in phase 2; (vii) accrued other current liabilities increased $0.4 million, comprised of an increase of $1.1 million for the accrued installation cost for the Energy Servers purchased by SPDS, mostly offset by a decrease of $0.7 million related to the payoff of accrued interest made on PPA II's debt; (viii) long-term portion of non-recourse debt decreased $63.7 million for the payoff of long term portion of PPA II debt, net of debt issuance costs written-off; (ix) noncontrolling interest decreased $18.4 million, comprised of $18.7 million of cash distribution to Credit Suisse resulting from our repurchase of 10.0 megawatts existing Energy Servers, partially offset by $0.3 million related to the HLBV adjustment; and (x) the reclass of $37.0 million from noncontrolling interest to accrued other current liabilities related to our commitment to mandatorily redeem the noncontrolling interest in DSGH by March 31, 2020 under the PPA II Project.

PPA Entities' Activities Summary

The table below shows the details of the five continuing Investment Companies and their cumulative activities from inception to the periods indicated (dollars in thousands):

	PPA II	PPA IIIa	PPA IIIb	PPA IV	PPA V
Overview:					
Maximum size of installation (in megawatts)	30	10	6	21	40
Installed size (in megawatts)	20 [4]	10	5	19	37
Term of power purchase agreements (years)	21	15	15	15	15
First system installed	Jun-12	Feb-13	Aug-13	Sep-14	Jun-15
Last system installed	Nov-13	Jun-14	Jun-15	Mar-16	Dec-16
Income (loss) and tax benefits allocation to Equity Investor	99%	99%	99%	90%	99%
Cash allocation to Equity Investor	99%	99%	99%	90%	90%
Income (loss), tax and cash allocations to Equity Investor after the flip date	5%	5%	5%	No flip	No flip
Equity Investor [1]	Credit Suisse	US Bank	US Bank	Exelon Corporation	Exelon Corporation
Put option date [2]	March 31, 2020	1st anniversary of flip point	1st anniversary of flip point	N/A	N/A
Company cash contributions	$ 22,442	$ 32,223	$ 22,658	$ 11,669	$ 27,932
Company non-cash contributions [3]	$ —	$ 8,655	$ 2,082	$ —	$ —
Equity Investor cash contributions	$ 139,993	$ 36,967	$ 20,152	$ 84,782	$ 227,344
Debt financing	$ 144,813	$ 44,968	$ 28,676	$ 99,000	$ 131,237
Cumulative Activity as of June 30, 2019:					
Distributions to Equity Investor	$ 138,602	$ 4,430	$ 2,007	$ 6,420	$ 69,099
Debt repayment—principal	$ 144,813	$ 5,651	$ 4,414	$ 16,731	$ 7,572
Cumulative Activity as of December 31, 2018:					
Distributions to Equity Investor	$ 116,942	$ 4,063	$ 1,807	$ 4,568	$ 66,745
Debt repayment—principal	$ 65,114	$ 4,431	$ 3,953	$ 15,543	$ 5,780

[1] Investor name represents ultimate parent of subsidiary financing the project.

[2] Investor right on the certain date, upon giving us advance written notice, to sell the membership interests to us or resign or withdraw from the investment partnership.

[3] Non-cash contributions consisted of warrants that were issued by us to respective lenders to each PPA Entity, as required by such entity's credit agreements. The corresponding values are amortized using the effective interest method over the debt term.

[4] Installed base decreased from March 31, 2019 due to the repurchase of 10 megawatts of our Energy Servers during June 2019 under the PPA II Project. See disclosures above.

Some of our PPA Entities contain structured provisions whereby the allocation of income and equity to the Equity Investors changes at some point in time after the formation of the PPA Entity. The change in allocations to Equity Investors (or the "flip") occurs based either on a specified future date or once the Equity Investors reaches its targeted rate of return. For PPA Entities with a specified future date for the flip, the flip occurs January 1 of the calendar year immediately following the year that includes the fifth anniversary of the date the last site achieves commercial operation.

The noncontrolling interests in PPA IIIa and PPA IIIb are redeemable as a result of the put option held by the Equity Investors as of June 30, 2019 . The noncontrolling interests in PPA II, IIIa and PPA IIIb are redeemable as a result of the put option held by the Equity Investors as of December 31, 2018. The redemption value is the put amount. At June 30, 2019, and December 31, 2018, the carrying value of redeemable noncontrolling interests of $0.5 million and $57.3 million, respectively, exceeded the maximum redemption value.

PPA Entities' Aggregate Assets and Liabilities

Generally, Operating Company assets can be used to settle only the Operating Company obligations and Operating Company creditors do not have recourse to us. The aggregate carrying values of the PPA Entities' assets and liabilities in the condensed consolidated balance sheets, after eliminations of intercompany transactions and balances, were as follows (in thousands):

	June 30, 2019 [1]	December 31, 2018
Assets		
Current assets:		
Cash and cash equivalents	$ 18,043	$ 5,295
Restricted cash	1,848	2,917
Accounts receivable	6,533	7,516
Customer financing receivable	5,817	5,594
Prepaid expenses and other current assets	1,585	4,909
Total current assets	33,826	26,231
Property and equipment, net	321,886	399,060
Customer financing receivable, non-current	64,146	67,082
Restricted cash	36,736	27,854
Other long-term assets	30,329	2,692
Total assets	$ 486,923	$ 522,919
Liabilities		
Current liabilities:		
Accounts payable	$ 443	$ 724
Accrued other current liabilities	39,028	1,442
Deferred revenue and customer deposits	786	786
Current portion of debt	10,544	21,162
Total current liabilities	50,801	24,114
Derivative liabilities, net of current portion	8,453	3,626
Deferred revenue, net of current portion	8,306	8,696
Long-term portion of debt	251,826	323,360
Other long-term liabilities	2,078	1,798
Total liabilities	$ 321,464	$ 361,594

[1] These amounts include PPA II financial statement balances. See discussion above.

As stated above, we are a minority shareholder in the PPA Entities for the administration of our Bloom Electrons program. PPA Entities contain debt that is non-recourse to us. The PPA Entities also own Energy Server assets for which we do not have title. Although we will continue to have Power Purchase Agreement Program entities in the future and offer customers the ability to purchase electricity without the purchase of Energy Servers, we do not intend to be a minority investor in any new Power Purchase Agreement Program entities.

We believe that by presenting assets and liabilities separate from the PPA Entities, we provide a better view of the true operations of our core business. The table below provides detail into the assets and liabilities of Bloom Energy separate from the PPA Entities. The following table shows Bloom Energy's stand-alone, the PPA Entities combined and these consolidated balances as of June 30, 2019, and December 31, 2018 (in thousands):

	June 30, 2019			December 31, 2018		
	Bloom	PPA Entities	Consolidated	Bloom	PPA Entities	Consolidated
Assets						
Current assets	$ 558,458	$ 33,826	$ 592,284	$ 646,350	$ 26,231	$ 672,581
Long-term assets	177,198	453,097	630,295	220,399	496,688	717,087
Total assets	$ 735,656	$ 486,923	$ 1,222,579	$ 866,749	$ 522,919	$ 1,389,668
Liabilities						
Current liabilities	$ 272,606	$ 40,257	$ 312,863	$ 246,866	$ 2,952	$ 249,818
Current portion of debt	15,680	10,544	26,224	8,686	21,162	29,848
Long-term liabilities	233,880	18,837	252,717	293,739	14,120	307,859
Long-term portion of debt	390,157	251,826	641,983	388,073	323,360	711,433
Total liabilities	$ 912,323	$ 321,464	$ 1,233,787	$ 937,364	$ 361,594	$ 1,298,958

13. Commitments and Contingencies

Commitments

Operating Leases

During the six months ended June 30, 2019 and 2018, rent expense for our facilities was $3.8 million and $2.9 million, respectively.

At June 30, 2019, future minimum lease payments under operating leases were as follows (in thousands):

Remainder of 2019	$ 8,410
2020	16,342
2021	13,683
2022	12,979
2023	12,532
Thereafter	48,297
	$ 112,243

Equipment Leases - Beginning in December 2015, we are a party to master lease agreements that provide for the sale of Energy Servers to third parties and the simultaneous leaseback of the systems which we then subleases to customers. The lease agreements expire on various dates through 2025 and there was no recorded rent expense for the six months ended June 30, 2019 and 2018.

Purchase Commitments with Suppliers and Contract Manufacturers - In order to reduce manufacturing lead-times and to ensure an adequate supply of inventories, we have agreements with our component suppliers and contract manufacturers to allow long lead-time component inventory procurement based on a rolling production forecast. We are contractually obligated to purchase long lead-time component inventory procured by certain manufacturers in accordance with our forecasts. We can generally give notice of order cancellation at least 90 days prior to the delivery date. However, we may also issue purchase orders to certain of our component suppliers and third-party manufacturers that may not be cancelable. As of June 30, 2019 and 2018, we had no material open purchase orders with our component suppliers and third-party manufacturers that are not cancelable.

Power Purchase Agreement Program - Under the terms of the Bloom Electrons program (see *Note 12 - Power Purchase Agreement Programs - PPA II Upgrade of Energy Servers*), customers agree to purchase power from our Energy Servers at

negotiated rates, generally for periods of up to twenty-one years. We are responsible for all operating costs necessary to maintain, monitor and repair these Energy Servers, including the fuel necessary to operate the systems under certain PPA contracts. The risk associated with the future market price of fuel purchase obligations is mitigated with commodity contract futures.

The PPA Entities guarantee the performance of Energy Servers at certain levels of output and efficiency to its customers over the contractual term. The PPA Entities monitor the need for any accruals arising from such guaranties, which are calculated as the difference between committed and actual power output or between natural gas consumption at warranted efficiency levels and actual consumption, multiplied by the contractual rates with the customer. Amounts payable under these guaranties are accrued in periods when the guaranties are not met and are recorded in cost of service revenue in the consolidated statements of operations. We paid $3.5 million and $0.9 million for the six months ended June 30, 2019 and 2018, respectively.

In June 2015, PPA V entered into a $131.2 million credit agreement to fund the purchase and installation of Energy Servers. The lenders have commitments to an LC facility with the aggregate principal amount of $6.2 million. The LC facility is to fund the Debt Service Reserve Account. The amount reserved under the LC as of June 30, 2019 and 2018 was $5.0 million.

Contingencies

Indemnification Agreements - We enter into standard indemnification agreements with our customers and certain other business partners in the ordinary course of business. Our exposure under these agreements is unknown because it involves future claims that may be made against us but have not yet been made. To date, we have not paid any claims or been required to defend any action related to our indemnification obligations. However, we may record charges in the future as a result of these indemnification obligations.

Warranty Costs - We generally warrant our products sold to our direct customers for one year following the date of acceptance of the products under a standard one-year warranty. As part of our MSAs, we provide output and efficiency guaranties (collectively "performance guaranties") to our customers when systems operate below contractually specified levels of efficiency and output. Such amounts have not been material to date.

The standard one-year warranty covers defects in materials and workmanship under normal use and service conditions, and against manufacturing or performance defects. We accrue this warranty expense using our best estimate of the amount necessary to settle future and existing warranty claims as of the balance sheet date.

Our obligations under our standard one-year warranty and MSA are generally in the form of product replacement, repair or reimbursement for higher customer electricity costs. Further, if the Energy Servers run at a lower efficiency or power output than we committed under our performance guaranty, we will reimburse the customer for the underperformance. Our aggregate reimbursement obligation for this performance guaranty for each order is capped at a portion of the purchase price. Prior to fiscal year 2014, certain MSAs with direct customers were accounted for as separately-priced warranty contracts under ASC 605-20-25 *Separately Priced Extended Warranty and Product Maintenance Contracts* (formerly FTB 90-1), in which we recorded an accrual for any expected costs that exceed the contracted revenues for that one-year service renewal arrangement, and is included as a component of the accrued warranty liability. Customers may renew the MSAs leading to future expense that is not recognized under GAAP until the renewal occurs. Over time, as our service offering evolved and we began managing the Energy Servers taking into consideration individual customer arrangements as well as our Bloom Energy Server fleet management objectives, our service offering evolved to the point that our services changed, becoming a more strategic offering for both us and our customers. Additionally, virtually all of our sales arrangements included bundled sales of maintenance service agreements along with the Energy Servers. The result is that we allocate a certain portion of the contractual revenue related to the Energy Servers to the MSAs based on our BESP compared to the stated amount in the service contracts.

Delaware Economic Development Authority - In March 2012, we entered into an agreement with the Delaware Economic Development Authority to provide a grant of $16.5 million as an incentive to establish a new manufacturing facility in Delaware and to provide employment for full time workers at the facility over a certain period of time. The grant contains two types of milestones that we must complete to retain the entire amount of the grant proceeds. The first milestone was to provide employment for 900 full time workers in Delaware by the end of the first recapture period of September 30, 2017. The second milestone was to pay these full time workers a cumulative total of $108.0 million in compensation by September 30, 2017. There are two additional recapture periods at which time we must continue to employ 900 full time workers and the cumulative total compensation paid by us is required to be at least $324.0 million by September 30, 2023. As of June 30, 2019, we had 317 full time workers in Delaware and paid $105.6 million in cumulative compensation. As of June 30, 2018, we had 328 full time workers in Delaware and paid $80.4 million in cumulative compensation. We have so far received $12.0 million of the grant which is contingent upon meeting the milestones through September 30, 2023. In the event that we do not meet the milestones, we may have to repay the Delaware Economic Development Authority, including up to $5.0 million on

September 30, 2021 and up to an additional $2.5 million on September 30, 2023. As of June 30, 2019 we had cumulatively paid $1.5 million for recapture provisions and recorded $10.5 million in other long-term liabilities for potential recapture.

Self-Generation Incentive Program ("SGIP") - Our PPA Entities' customers receive payments under the SGIP which is a program specific to the State of California that provides financial incentives for the installation of qualifying new self-generation equipment that we own. The SGIP program issues 50% of the fully anticipated amount in the first year the equipment is placed into service. The remaining incentive is then paid based on the size of the equipment (i.e., nameplate kilowatt capacity) over the subsequent five years.

The SGIP program has operational criteria primarily related to fuel mixture and minimum output for the first five years after the qualified equipment is placed in service. If the operational criteria are not fulfilled, it could result in a partial refund of funds received. However, for certain PPA Entities, we make SGIP reservations on behalf of the PPA Entity and, therefore, the PPA Entity bears the risk of loss if these funds are not paid.

Investment Tax Credits ("ITCs") - Our Energy Servers are eligible for federal ITCs that accrued to qualified property under Internal Revenue Code Section 48 when placed into service. However, the ITC program has operational criteria that extend for five years. If the energy property is disposed or otherwise ceases to be qualified investment credit property before the close of the five year recapture period is fulfilled, it could result in a partial reduction of the incentives. The purchase of Energy Servers were made by the PPA Entities and, therefore, the PPA Entities bear the risk of repayment if the assets placed in service do not meet the ITC operational criteria in the future.

Legal Matters - From time to time, we are involved in disputes, claims, litigation, investigations, proceedings and/or other legal actions consisting of commercial, securities and employment matters that arise in the ordinary course of business. We review all legal matters at least quarterly and assesses whether an accrual for loss contingencies needs to be recorded. The assessment reflects the impact of negotiations, settlements, rulings, advice of legal counsel and other information and events pertaining to a particular situation. We record an accrual for loss contingencies when management believes that it is both probable that a liability has been incurred and the amount of the loss can be reasonably estimated. Legal matters are subject to uncertainties and are inherently unpredictable, so the actual liability in any such matters may be materially different from our estimates. If an unfavorable resolution were to occur, there exists the possibility of a material adverse impact on the consolidated financial condition, results of operations or cash flows for the period in which the resolution occurs or on future periods.

In July of 2018, two former executives of Advanced Equities, Inc., Keith Daubenspeck and Dwight Badger, filed a Statement of Claim with the American Arbitration Association in Santa Clara, CA, against us, Kleiner Perkins, Caufield & Byers, LLC ("KPCB"), New Enterprise Associates, LLC ("NEA") and affiliated entities of both KPCB and NEA seeking to compel arbitration and alleging a breach of a confidential agreement executed between the parties on June 27, 2014 ("Confidential Agreement"). On May 7, 2019, KPCB and NEA were dismissed with prejudice. On June 15, 2019, a Second Amended Statement of Claim was filed against us alleging securities fraud, fraudulent inducement, a breach of the Confidential Agreement, and violation of the California unfair competition law. On July 16, 2019, we filed our Answering Statement and Affirmative Defenses. We believe the Second Amended Statement of Claim to be without merit and, as a result, we have recorded no loss contingency related to this claim.

In June of 2019. Messrs. Daubenspeck and Badger filed a complaint against our CEO, out CFO and our former CFO in the United States District Court for the Northern District of Illinois, Case No. 1:19-cv-04305, asserting nearly identical claims as those in the pending arbitration discussed above. We believe the complaint to be without merit and, as a result, we have recorded no loss contingency related to this claim.

In March of 2019, the Lincolnshire Police Pension fund filed a class action complaint in the Superior Court of the State of California, County of Santa Clara, against us, certain members of our senior management, certain of our directors and the underwriters in our initial public offering alleging violations under Sections 11 and 15 of the Securities Act of 1933, as amended, for alleged misleading statements or omissions in our Form S-1 Registration Statement filed with the Securities and Exchange Commission in connection with our July 25, 2018 initial public offering. Two related class action cases were subsequently filed in the Santa Clara County Superior Court against the same defendants containing the same allegations; Rodriquez vs Bloom Energy et al was filed on April 22, 2019 and Evans vs Bloom Energy et al. was filed on May 7, 2019. These cases have been consolidated and a case management schedule has been set, with Plaintiffs' Consolidated Amended Complaint due to be filed with the court by October 14, 2019. Discovery is currently stayed.

In May of 2019, Elissa Roberts filed a class action complaint in the federal district court for the Northern District of California against us and certain of our directors alleging violations under Section 11 and 15 of the Securities Act of 1933, as amended, for alleged misleading statements or omissions in our Form S-1 Registration Statement filed with the Securities and Exchange Commission in connection with our July 25, 2018 initial public offering. Lead plaintiff applications were submitted to the court on July 29, 2019 and the lead plaintiff selection hearing is scheduled for September 4, 2019.

14. Segment Information

Segments and the Chief Operating Decision Maker

Our chief operating decision makers ("CODMs"), the Chief Executive Officer and the Chief Financial Officer, review financial information presented on a consolidated basis for purposes of allocating resources and evaluating financial performance. The CODMs allocate resources and make operational decisions based on direct involvement with our operations and product development efforts. Bloom Energy is managed under a functionally-based organizational structure with the head of each function reporting to the Chief Executive Officer. The CODMs assess performance, including incentive compensation, based upon consolidated operations performance and financial results on a consolidated basis. As such, we have a single reporting segment and operating unit structure.

15. Related Party Transactions

Our results of operations included the following related party transactions (in thousands):

	Six Months Ended June 30,	
	2019	2018
Total revenue from related parties	$ 93,204	$ 30,925
Consulting expenses paid to related parties (included in general and administrative expense)	102	102
Interest expense on debt to related parties	3,218	5,299

Bloom Energy Japan Limited

In May 2013, we entered into a joint venture with Softbank Corp., which is accounted for as an equity method investment. Under this arrangement, we sell Energy Servers and provide maintenance services to the joint venture. We recognized related party service revenue of $0.8 million for the three months ended June 30, 2019 and related party revenue of $1.7 million, comprised of service revenue of $0.2 million and installation revenue of $1.5 million, for the three months ended June 30, 2018. We recognized related party service revenue of $1.6 million for the six months ended June 30, 2019 and related party revenue of $30.9 million, comprised of service revenue of $0.3 million, product revenue of $28.3 million, and installation revenue of $2.3 million, for the six months ended June 30, 2018. Accounts receivable from this joint venture was $9,800 as of June 30, 2019 and $3.3 million as of December 31, 2018.

Diamond State Generation Holdings, LLC

On June 14, 2019, we entered into a transaction with SP Diamond State Class B Holdings for the PPA II upgrade of Energy Servers. In connection with the closing of this transaction, SPDS was admitted as a member of Diamond State Generation Partners, LLC ("DSGP"). DSGP, an operating company was a wholly owned subsidiary of DSGH prior to June 14, 2019. As a result of the PPA II upgrade of Energy Servers transaction, we determined that we no longer retain a controlling interest in PPA II and therefore it will no longer be consolidated as a variable interest entity, or VIE, into our condensed consolidated financial statements as of June 30, 2019. DSGP is considered to be a related party as regards to our PPA II upgrade of Energy Servers transaction for which we recognized related party revenue of approximately $91.6 million, comprised of product revenue of approximately $87.7 million and installation revenue of $3.9 million, for the three and six months ended June 30, 2019. We determined that we have retained significant influence over DSGP and consequently recognize our remaining interest in DSGP as an equity investment as of June 30, 2019. See Note 12 - Power Purchase Agreement Programs - PPA II Upgrade of Energy Servers. We had no accounts receivable from DSGP as of June 30, 2019.

Consulting Arrangement

In January 2009, we entered into a consulting agreement with General Colin L. Powell, a member of our board of directors, pursuant to which General Powell performs certain strategic planning and advisory services for us. Pursuant to this consulting agreement, General Powell receives compensation of $125,000 per year and reimbursement for reasonable expenses.

Debt to Related Parties

The following is a summary of our debt and convertible notes from investors considered to be related parties as of June 30, 2019 (in thousands):

	Unpaid Principal Balance	Net Carrying Value		
		Current	Long-Term	Total
Recourse debt from related parties:				
6% convertible promissory notes due December 2020 from related parties	$ 27,734	$ —	$ 27,734	$ 27,734
Non-recourse debt from related parties:				
7.5% term loan due September 2028 from related parties	39,317	2,889	32,643	35,532
Total debt from related parties	$ 67,051	$ 2,889	$ 60,377	$ 63,266

The following is a summary of our debt and convertible notes from investors considered to be related parties as of December 31, 2018 (in thousands):

	Unpaid Principal Balance	Net Carrying Value		
		Current	Long-Term	Total
Recourse debt from related parties:				
6% convertible promissory notes due December 2020 from related parties	$ 27,734	$ —	$ 27,734	$ 27,734
Non-recourse debt from related parties:				
7.5% term loan due September 2028 from related parties	40,538	2,200	34,119	36,319
Total debt from related parties	$ 68,272	$ 2,200	$ 61,853	$ 64,053

Regarding non-recourse debt from related parties, we repaid $0.4 million and $0.7 million of principal and interest in the three months ended June 30, 2019, and we repaid $1.2 million and $1.5 million of principal and interest in the six months ended June 30, 2019, respectively. No other significant changes have occurred in total debt from related parties since December 31, 2018. See *Note 6 - Outstanding Loans and Security Agreements* for additional information on our debt facilities. During the three months ended June 30, 2019 and 2018, interest expense on debt from related parties was $1.6 million and $2.7 million, and during the six months ended June 30, 2019 and 2018, interest expense on debt from related parties was $3.2 million and $5.3 million, respectively.

16. Subsequent Events

There have been no subsequent events that occurred during the period subsequent to the date of these financial statements that would require adjustment to, or disclosure in, the financial statements as presented.

ITEM 2 - MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion of our financial condition and results of operations in conjunction with the consolidated financial statements and the notes thereto included elsewhere in this Quarterly Report on Form 10-Q. Some of the information contained in this discussion and analysis or set forth elsewhere in this Quarterly Report on Form 10-Q, including information with respect to our plans and strategy for our business, includes forward-looking statements that involve risks and uncertainties as described under the heading Special Note Regarding Forward-Looking Statements following the Table of Contents of this Quarterly Report on Form 10-Q. You should review the disclosure under ITEM 1A - Risk Factors in this Quarterly Report on Form 10-Q for a discussion of important factors that could cause actual results to differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.

Overview

Our solution, our Energy Server, is a stationary power generation platform built for the digital age and capable of delivering highly reliable, uninterrupted, 24x7 constant power that is also clean and sustainable. The Energy Server converts standard low-pressure natural gas or biogas into electricity through an electrochemical process without combustion, resulting in very high conversion efficiencies and lower harmful emissions than conventional fossil fuel generation. A typical configuration produces 250 kilowatts of power in a footprint roughly equivalent to that of half of a standard thirty-foot shipping container, or approximately 125 times more space-efficient than solar power generation. Two hundred fifty (250) kilowatts of power is roughly equivalent to the constant power requirement of a typical big box retail store. Any number of these Energy Server systems can be clustered together in various configurations to form solutions from hundreds of kilowatts to many tens of megawatts.

We market and sell our Energy Servers primarily through our direct sales organization in the United States, and also have direct and indirect sales channels internationally. Recognizing that deploying our solutions requires a material financial commitment, we have developed a number of financing options to support sales of Energy Servers to customers that lack the financial capability to purchase our Energy Servers directly, who prefer to finance the acquisition using third party financing or who prefer to contract for our services on a pay-as-you-go model.

Our typical target commercial or industrial customer has historically been either an investment-grade entity or a customer with investment-grade attributes such as size, assets and revenue, liquidity, geographically diverse operations and general financial stability. We have recently expanded our below investment-grade customer base and have also expanded internationally to target customers with deployments on a wholesale grid. Given that our customers are typically large institutions with multi-level decision making processes, we generally experience a lengthy sales process.

Purchase and Lease Programs

Initially, we only offered our Energy Servers on a direct purchase basis, in which the customer purchases the product directly from us. In order to expand our offerings to customers who lack the financial capability to purchase our Energy Servers directly and/or who prefer to lease the product or contract for our services on a pay-as-you-go model, we subsequently developed the Traditional Lease, Managed Services, Bloom Electrons program and further, our Third-Party PPA Program. The Third-Party PPA Program carries many of the same obligations as a traditional Bloom Electrons program, except that we do not have any equity interest in the PPA structure. Therefore, the Bloom Electrons programs and the various Third-Party PPA Programs are collectively described here under the Power Purchase Agreement Program(s). The substantial majority of bookings made and revenue generated in recent periods are pursuant to Third-Party PPA Programs.

Power Purchase Agreement Programs

Our customers have the option to purchase electricity produced by our Energy Servers through a financed offering which we refer to as a Power Purchase Agreement Program, whereby one or more parties are equity investors in financing the entities that purchase the Energy Servers. The entity owning the Energy Server then enters into agreements with the customer pursuant to which the customer purchases the electricity generated by the Energy Server for a fixed price per kilowatt-hour. Our Power Purchase Agreement Programs include both the Bloom Electrons program, which includes an equity investment by us and in which we recognize revenue as the electricity is produced, and our Third-Party PPA programs, in which we have no equity investment and we recognize revenue on acceptance.

For further information about our Power Purchase Agreement Programs, see *Note 12 - Power Purchase Agreement Programs - PPA II Upgrade of Energy Servers* to our consolidated financial statements included in this Quarterly Report on Form 10-Q.

With our Bloom Electrons program, we endeavored to assist our customers' purchases by directly participating in financing the purchase of their Energy Server. More recently, we have moved to providing the same service to our customers without our direct involvement in the capital financing and therefore, having no equity investment in the resulting PPA. We refer to this purchase option as Third-Party PPA arrangements, structured in a near-identical manner and with the same terms and conditions as our Bloom Electrons program (described above), only without our assuming an equity position in the PPA structure. This way, we retain the benefits for the marketability of our Energy Servers without the capital burden and without the potential financial liability.

On June 28, 2019, we sold all of our equity interests in 2018 ESA Project Company, LLC (the "Project Company") to Project Oxygen Holdings, LLC, a wholly owned subsidiary of Duke Energy One, Inc. ("Duke"). The Project Company is party to a portfolio of power purchase agreements with commercial off-takers. Simultaneously with the sale of equity interests, the Project Company entered into sale agreement with us whereby, subject to satisfaction of certain conditions, the Project Company committed to purchase approximately 36.8 MW of Energy Servers from us for a total amount of no more than $249M. Additionally, we agreed to provide operations and maintenance services for the portfolio of Energy Servers. We consider this transaction a Third-Party PPA arrangement. The terms and conditions of this transaction, including the suite of warranties and guaranties provided with respect to the performance of the Energy Servers, are customary for Bloom transactions of this type.

Lease Programs

In our Lease Programs, we sell the Energy Server to a financing party that in turn leases the Energy Server to the customer. We then enter into an operations and maintenance agreement with the customer. The customer pays the financing party a rent payment and pays us an operations and maintenance fee. In our Lease programs, we recognize revenue at the time of the sale to the financing party, which typically occurs in connection with acceptance.

Managed Services Programs

In our Managed Services Programs, we sell the Energy Server to a financing party and simultaneously lease the Energy Server back from the financing party. We then enter into an Energy Server services agreement with the customer. The customer pays us a fixed payment equal to our lease payment obligation to the financing party. In some cases, the customer may also pay us an operations and maintenance fee. In our Managed Services programs, we recognize revenue at the time of the sale to the financing party, which typically occurs in connection with acceptance.

Purchase Options

Depending upon the purchase option chosen by our customer, either the customer or the financing provider may utilize investment tax credits and other government incentives. However, the timing of the product-related cash flows to us is generally consistent across all of the purchase options. We generally receive all product-related payments by the time that the product is accepted by the end customer.

Our capacity to offer our Energy Servers through any of these arrangements depends in large part on the ability of the parties involved in providing payment for the Energy Servers to monetize the related investment tax credits, accelerated tax depreciation and other incentives, and/or the future power purchase obligations of the end customer. Interest rate fluctuations would also impact the attractiveness of any financing offerings for our customers, and currency exchange fluctuations may also impact the attractiveness of international offerings. The Traditional Lease, Managed Services and Power Purchase Agreement Program options are limited by the creditworthiness of the customer. Additionally, the Traditional Lease and Managed Services options, as with all leases, are also limited by the customer's willingness to commit to making fixed payments regardless of the performance of the Energy Servers or our performance of our obligations under the customer agreement.

Under each purchase option, we provide warranties and performance guaranties for the Energy Servers' efficiency and output. Under direct purchase, Traditional Lease, and Power Purchase Agreement Program options, the warranty and performance guaranty is typically included in the price of the Energy Server for the first year. The warranty and performance guaranty may be renewed annually at the customer's option - as an operations and maintenance services agreement - at predetermined prices for a period of up to 25 years. Historically, our customers have almost always exercised their option to renew under these operations and maintenance services agreements. Under the Power Purchase Agreement Programs, we provide warranties and performance guaranties regarding the Energy Servers' efficiency to the customer (i.e., the electricity user), and we provide warranties and performance guaranties regarding the Energy Servers' output to the customer that purchases the Energy Servers. Additionally, under the Managed Services program, the operations and maintenance services

agreements are priced separately and included for a fixed period specified in the customer agreement. This period is typically either 6 or 10 years, which may be extended at the option of the parties for additional years with all payments made annually.

Warranty Commitments - We typically provide (i) an output warranty to operate at or above a specified baseload output of the Energy Servers on a site, and (ii) an efficiency warranty to operate at or above a specified level of fuel efficiency. Both are measured on a monthly, cumulative, or other basis, as specified in the Financing Agreement or customer agreement, as applicable. Upon the applicable beneficiary making a warranty claim for a failure of any of our warranty commitments, we are then obligated to repair or replace the Energy Server, or if a repair or replacement is not feasible, to pay the customer an amount approximately equal to the net book value of the Energy Server, after which the Financing Agreement or customer agreement would be terminated.

Performance Guaranties - Our performance guaranties are negotiated on a case-by-case basis, but we typically provide (i) an output guaranty to deliver a specified amount of electricity, and (ii) an efficiency guaranty to operate at or about a specified level of fuel efficiency. The output guaranty and efficiency guaranty are each typically measured on a cumulative basis from the date the applicable Energy Server(s) are commissioned, but the measurement period may be subject to negotiations on a case-by-case basis. In each case, underperformance obligates us to make a payment to the applicable beneficiary, subject to a cap specified in the applicable agreement.

International Channel Partners

Prior to 2018, we consummated a small number of sales outside the United States of America, including in India and Japan. In India, sales activities are currently conducted by Bloom Energy (India) Pvt. Ltd., our wholly-owned indirect subsidiary; however, we are currently evaluating the Indian market to determine whether the use of channel partners would be a beneficial go-to-market strategy to grow our India market sales.

In Japan, sales are conducted pursuant to a Japanese joint venture established between us and subsidiaries of SoftBank Corp, called Bloom Energy Japan Limited ("Bloom Energy Japan"). Under this arrangement, we sell Energy Servers to Bloom Energy Japan and we recognize revenue once the Energy Servers leave the port of the U.S. as Bloom Energy Japan enters into the contract with the end customer and performs all installation work, as well as some of the operations and maintenance work.

In 2018, Bloom Energy Japan consummated a sale of Energy Servers into certain countries in the Asia Pacific region. In addition, we have also entered into a Preferred Distributor Agreement with SK Engineering & Construction Co., Ltd. and SKD&D to enable us to sell directly into the Asia Pacific region.

Key Operating Metrics

In addition to the measures presented in the consolidated financial statements, we use the following key operating metrics to evaluate business activity, to measure performance, to develop financial forecasts and to make strategic decisions:

- **Product accepted** - the number of customer acceptances of our Energy Servers in any period. We recognize revenue when an acceptance is achieved. We use this metric to measure the volume of deployment activity. We measure each Energy Server manufactured, shipped and accepted in terms of 100 kilowatt equivalents.
- **Product costs of product accepted in the period (per kilowatt)** - the average unit product cost for the Energy Servers that are accepted in a period. We use this metric to provide insight into the trajectory of product costs and, in particular, the effectiveness of cost reduction activities.
- **Period costs of manufacturing expenses not included in product costs** - the manufacturing and related operating costs that are incurred to procure parts and manufacture Energy Servers that are not included as part of product costs. We use this metric to measure any costs incurred to run our manufacturing operations that are not capitalized (i.e., absorbed) into inventory and therefore, expensed to our consolidated statement of operations in the period that they are incurred.
- **Installation costs on product accepted (per kilowatt)** - the average unit installation cost for Energy Servers that are accepted in a given period. This metric is used to provide insight into the trajectory of install costs and, in particular, to evaluate whether our installation costs are in line with our installation billings.

Comparison of the Three and Six Months Ended June 30, 2019 and 2018

Acceptances

We use acceptances as a key operating metric to measure the volume of our completed Energy Server installation activity from period to period. We typically define an acceptance as when an Energy Server is installed and running at full power as defined in the customer contract or the financing agreements. For orders where a third party performs the installation, acceptances are generally achieved when the Energy Servers are shipped.

The product acceptances in the period were as follows:

	Three Months Ended June 30,		Change		Six Months Ended June 30,		Change	
	2019	2018	Amount	%	2019	2018	Amount	%
Product accepted during the period (in 100 kilowatt systems)	271	181	90	49.7%	506	347	159	45.8%

Product accepted increased approximately 90 systems, or 49.7%, for the three months ended June 30, 2019, as compared to the three months ended June 30, 2018. Acceptance volume increased as we continue to drive growth from our backlog, including the PPA II Project, and deliver growth in the Asia Pacific region, as well as enhance our ability and capacity to install more Energy Servers with our installation team.

Product accepted increased approximately 159 systems, or 45.8%, for the six months ended June 30, 2019, as compared to the six months ended June 30, 2018. Acceptance volume increased as we continue to drive growth from our backlog, including the PPA II Project and deliver growth in the Asia Pacific region, as well as enhance our ability and capacity to install more Energy Servers with our installation team.

As discussed in the Purchase and Lease Programs above, our customers have several purchase options for our Energy Servers. The portion of acceptances attributable to each purchase option in the three and six months ended June 30, 2019 and 2018 was as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Direct Purchase (including Third Party PPAs)	93%	75%	94%	87%
Traditional Lease	7%	25%	6%	13%
Managed Services	—%	—%	—%	—%
Bloom Electrons	—%	—%	—%	—%
	100%	100%	100%	100%

The portion of total revenue attributable to each purchase option in the period was as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Direct Purchase (including Third Party PPAs)	77%	63%	70%	72%
Traditional Lease	13%	19%	18%	10%
Managed Services	2%	5%	2%	5%
Bloom Electrons	8%	13%	10%	13%
	100%	100%	100%	100%

Costs Related to Our Products

	Three Months Ended June 30,		Change		Six Months Ended June 30,		Change	
	2019	2018	Amount	%	2019	2018	Amount	%
Product costs of product accepted in the period	$ 3,045/kW	$ 3,485/kW	$ (440)/kW	(12.6)%	$ 3,120/kW	$ 3,662/kW	$ (542)/kW	(14.8)%
Period costs of manufacturing related expenses not included in product costs (in thousands)	$ 3,321	$ 3,018	$ 303	10.0 %	$ 10,258	$ 13,803	$ (3,545)	(25.7)%
Installation costs on product accepted in the period	$ 627/kW	$ 1,967/kW	$ (1,340)/kW	(68.1)%	$ 650/kW	$ 1,276/kW	$ (626)/kW	(49.1)%

Product costs of product accepted decreased approximately $440 per kilowatt, or 12.6%, for the three months ended June 30, 2019, as compared to the three months ended June 30, 2018. The product cost reduction was driven generally by our ongoing cost reduction efforts to reduce material costs in conjunction with our suppliers and our reduction in labor and overhead costs through improved automation at our manufacturing facilities.

Product costs of product accepted decreased approximately $542 per kilowatt, or 14.8%, for the six months ended June 30, 2019, as compared to the six months ended June 30, 2018. The product cost reduction was driven generally by our ongoing cost reduction efforts to reduce material costs in conjunction with our suppliers and our reduction in labor and overhead costs through improved automation at our manufacturing facilities.

Period costs of manufacturing related expenses increased approximately $0.3 million, or 10.0%, for the three months ended June 30, 2019, as compared to the three months ended June 30, 2018. Our period costs of manufacturing related expenses decreased primarily as a result of higher absorption of fixed manufacturing costs into product costs due to a larger volume of builds through our factory tied to our acceptance growth, which resulted in higher factory utilization.

Period costs of manufacturing related expenses decreased approximately $3.5 million, or 25.7%, for the six months ended June 30, 2019, as compared to the six months ended June 30, 2018. Our period costs of manufacturing related expenses decreased primarily as a result of higher absorption of fixed manufacturing costs into product costs due to a larger volume of builds through our factory tied to our acceptance growth, which resulted in higher factory utilization.

Installation costs on product accepted decreased approximately $1,340 per kilowatt, or 68.1%, for the three months ended June 30, 2019, as compared to the three months ended June 30, 2018. Each customer site is different and installation costs can vary due to a number of factors, including size and site complexity, such as site and utility location, presence of a storage solution, regulatory and any other customer requirements. As such, installation on a per kilowatt basis can vary significantly from period-to-period. When we achieve international acceptances, our partners are responsible for the installation, and therefore we do not incur installation costs. When we achieve acceptances for upgrading customer sites to our latest technology, installation costs are minimal as most of the installation work and costs were incurred when the site was initially installed. The mix of international acceptances and the PPA II Project contributed to the lower installation cost this quarter

Installation costs on product accepted decreased approximately $626 per kilowatt, or 49.1%, for the six months ended June 30, 2019, as compared to the six months ended June 30, 2018. Each customer site is different and installation costs can vary due to a number of factors, including size and site complexity, such as site and utility location, presence of a storage solution, regulatory and any other customer requirements. As such, installation on a per kilowatt basis can vary significantly from period-to-period. When we achieve international acceptances, our partners are responsible for the installation, and therefore we do not incur installation costs. The mix of international acceptances for the six months ended June 30, 2019 contributed to the decrease in installation costs.

Results of Operations

Comparison of the Three and Six Months Ended June 30, 2019 and 2018

Revenue

	Three Months Ended June 30,		Change		Six Months Ended June 30,		Change	
	2019	2018	Amount	%	2019	2018	Amount	%
					(in thousands except percents)			
Product	$ 179,900	$ 108,654	$ 71,246	65.6 %	$ 321,633	$ 229,961	$ 91,672	39.9 %
Installation	17,284	26,245	(8,961)	(34.1)%	39,543	40,363	(820)	(2.0)%
Service	23,659	19,975	3,684	18.4 %	46,949	39,882	7,067	17.7 %
Electricity	12,939	14,007	(1,068)	(7.6)%	26,364	28,036	(1,672)	(6.0)%
Total revenue	$ 233,782	$ 168,881	$ 64,901	38.4 %	$ 434,489	$ 338,242	$ 96,247	28.5 %

Total Revenue

Total revenue increased approximately $64.9 million, or 38.4%, for the three months ended June 30, 2019, as compared to the three months ended June 30, 2018. This increase was driven primarily by the increase in product acceptances of approximately 90 systems, or 49.7%, for the three months ended June 30, 2019, as compared to the three months ended June 30, 2018.

Total revenue increased approximately $96.2 million, or 28.5%, for the six months ended June 30, 2019, as compared to the six months ended June 30, 2018. Revenue in the six months ended June 30, 2018 included a one-time benefit of $45.5 million associated with the 2017 retroactive ITC benefit recognized in the same period in 2018. Excluding this one-time retroactive ITC benefit in 2018, revenue increased during the six months ended June 30, 2019 by approximately $141.7 million, or 48.4% compared to the same period in 2018. This increase was driven primarily by the increase in product acceptances of approximately 159 systems, or 45.8%, for the six months ended June 30, 2019, as compared to the six months ended June 30, 2018.

Product and installation revenue combined increased approximately $62.3 million, or 46.2%, to $197.2 million for the three months ended June 30, 2019 from $134.9 million for the three months ended June 30, 2018. The upfront portion of the product and install revenue increased approximately $67.2 million to $195.2 million for the three months ended June 30, 2019 from $128.0 million for the three months ended June 30, 2018. This increase in upfront product and install revenue was primarily due to the increase in upfront acceptances to 271 in the three months ended June 30, 2019 from 181 in the three months ended June 30, 2018. The upfront product and install average selling price increased to $7,203 per kilowatt for the three months ended June 30, 2019, from $7,093 per kilowatt for the three months ended June 30, 2018.

Product Revenue

Product revenue increased approximately $71.2 million, or 65.6%, for the three months ended June 30, 2019, as compared to the three months ended June 30, 2018. This increase was primarily driven by the increase in acceptances of 90 systems, and a higher per unit average selling price associated with those acceptances in the three months ended June 30, 2019, as compared to the three months ended June 30, 2018.

Product revenue increased approximately $91.7 million, or 39.9%, for the six months ended June 30, 2019, as compared to the six months ended June 30, 2018. This increase was primarily driven by the increase in acceptances of 159 systems. Product revenue in the six months ended June 30, 2018 included a one-time benefit of $45.5 million associated with the 2017 retroactive ITC benefit recognized in the same period in 2018. Excluding this one-time retroactive ITC benefit in 2018, revenue increased during the six months ended June 30, 2019 by approximately $137.2 million, or 74.4% compared to the same period in 2018.

Installation Revenue

Installation revenue decreased approximately $9.0 million, or 34.1%, from $26.2 million for the three months ended June 30, 2018 to $17.3 million for the three months ended June 30, 2019. This decrease was generally driven by the higher mix of international acceptances where we don't perform the installation service and therefore do not get installation revenue for the three months ended June 30, 2019 compared to the three months ended June 30, 2018. Installation revenue can increase or decrease from period to period as a result of differences in size and complexity for the sites accepted and the mix of international versus domestic acceptances. Both the cost and revenue of installations can vary based on the size of the installation, the complexity of the installation, the features and ancillary equipment included in the installation, and whether or not we perform the installation as part of the overall scope of the customer contract.

Installation revenue decreased approximately $0.8 million, or 2.0%, from $40.4 million for the six months ended June 30, 2018 to $39.5 million for the six months ended June 30, 2019. This decrease was generally driven by the higher mix of international acceptances, where we don't perform the installation service for the six months ended June 30, 2019 compared to the six months ended June 30, 2018.

Service Revenue

Service revenue increased approximately $3.7 million, or 18.4%, for the three months ended June 30, 2019, as compared to the three months ended June 30, 2018. This was primarily due to the increase in the number of annual maintenance contract renewals driven by our growing fleet of installed Energy Servers.

Service revenue increased approximately $7.1 million, or 17.7%, for the six months ended June 30, 2019, as compared to the six months ended June 30, 2018. This was primarily due to the increase in the number of annual maintenance contract renewals driven by our growing fleet of installed Energy Servers.

Electricity Revenue

Electricity revenue decreased approximately $1.1 million, or 7.6%, for the three months ended June 30, 2019, as compared to the three months ended June 30, 2018, due to a reduction in revenues from the PPA II upgrade of Energy Servers transaction, resulting from the reduced output during the period between the decommissioning of the existing products being removed and the commencement of operations of the new products installed as replacements.

Electricity revenue decreased approximately $1.7 million, or 6.0%, for the six months ended June 30, 2019, as compared to the six months ended June 30, 2018, due to a reduction in revenues from the PPA II upgrade of Energy Servers transaction, resulting from the reduced output during the period between the decommissioning of the existing products being removed and the commencement of operations of the new products installed as replacements.

Cost of Revenue

	Three Months Ended June 30,		Change		Six Months Ended June 30,		Change	
	2019	2018	Amount	%	2019	2018	Amount	%
	(in thousands except percents)							
Cost of revenue:								
Product	$ 131,952	$ 70,802	$ 61,150	86.4 %	$ 255,952	$ 151,157	$ 104,795	69.3 %
Installation	22,116	37,099	(14,983)	(40.4)%	46,282	47,537	(1,255)	(2.6)%
Service	19,599	19,260	339	1.8 %	47,156	43,513	3,643	8.4 %
Electricity	18,442	8,949	9,493	106.1 %	27,671	19,598	8,073	41.2 %
Total cost of revenue	$ 192,109	$ 136,110	$ 55,999	41.1 %	$ 377,061	$ 261,805	$ 115,256	44.0 %
Gross profit (loss)	$ 41,673	$ 32,771	$ 8,902	27.2 %	$ 57,428	$ 76,437	$ (19,009)	(24.9)%

Total Cost of Revenue

Total cost of revenue increased approximately $56.0 million, or 41.1%, for the three months ended June 30, 2019, as compared to the three months ended June 30, 2018. Total cost of revenue includes stock-based compensation which increased approximately $8.4 million for the three months ended June 30, 2019, as compared to the three months ended June 30, 2018. Total cost of revenue, excluding stock-based compensation, increased approximately $47.6 million, or 35.5%, to $181.7 million for the three months ended June 30, 2019, as compared to $134.1 million for the three months ended June 30, 2018. This increase in total cost of revenue was primarily attributable to higher product cost of revenue which was driven by an increase in the volume of product acceptances.Cost of revenue for the three months ended June 30, 2019 included $33.7 million one time expenses associated with the PPA II Project, $25.6 million recoded in cost of product revenue and $8.1 million recorded in cost of electricity revenue. See *Note 12 - Power Purchase Agreement Programs - PPA II Upgrade of Energy Servers* for further details.

Total cost of revenue increased approximately $115.3 million, or 44.0%, for the six months ended June 30, 2019, as compared to the six months ended June 30, 2018. Total cost of revenue includes stock-based compensation which increased approximately $20.9 million for the six months ended June 30, 2019, as compared to the six months ended June 30, 2018. Total cost of revenue, excluding stock-based compensation, increased approximately $94.4 million, or 36.6%, to $352.3 million for the six months ended June 30, 2019, as compared to $257.9 million for the six months ended June 30, 2018. This increase in total cost of revenue was primarily attributable to higher product cost of revenue which was driven by an increase in the volume of product acceptances.

Combined product and installation cost of revenue increased approximately $46.2 million, or 42.8%, to $154.1 million for the three months ended June 30, 2019, from $107.9 million for the three months ended June 30, 2018. The upfront portion of the product and installation cost of revenue, excluding stock based compensation, increased approximately $41.7 million to $142.9 million for the three months ended June 30, 2019, from $101.2 million for the three months ended June 30, 2018. This increase in upfront product and installation cost of revenue was primarily due to the increase in upfront acceptances to 271 in the three months ended June 30, 2019, from 181 in the three months ended June 30, 2018. The upfront product and installation average cost of revenue on a per kilowatt basis, also described as total installed system cost ("TISC") decreased to $5,274 per kilowatt for the three months ended June 30, 2019, from $5,607 per kilowatt for the three months ended June 30, 2018. This decrease was primarily driven by the decrease in installation costs resulting from the higher international customer mix and the size and complexity for the sites accepted in the three months ended June 30, 2019.

Cost of Product Revenue

Cost of product revenue increased approximately $61.2 million, or 86.4%, for the three months ended June 30, 2019, as compared to the three months ended June 30, 2018. This increase was driven by the increase in acceptances and an increase in stock-based compensation

Cost of product revenue increased approximately $104.8 million, or 69.3%, for the six months ended June 30, 2019 as compared to the six months ended June 30, 2018. This increase was driven by the increase in acceptances and an increase in stock-based compensation, partially offset by a one-time payment of $9.4 million recorded to cost of product revenue in the six months ended June 30, 2018. This $9.4 million cost was driven by the reinstatement of the ITC program in February 2018, where we were required to repay certain suppliers for previously negotiated contractual discounts.

Cost of Installation Revenue

Cost of installation revenue decreased approximately $15.0 million, or 40.4%, for the three months ended June 30, 2019, as compared to the three months ended March 31, 2018. This decrease was generally driven by the higher mix of international acceptances in the three months ended June 30, 2019 where we do not perform the installation service.

Cost of installation revenue decreased approximately $1.3 million, or 2.6%, for the six months ended June 30, 2019, as compared to the six months ended June 30, 2018. This decrease was generally driven by the higher mix of international acceptances in the six months ended June 30, 2019 where we do not perform the installation service.

Cost of Service Revenue

Cost of service revenue increased approximately $0.3 million, or 1.8%, for the three months ended June 30, 2019, as compared to the three months ended June 30, 2018. This increase in service cost was primarily due to more power module replacements required in the fleet as our fleet of installed Energy Servers grows with acceptances and additional extended service contracts are executed supported by our standard maintenance process.

Cost of service revenue increased approximately $3.6 million, or 8.4%, for the six months ended June 30, 2019, as compared to the six months ended June 30, 2018. This increase in service cost was primarily due to more power module replacements required in the fleet as our fleet of installed Energy Servers grows with acceptances and additional extended service contracts are executed supported by our standard maintenance process.

Cost of Electricity Revenue

Cost of electricity revenue increased approximately $9.5 million, or 106.1%, for the three months ended June 30, 2019, as compared to the three months ended June 30, 2018, mainly due to charges related to the decommissioning of PPA II Energy Servers associated with the PPA II Project and a loss recorded as a result of the fair value adjustment on our natural gas fixed price forward contract.

Cost of electricity revenue increased approximately $8.1 million, or 41.2%, for the six months ended June 30, 2019, as compared to the six months ended June 30, 2018, mainly due to charges related to the decommissioning of PPA II Energy Servers associated with the PPA II Project.

Gross Profit (Loss)

	Three Months Ended June 30,		Change	Six Months Ended June 30,		Change
	2019	2018	Amount	2019	2018	Amount
			(in thousands)			
Gross Profit (Loss):						
Product	$ 47,948	$ 37,852	$ 10,096	$ 65,681	$ 78,804	$ (13,123)
Installation	(4,832)	(10,854)	6,022	(6,739)	(7,174)	435
Service	4,060	715	3,345	(207)	(3,631)	3,424
Electricity	(5,503)	5,058	(10,561)	(1,307)	8,438	(9,745)
Total Gross Profit (Loss)	$ 41,673	$ 32,771	$ 8,902	$ 57,428	$ 76,437	$ (19,009)
Gross Margin:						
Product	26.7 %	34.8 %		20.4 %	34.3 %	
Installation	(28.0)%	(41.4)%		(17.0)%	(17.8)%	
Service	17.2 %	3.6 %		(0.4)%	(9.1)%	
Electricity	(42.5)%	36.1 %		(5.0)%	30.1 %	
Total Gross Margin	17.8 %	19.4 %		13.2 %	22.6 %	

Total Gross Profit

Gross profit improved $8.9 million in the three months ended June 30, 2019, as compared to the three months ended June 30, 2018. Stock-based compensation included in cost of revenue increased approximately $8.4 million for the three months ended June 30, 2019, as compared to the three months ended June 30, 2018. Excluding stock based compensation, gross profit increased in the three months ended June 30, 2019 by approximately $17.3 million, or 49.9%, as compared to the three months ended June 30, 2018. This increase was generally due to the increase in product acceptances, higher average selling price and lower product cost driven by increased volume and ongoing cost reduction activities.

Gross profit decreased $19.0 million in the six months ended June 30, 2019, as compared to the six months ended June 30, 2018. During the six months ended June 30, 2018, gross profit included a one-time benefit of $36.1 million associated with the 2017 retroactive ITC benefit recognized in the same period in 2018. In addition, stock-based compensation increased approximately $20.9 million for the six months ended June 30, 2019, as compared to the six months ended June 30, 2018. Excluding this one-time retroactive ITC benefit in the six months ended June 30, 2018 and excluding stock based compensation, gross profit increased in the six months ended June 30, 2019 by approximately $38.0 million, or 85.9%, as compared to the six months ended June 30, 2018. This increase was generally due to the increase in product acceptances, higher average selling price and lower product cost driven by increased volume and ongoing cost reduction activities.

Product Gross Profit

Product gross profit increased $10.1 million in the three months ended June 30, 2019, as compared to the three months ended June 30, 2018. Excluding stock based compensation, product gross profit increased in the three months ended June 30, 2019 by approximately $15.9 million, as compared to the three months ended June 30, 2018. This increase was generally due to the increase in product acceptances, higher average selling price and lower product cost driven by increased volume and ongoing cost reduction activities.

Product gross profit decreased $13.1 million in the six months ended June 30, 2019, as compared to the six months ended June 30, 2018. Excluding the one-time retroactive ITC benefit in the six months ended June 30, 2018 of $36.1 million and excluding stock based compensation, product gross profit increased in the six months ended June 30, 2019 by approximately $38.3 million, as compared to the six months ended June 30, 2018. This increase was generally due to the increase in product acceptances, higher average selling price and lower product cost driven by increased volume and ongoing cost reduction activities.

Installation Gross Loss

Installation gross loss decreased $6.0 million in the three months ended June 30, 2019, as compared to the three months ended June 30, 2018. This improvement was due to lower installation costs due to a higher mix of international customer sites accepted in the three months ended June 30, 2019, as compared to the three months ended June 30, 2018, partially offset by higher stock based compensation expense. Our installation costs are driven by the complexity of each site at which we are installing an Energy Server, including personalized applications, size of each installation, which can cause variability in installation costs and whether we or our international partners perform the installation.

Installation gross loss decreased $0.4 million in the six months ended June 30, 2019, as compared to the six months ended June 30, 2018. This improvement was due to lower installation costs due to a higher mix of international customer sites accepted in the three months ended June 30, 2019, as compared to the three months ended June 30, 2018, partially offset by higher stock based compensation expense. Our installation costs are driven by the complexity of each site at which we are installing an Energy Server, including personalized applications, the size of each installation, which can cause variability in installation costs and whether we or our international partners perform the installation.

Service Gross Profit / Loss

Service gross profit improved $3.3 million in the three months ended June 30, 2019, as compared to the three months ended June 30, 2018. Our service gross improved slightly on a larger installed base generally due to less frequent power module replacements being required as our fleet transitions to our more recent technology.

Service gross loss improved $3.4 million in the six months ended June 30, 2019, as compared to the six months ended June 30, 2018. Our service gross loss improved slightly on a larger installed base generally due to less frequent power module replacements being required as our fleet transitions to our more recent technology.

Electricity Gross Profit / Loss

Electricity gross profit decreased $10.6 million, or 208.8%, in the three months ended June 30, 2019, as compared to the three months ended June 30, 2018, mainly due to charges related to the decommissioning of PPA II Energy Servers associated with the PPA II Project.

Electricity gross profit decreased $9.7 million, or 115.5%, in the six months ended June 30, 2019, as compared to the six months ended June 30, 2018, mainly due to charges related to the decommissioning of PPA II Energy Servers associated with the PPA II Project.

Operating Expenses

	Three Months Ended June 30,		Change		Six Months Ended June 30,		Change	
	2019	2018	Amount	%	2019	2018	Amount	%
				(in thousands except percents)				
Research and development	$ 29,772	$ 14,413	$ 15,359	106.6%	$ 58,631	$ 29,144	$ 29,487	101.2%
Sales and marketing	18,359	8,254	10,105	122.4%	38,822	16,516	22,306	135.1%
General and administrative	43,662	15,359	28,303	184.3%	82,736	30,347	52,389	172.6%
Total operating expenses	$ 91,793	$ 38,026	$ 53,767	141.4%	$ 180,189	$ 76,007	$ 104,182	137.1%

Total Operating Expenses

Total operating expenses increased $53.8 million, or 141.4%, in the three months ended June 30, 2019, as compared to the three months ended June 30, 2018. Total operating expenses includes stock-based compensation expenses, which increased approximately $35.0 million for the three months ended June 30, 2019, as compared to the three months ended June 30, 2018, accounting for much of the year-over-year increase. The increase in stock-based compensation is primarily attributable to a one-time employee grant of restricted stock units ("RSUs") at the time of our IPO. These RSUs have a 2-year vesting period starting at the time of IPO and were issued as an employee retention vehicle to bring our stock-based compensation in line with our peer group. In addition to the one-time grant, the stock-based compensation includes some previously granted RSUs that vested upon the completion of our IPO. Total operating expenses, excluding stock-based compensation, increased approximately $18.8 million, or 58.4%, in the three months ended June 30, 2019, as compared to the three months ended June 30, 2018. This increase was primarily due to compensation related expenses associated with hiring new employees, investments for next generation servers and customer personalized application technology development, expenses related to our demand generation functions, expenses related to our public company readiness and a $5.9 million one-time debt payoff make-whole penalty associated with the PPA II Project.

Total operating expenses increased $104.2 million, or 137.1%, in the six months ended June 30, 2019, as compared to the six months ended June 30, 2018. Total operating expenses includes stock-based compensation expenses, which increased approximately $78.4 million for the three months ended June 30, 2019, as compared to the three months ended June 30, 2018, accounting for much of the year-over-year increase. The increase in stock-based compensation is primarily attributable to a one-time employee grant of restricted stock units ("RSUs") at the time of our IPO. These RSUs have a 2-year vesting period starting at the time of IPO and were issued as an employee retention vehicle to bring our stock-based compensation in line with our peer group. In addition to the one-time grant, the stock-based compensation includes some previously granted RSUs that vested upon the completion of our IPO. Total operating expenses, excluding stock-based compensation, increased approximately $25.8 million, or 40.2%, in the six months ended June 30, 2019, as compared to the six months ended June 30, 2018. This increase was primarily due to compensation related expenses associated with hiring new employees, investments for next generation servers and customer personalized application technology development, expenses related to our demand generation functions, expenses related to our public company readiness and a $5.9 million one-time debt payoff make-whole penalty associated with the PPA II Project.

Research and Development

Research and development expenses increased approximately $15.4 million, or 106.6%, in the three months ended June 30, 2019, as compared to the three months ended June 30, 2018. The majority of this increase was due to stock-based compensation expenses related to RSU grants made at the time of our IPO, which increased approximately $10.5 million for the three months ended June 30, 2019, as compared to the three months ended June 30, 2018. Total research and development expenses, excluding stock-based compensation, increased approximately $4.9 million, or 38.5%, for the three months ended June 30, 2019, as compared to the three months ended June 30, 2018. This increase was primarily due to compensation-related expenses for hiring new employees and investments made for our next generation technology development, sustaining engineering projects for the current Energy Server platform, and investments made for customer personalized applications, such as microgrid and storage solutions, and new fuel solutions utilizing biogas.

Research and development expenses increased approximately $29.5 million, or 101.2%, in the six months ended June 30, 2019, as compared to the six months ended June 30, 2018. The majority of this increase was due to stock-based compensation expenses related to RSU grants made at the time of our IPO, which increased approximately $23.1 million for the six months ended June 30, 2019, as compared to the six months ended June 30, 2018. Total research and development expenses, excluding

stock-based compensation, increased approximately $6.4 million, or 24.9%, for the six months ended June 30, 2019, as compared to the six months ended June 30, 2018. This increase was primarily due to compensation-related expenses for hiring new employees and investments made for our next generation technology development, sustaining engineering projects for the current Energy Server platform, and investments made for customer personalized applications, such as microgrid and storage solutions, and new fuel solutions utilizing biogas.

Sales and Marketing

Sales and marketing expenses increased approximately $10.1 million, or 122.4%, in the three months ended June 30, 2019, as compared to the three months ended June 30, 2018. The majority of this increase was due to stock-based compensation expenses related to RSU grants made at the time of our IPO, which increased approximately $7.7 million for the three months ended June 30, 2019, as compared to the three months ended June 30, 2018. Total sales and marketing expenses, excluding stock-based compensation, increased approximately $2.4 million, or 33.9%, for the three months ended June 30, 2019, as compared to the three months ended June 30, 2018. This increase was primarily due to compensation expenses related to hiring new employees and expenses related to efforts to increase demand and raise market awareness of our Energy Server solutions, expanding outbound communications, as well as efforts to develop new customer financing programs and partners.

Sales and marketing expenses increased approximately $22.3 million, or 135.1%, in the six months ended June 30, 2019, as compared to the six months ended June 30, 2018. The majority of this increase was due to stock-based compensation expenses related to RSU grants made at the time of our IPO, which increased approximately $18.3 million for the six months ended June 30, 2019, as compared to the six months ended June 30, 2018. Total sales and marketing expenses, excluding stock-based compensation, increased approximately $4.0 million, or 28.0%, for the six months ended June 30, 2019, as compared to the six months ended June 30, 2018. This increase was primarily due to compensation expenses related to hiring new employees and expenses related to efforts to increase demand and raise market awareness of our Energy Server solutions, expanding outbound communications, as well as efforts to develop new customer financing programs and partners.

General and Administrative

General and administrative expenses increased approximately $28.3 million, or 184.3%, in the three months ended June 30, 2019, as compared to the three months ended June 30, 2018. The majority of this increase was due to stock-based compensation expenses related to RSU grants made at the time of our IPO, which increased approximately $16.8 million for the three months ended June 30, 2019, as compared to the three months ended June 30, 2018. Total general and administrative expenses, excluding stock-based compensation, increased approximately $11.5 million, or 92.5%, for the three months ended June 30, 2019, as compared to the three months ended June 30, 2018. The increase in general and administrative expenses was due to an increase in compensation related expenses associated with hiring new employees to support public company readiness across accounting and legal functions, expenses related to becoming a public company, and information technology related expenses for infrastructure and security support, as well as $5.9 million for a one-time debt payoff make-whole penalty associated with the PPA II Project.

General and administrative expenses increased approximately $52.4 million, or 172.6%, in the six months ended June 30, 2019, as compared to the six months ended June 30, 2018. The majority of this increase was due to stock-based compensation expenses related to RSU grants made at the time of our IPO, which increased approximately $37.1 million for the six months ended June 30, 2019, as compared to the six months ended June 30, 2018. Total general and administrative expenses, excluding stock-based compensation, increased approximately $15.3 million, or 63.8%, for the six months ended June 30, 2019, as compared to the six months ended June 30, 2018. The increase in general and administrative expenses was due to an increase in compensation related expenses associated with hiring new employees to support public company readiness across accounting and legal functions, expenses related to becoming a public company, and information technology related expenses for infrastructure and security support, as well as $5.9 million for a one-time debt payoff make-whole penalty associated with the PPA II uProject.

Stock-Based Compensation

	Three Months Ended June 30,		Change		Six Months Ended June 30,		Change	
	2019	2018	Amount	%	2019	2018	Amount	%
				(in thousands except percents)				
Cost of revenue	$ 10,392	$ 1,971	$ 8,421	427%	$ 24,764	$ 3,869	$ 20,895	540%
Research and development	12,218	1,739	10,479	603%	26,448	3,376	23,072	683%
Sales and marketing	8,935	1,214	7,721	636%	20,447	2,166	18,281	844%
General and administrative	19,673	2,894	16,779	580%	43,441	6,362	37,079	583%
Total stock-based compensation	$ 51,218	$ 7,818	$ 43,400	555%	$ 115,100	$ 15,773	$ 99,327	630%

Total stock-based compensation increased $43.4 million, or 555.1%, in the three months ended June 30, 2019, as compared to the three months ended June 30, 2018. Of the $51.2 million in stock based compensation for the three months ended June 30, 2019, approximately $23.9 million was related to a one-time RSUs grant to our employees that were issued at the time of our IPO and that have a 2-year vesting period. These RSUs provided us an employee retention vehicle to bring our stock-based compensation in line with our peer group. In addition, the stock-based compensation included some previously granted RSUs that vested upon completion of our IPO.

Total stock-based compensation increased $99.3 million, or 629.7%, in the six months ended June 30, 2019, as compared to the six months ended June 30, 2018. Of the $115.1 million in stock based compensation for the six months ended June 30, 2019, approximately $54.9 million was related to a one-time RSUs grant to our employees that were issued at the time of our IPO and that have a 2-year vesting period. These RSUs provided us an employee retention vehicle to bring our stock-based compensation in line with our peer group. In addition, the stock-based compensation included some previously granted RSUs that vested upon completion of our IPO.

Other Income and Expense

	Three Months Ended June 30,		Change	Six Months Ended June 30,		Change
	2019	2018	Amount	2019	2018	Amount
			(in thousands)			
Interest income	$ 1,700	$ 444	$ 1,256	$ 3,585	$ 859	$ 2,726
Interest expense	(16,725)	(22,525)	5,800	(32,687)	(43,904)	11,217
Interest expense, related parties	(1,606)	(2,672)	1,066	(3,218)	(5,299)	2,081
Other income (expense), net	(222)	(855)	633	43	(930)	973
Loss on revaluation of warrant liabilities and embedded derivatives	—	(19,197)	19,197	—	(23,231)	23,231
Total	$ (16,853)	$ (44,805)	$ 27,952	$ (32,277)	$ (72,505)	$ 40,228

Total Other Income and Expense

Total other income and expense decreased $28.0 million and $40.2 million in the three and six months ended June 30, 2019, as compared to the three and six months ended June 30, 2018, respectively. This decrease was primarily due to the change in accounting for warrant liabilities and embedded derivatives that occurred at the time of the IPO, removing the remeasurement requirement for these instruments, and a decrease in interest expense following the conversion of a portion of our debt into equity at the time of the IPO.

Interest Income

Interest income increased $1.3 million in the three months ended June 30, 2019, as compared to the three months ended June 30, 2018. This increase was primarily due to the increase in interest on the short term investment balances which increased as a result of the proceeds from the IPO.

Interest income increased $2.7 million in the six months ended June 30, 2019, as compared to the six months ended June 30, 2018. This increase was primarily due to the increase in interest on the short term investment balances which increased as a result of the proceeds from the IPO.

Interest Expense

Interest expense decreased $5.8 million in the three months ended June 30, 2019, as compared to the three months ended June 30, 2018. This decrease was primarily due to lower amortization expense of our debt derivatives and due to the conversion of a portion of our debt into equity at the time of the IPO.

Interest expense decreased $11.2 million in the six months ended June 30, 2019, as compared to the six months ended June 30, 2018. This decrease was primarily due to lower amortization expense of our debt derivatives and due to the conversion of a portion of our debt into equity at the time of the IPO.

Interest Expense, Related Parties

Interest expense, related parties decreased $1.1 million in the three months ended June 30, 2019, as compared to the three months ended June 30, 2018. This decrease was due to the conversion of $40.1 million of our 8% Notes from related parties into equity at the time of the IPO.

Interest expense, related parties decreased $2.1 million in the six months ended June 30, 2019, as compared to the six months ended June 30, 2018. This decrease was due to the conversion of $40.1 million of our 8% Notes from related parties into equity at the time of the IPO.

Other Income (Expense), net

Other income (expense), net improved $0.6 million in the three months ended June 30, 2019, as compared to the three months ended June 30, 2018. This change was primarily due to changes in foreign currency translation expense.

Other income (expense), net improved $1.0 million in the six months ended June 30, 2019, as compared to the six months ended June 30, 2018. This change was primarily due to changes in foreign currency translation expense.

Loss on Revaluation of Warrant Liabilities and Embedded Derivatives

For the three and six months ended June 30, 2019, the revaluation of warrant liabilities and embedded derivatives was zero. Upon the IPO, the final valuation of the embedded derivatives related to the 6% Notes was reclassified from a derivative liability to additional paid-in capital. For the three and six months ended June 30, 2018, we recognized net loss of $19.2 million and $23.2 million, respectively, primarily due to an increase in our derivative valuation adjustment for the three and six months ended June 30, 2018 of $23.5 million and $31.0 million, respectively, which was partially offset by gains recognized from the revaluation of the preferred warrant liability of $4.3 million and $7.6 million, respectively.

Provision for Income Taxes

	Three Months Ended June 30,		Change		Six Months Ended June 30,		Change	
	2019	2018	Amount	%	2019	2018	Amount	%
				(in thousands except percent)				
Income tax provision	$ 258	$ 128	$ 130	101.6%	$ 466	$ 461	$ 5	1.1%

Income tax provision increased $0.1 million in the three months ended June 30, 2019, as compared to the three months ended June 30, 2018, and was primarily due to fluctuations in the effective tax rates on income earned by international entities.

Income tax provision was essentially flat comparing the six months ended June 30, 2019 to the six months ended June 30, 2018.

Net Loss Attributable to Noncontrolling Interests and Redeemable Noncontrolling Interests

	Three Months Ended June 30,		Change		Six Months Ended June 30,		Change	
	2019	2018	Amount	%	2019	2018	Amount	%
				(in thousands except percent)				
Net loss attributable to noncontrolling interests and redeemable noncontrolling interests	$ (5,015)	$ (4,512)	$ (503)	(11.1)%	$ (8,847)	$ (9,143)	$ 296	3.2%

Net loss attributable to noncontrolling interests increased $0.5 million, or 11.1%, in the three months ended June 30, 2019, as compared to the three months ended June 30, 2018. The net loss increased due to the allocation of our lower net loss to our noncontrolling interests.

Net loss attributable to noncontrolling interests decreased $0.3 million, or 3.2%, in the six months ended June 30, 2019, as compared to the six months ended June 30, 2018. The net loss decreased due to the allocation of our lower net loss to our noncontrolling interests.

Unaudited Quarterly Supplemental Financial Information

The following consolidated statements of operations, presented on a quarterly basis for the nine quarters ended June 30, 2019, are unaudited. These statements have been prepared in accordance with U.S. GAAP for interim financial information and, in the opinion of management, reflect all adjustments, which include only normal recurring adjustments, necessary for a fair statement of the results of operations for the periods presented (in thousands, except per share):

	2019		2018				2017		
	June 30	March 31	Dec. 31	Sept. 30	June 30	March 31	Dec. 31	Sept. 30	June 30
	(in thousands except per share amounts)								
Revenue:									
Product	$ 179,899	$ 141,734	$ 156,671	$ 125,690	$ 108,654	$ 121,307	$ 66,913	$ 45,255	$ 39,935
Installation	17,285	22,258	21,363	29,690	26,245	14,118	21,601	14,978	14,354
Service	23,659	23,290	21,752	20,751	19,975	19,907	19,927	19,511	18,875
Electricity	12,939	13,425	13,820	14,059	14,007	14,029	14,810	14,021	13,619
Total revenue	233,782	200,707	213,606	190,190	168,881	169,361	123,251	93,765	86,783
Cost of revenue:									
Product	131,952	124,000	128,076	95,357	70,802	80,355	70,450	53,923	47,545
Installation	22,116	24,166	31,819	40,118	37,099	10,438	16,933	14,696	14,855
Service	19,599	27,557	28,475	22,651	19,260	24,253	14,012	30,058	21,308
Electricity	18,442	9,229	7,988	8,679	8,949	10,649	9,806	10,178	8,881
Total cost of revenue	192,109	184,952	196,358	166,805	136,110	125,695	111,201	108,855	92,589
Gross profit (loss)	41,673	15,755	17,248	23,385	32,771	43,666	12,050	(15,090)	(5,806)
Operating expenses:									
Research and development	29,772	28,859	32,970	27,021	14,413	14,731	15,181	12,374	12,368
Sales and marketing	18,359	20,463	24,983	21,476	8,254	8,262	9,346	6,561	8,663
General and administrative	43,662	39,074	47,471	40,999	15,359	14,988	14,818	13,652	14,325
Total operating expenses	91,793	88,396	105,424	89,496	38,026	37,981	39,345	32,587	35,356
Income (loss) from operations	(50,120)	(72,641)	(88,176)	(66,111)	(5,255)	5,685	(27,295)	(47,677)	(41,162)
Interest income[1]	1,700	1,885	1,996	1,467	444	415	298	223	138
Interest expense[1]	(16,725)	(17,574)	(17,806)	(18,819)	(25,197)	(24,007)	(29,807)	(28,899)	(25,554)
Other income (expense), net[1]	(1,606)	265	635	(705)	(855)	(74)	(123)	(263)	(124)
Gain (loss) on revaluation of warrant liabilities and embedded derivatives	(222)	—	(13)	1,655	(19,197)	(4,034)	(15,114)	572	(668)
Net loss before income taxes	(66,973)	(88,065)	(103,364)	(82,513)	(50,060)	(22,015)	(72,041)	(76,044)	(67,370)
Income tax provision (benefit)	258	208	1,079	(3)	128	333	(120)	314	228
Net loss	(67,231)	(88,273)	(104,443)	(82,510)	(50,188)	(22,348)	(71,921)	(76,358)	(67,598)
Net loss attributable to noncontrolling interests and redeemable noncontrolling interests	(5,015)	(3,832)	(4,662)	(3,931)	(4,512)	(4,632)	(4,160)	(4,527)	(4,123)
Net loss attributable to Class A and Class B common stockholders	$ (62,216)	$ (84,441)	$ (99,781)	$ (78,579)	$ (45,677)	$ (17,716)	$ (67,761)	$ (71,831)	$ (63,475)
Net loss per share attributable to Class A and Class B common stockholders, basic and diluted	$ (0.55)	$ (0.76)	$ (0.91)	$ (0.97)	$ (4.34)	$ (1.70)	$ (6.56)	$ (6.97)	$ (6.22)
Weighted average shares used to compute net loss per share attributable to Class A and Class B common stockholders, basic and diluted	113,622	111,842	109,416	81,321	10,536	10,403	10,333	10,305	10,209

[1] Certain prior years' amounts reported herein have been reclassified to conform to current period presentation.

Liquidity and Capital Resources

As of June 30, 2019, we had an accumulated deficit of approximately $2.7 billion. We have financed our operations, including the costs of acquisition and installation of Energy Servers, mainly through a variety of financing arrangements and PPA Entities, credit facilities from banks, sales of our preferred and common stock, debt financings and cash provided from our operations. As of June 30, 2019, we had $405.8 million of total outstanding recourse debt and $320.8 million of total outstanding non-recourse debt plus other long term liabilities. See *Note 6* - *Outstanding Loans and Security Agreements* for a complete description of our outstanding debt. As of June 30, 2019 and December 31, 2018, we had cash and cash equivalents of $308.0 million and $325.1 million, respectively.

In July 2018, we successfully completed an initial public offering (IPO) of our securities with the sale of 20,700,000 shares of our Class A common stock at a price of $15.00 per share, resulting in cash proceeds of $282.3 million, net of underwriting discounts, commissions and estimated offering costs. We intend to use the net proceeds from this offering for general corporate purposes including research and development, sales and marketing activities, general and administrative matters, and capital expenditures.

We believe that our existing cash and cash equivalents will be sufficient to meet our operating cash flow, capital requirements and other cash flow needs for at least the next 12 months. Our future capital requirements may vary materially from those currently planned and will depend on many factors, including our rate of revenue growth, the timing and extent of spending on research and development efforts and other business initiatives, the rate of growth in the volume of system builds, the expansion of sales and marketing activities, market acceptance of our products, the timing of receipt by us of distributions from our PPA Entities and overall economic conditions. We do not expect to receive significant cash distributions from our PPA Entities. During June 2019, we completed a transaction for the upgrade in PPA II which included new product sale permitting us to repay all the PPA II outstanding debt of $72.3 million. For additional information refer to *Note 12. Power Purchase Agreement Programs - PPA II Upgrade of Energy Servers.* To the extent that current and anticipated future sources of liquidity are insufficient to fund our future business activities and requirements, we may be required to seek additional debt or equity financing.

Cash Flows

A summary of our sources and uses of cash, cash equivalents and restricted cash is as follows (in thousands):

	Six Months Ended June 30,	
	2019	**2018**
Net cash provided by (used in):		
Operating activities	$ 115,206	$ (18,585)
Investing activities	84,648	9,673
Financing activities	(109,273)	(21,828)

Net cash provided by our variable interest entities (the "PPA Entities") which are incorporated into the condensed consolidated statement of cash flows for June 30, 2019 and 2018, is as follows (in thousands):

	Six Months Ended June 30,		Change
	2019	**2018**	
PPA Entities [1]			
Net cash provided by PPA operating activities	$ 139,364	$ 21,470	$ 117,894
Net cash used in PPA financing activities	$ (118,805)	$ (23,706)	$ (95,099)

[1] The PPA Entities' operating cash flows, which is a subset of our consolidated cash flows and represents the stand-alone cash flows prepared in accordance with U.S. GAAP, consists principally of cash used to run the operations of the PPA Entities, the purchase of Energy Servers from us and principal reductions in loan balances. We believe this presentation of net cash provided by (used in) PPA activities is useful to provide the reader with the impact to consolidated cash flows of the PPA Entities in which we have only a minority interest.

Operating Activities

Net cash provided by operating activities for the six months ended June 30, 2019 was $115.2 million and was primarily the result of net cash earnings of $36.7 million plus the net decrease in working capital of $78.5 million. Net cash earnings is primarily comprised of a net operating loss of $155.5 million, adjusted for non-cash benefit items including: (i) depreciation and amortization of $31.0 million; (ii) write-off of property, plant and equipment net of $2.7 million; (iii) PPA II decommissioning net of $25.6 million; (iv) a gain on revaluation of derivative contracts of $0.6 million; (v) stock-based compensation of $115.1 million; (vi) amortization of debt issuance cost of $11.3 million, plus (vii) an expense reclass to financing activities related to a debt make-whole payment of $5.9 million. Net cash provided from changes in working capital consisted primarily of decreases in: (i) accounts receivable of $46.6 million; (ii) inventory of $27.5 million; (iii) deferred cost of revenue of $19.2 million; (iv) customer financing receivable and (v) other of $2.7 million; (vi) prepaid expenses and other current assets of $8.5 million; and (vii) other long-term assets of $1.0 million; plus increases in: (viii) accrued other current liabilities of $7.2 million; and (ix) other long-term liabilities of $3.4 million. These sources of cash from working capital were partially offset by decreases in: (i) accounts payable of $5.5 million; (ii) accrued warranty of $6.8 million; and (iii) deferred revenue and customer deposits of $25.4 million.

Net cash used in operating activities for the six months ended June 30, 2018 was $18.6 million and was the result of net cash earnings of approximately $1.0 million offset by the net increase in working capital of $19.5 million. Net cash earnings is primarily comprised of a net operating loss of $72.5 million, adjusted for non-cash benefit items including: (i) depreciation and amortization of approximately $21.6 million; (ii) a loss on revaluation of derivative contracts of $28.6 million; (iii) stock-based compensation of $15.8 million; and (iv) amortization of debt issuance cost of $14.4 million; partially offset by (v) a gain on revaluation of stock warrants of $7.5 million. Net cash used by changes in working capital consisted primarily of increases in: (i) accounts receivable of $6.5 million; (ii) inventory of $46.2 million; plus decreases in: (iii) accrued warranty of $1.9 million; (iv) accrued other current liabilities of $12.8 million; (v) deferred revenue and customer deposits of $31.8 million. These uses of cash for working capital were partially offset by decreases in: (i) deferred cost of revenue of $48.8 million; (ii) customer financing receivable and other of $2.4 million; (iii) prepaid expenses and other current assets of $4.5 million; plus increases in: (iv) accounts payable of $5.2 million; and other long term liabilities of $18.7 million.

Investing Activities

Net cash provided by investing activities in the six months ended June 30, 2019 was $84.6 million which included proceeds from maturity of marketable securities of $104.5 million, partially offset by $19.9 million used for the purchase of long-lived assets. Our use of cash in the six months ended June 30, 2019 for the purchase of property, plant and equipment increased, as compared to the same period in 2018, due to completing a move to our new corporate headquarters which is used for administration, research and development, and sales and marketing.

Net cash provided by investing activities in the six months ended June 30, 2018 was $9.7 million which was primarily the result of net proceeds from maturity of, and partial reinvestment in, marketable securities of $11.3 million, partially offset by $1.6 million used for the purchase of long-lived assets.

Financing Activities

Net cash used in financing activities in the six months ended June 30, 2019 was $109.3 million which included payments to noncontrolling and redeemable noncontrolling interest of $18.7 million, distributions paid to our PPA Equity Investors of $7.8 million, repayments of debt of $85.2 million, and a debt make-whole payment of $5.9 million related to our PPA II upgrade, partially offset by proceeds from issuance of common stock of $8.3 million.

Net cash used in financing activities in the six months ended June 30, 2018 was $21.8 million which included distributions paid to our PPA Equity Investors of $11.6 million, repayments of long-term debt of $9.8 million, and payments of initial public offering issuance costs of $1.2 million, partially offset by proceeds from issuance of common stock of $0.7 million.

Outstanding Loans and Security Agreements

The following is a summary of our debt as of June 30, 2019 (in thousands):

	Unpaid Principal Balance	Net Carrying Value			Unused Borrowing Capacity
		Current	Long-Term	Total	
LIBOR + 4% term loan due November 2020	$ 2,429	$ 1,681	$ 695	$ 2,376	$ —
5% convertible promissory note due December 2020	33,104	—	35,576	35,576	—
6% convertible promissory notes due December 2020	296,233	—	271,503	271,503	—
10% notes due July 2024	100,000	14,000	82,384	96,384	—
Total recourse debt	431,766	15,681	390,158	405,839	—
7.5% term loan due September 2028	39,317	2,889	32,643	35,532	—
LIBOR + 5.25% term loan due October 2020	24,262	957	22,704	23,661	—
6.07% senior secured notes due March 2030	82,269	2,803	78,420	81,223	—
LIBOR + 2.5% term loan due December 2021	123,664	3,894	118,058	121,952	—
Letters of Credit due December 2021	—	—	—	—	1,220
Total non-recourse debt	269,512	10,543	251,825	262,368	1,220
Total debt	$ 701,278	$ 26,224	$ 641,983	$ 668,207	$ 1,220

Recourse debt refers to debt that Bloom Energy Corporation has an obligation to pay. Non-recourse debt refers to debt that is recourse to only specified assets or subsidiaries of the Company. The differences between the unpaid principal balances and the net carrying values are due to debt discounts and deferred financing costs. We were in compliance with all of our financial covenants as of June 30, 2019 and December 31, 2018.

Recourse Debt Facilities

LIBOR + 4% Term Loan due November 2020 - In May 2013, we entered into a $5.0 million credit agreement and a $12.0 million financing agreement to help fund the building of a new facility in Newark, Delaware. The $5.0 million credit agreement expired in December 2016. The $12.0 million financing agreement has a term of 90 months, payable monthly at a variable rate equal to one-month LIBOR plus the applicable margin. The weighted average interest rate as of June 30, 2019 and 2018 was 6.5% and 5.9%, respectively. The loan requires monthly payments and is secured by the manufacturing facility. In addition, the credit agreements also include a cross-default provision which provides that the remaining balance of borrowings under the agreements will be due and payable immediately if a lien is placed on the Newark facility in the event we default on any indebtedness in excess of $100,000 individually or $300,000 in the aggregate. Under the terms of these credit agreements, we are required to comply with various restrictive covenants. As of June 30, 2019 and 2018, the debt outstanding was $2.4 million and $3.3 million, respectively.

5% Convertible Promissory Notes due 2020 (Originally 8% Convertible Promissory Notes due December 2018) - Between December 2014 and June 2016, we issued $193.2 million of three-year convertible promissory notes ("8% Notes") to certain investors. The 8% Notes had a fixed interest rate of 8% compounded monthly, due at maturity or at the election of the investor with accrued interest due in December of each year.

On January 18, 2018, amendments were finalized to extend the maturity dates for all the 8% Notes to December 2019. At the same time, the portion of the notes that was held by Constellation NewEnergy, Inc. ("Constellation") was extended to December 2020 and the interest rate decreased from 8% to 5% ("5% Notes").

Investors held the right to convert the unpaid principal and accrued interest of both the 8% Notes and 5% Notes to Series G convertible preferred stock at any time at the price of $38.64. In July 2018, upon our IPO, the $221.6 million of principal and accrued interest of outstanding 8% Notes automatically converted into additional paid-in capital, the conversion of which included all the related-party noteholders. The 8% Notes converted to shares of Series G convertible preferred stock and, concurrently, each such share of Series G convertible preferred stock converted automatically into one share of Class B common stock. Upon the Company's IPO, 5,734,440 shares of Class B common stock were issued from conversions and the 8% Notes were retired. Constellation, the holders of the 5% convertible promissory notes, have not elected to convert as of June 30, 2019. The outstanding unpaid principal and accrued interest debt balance of the 5% Note of $34.7 million was classified as non-current as of June 30, 2019, and

the outstanding unpaid principal and accrued interest debt balance of the 8% Notes of $244.7 million was classified as non-current as of December 31, 2018.

6% Convertible Promissory Notes due December 2020 - Between December 2015 and September 2016, we issued $260.0 million convertible promissory notes due December 2020 ("6% Notes") to certain investors. The 6% Notes bore a 5% fixed interest rate, payable monthly either in cash or in kind, at our election. We amended the terms of the 6% Notes in June 2017 to reduce the collateral securing the notes and to increase the interest rate from 5% to 6%.

As of June 30, 2019 and 2018, the amount outstanding on the 6% Notes, which includes interest paid in kind through the IPO date, was $296.2 million and $286.1 million, respectively. Upon the IPO, the debt is convertible at the option of the holders at the conversion price of $11.25 per share into common stock at any time through the maturity date. In January 2018, we amended the terms of the 6% Notes to extend the convertible put option, which investors could elect only if the IPO did not occur prior to December 2019. After the IPO, we paid the interest in cash when due and no additional interest accrued on the consolidated balance sheet on the 6% Notes.

On or after July 27, 2020, we may redeem, at our option, all or part of the 6% Notes if the last reported sale price of our common stock has been at least $22.50 for at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading days ending within the three trading days immediately preceding the date on which we provide written notice of redemption. In certain circumstances, the 6% Notes are also redeemable at our option in connection with a change of control.

Under the terms of the indenture governing the 6% Notes, we are required to comply with various restrictive covenants, including meeting reporting requirements, such as the preparation and delivery of audited consolidated financial statements, and restrictions on investments. In addition, we are required to maintain collateral which secures the 6% Notes in an amount equal to 200% of the principal amount of and accrued and unpaid interest on the outstanding notes. This minimum collateral test is not a negative covenant and does not result in a default if not met. However, the minimum collateral test does restrict us with respect to investing in non-PPA subsidiaries. If we do not meet the minimum collateral test, we cannot invest cash into any non-PPA subsidiary that is not a guarantor of the notes. The 6% Notes also include a cross-acceleration provision which provides that the holders of at least 25% of the outstanding principal amount of the 6% Notes may cause such notes to become immediately due and payable if we or any of our subsidiaries default on any indebtedness in excess of $15.0 million such that the repayment of such indebtedness is accelerated.

In connection with the issuance of the 6% Notes, we agreed to issue to J.P. Morgan and CPPIB, upon the occurrence of certain conditions, warrants to purchase we common stock up to a maximum of 146,666 shares and 166,222 shares, respectively. On August 31, 2017, J.P. Morgan transferred its rights to CPPIB. Upon completion of the IPO, the 312,888 warrants were net exercised for 312,575 shares of Class B Common stock.

10% Notes due July 2024 - In June 2017, we issued $100.0 million of senior secured notes ("10% Notes"). The 10% Notes mature between 2019 and 2024 and bear a 10.0% fixed rate of interest, payable semi-annually. The 10% Notes have a continuing security interest in the cash flows payable to us as servicing, operations and maintenance fees and administrative fees from the five active power purchase agreements in our Bloom Electrons program. Under the terms of the indenture governing the notes, we are required to comply with various restrictive covenants including, among other things, to maintain certain financial ratios such as debt service coverage ratios, to incur additional debt, issue guarantees, incur liens, make loans or investments, make asset dispositions, issue or sell share capital of our subsidiaries and pay dividends, meet reporting requirements, including the preparation and delivery of audited consolidated financial statements, or maintain certain restrictions on investments and requirements in incurring new debt. As of June 30, 2019, we were in compliance with all of such covenants. In addition, we are required to maintain collateral which secures the 10% Notes based on debt ratio analyses. This minimum collateral test is not a negative covenant and does not result in a default if not met. However, the minimum collateral test does restrict us with respect to investing in non-PPA subsidiaries. If we do not meet the minimum collateral test, we cannot invest cash into any non-PPA subsidiary that is not a guarantor of the notes.

Non-recourse Debt Facilities

5.22% Senior Secured Term Notes - In March 2013, PPA Company II refinanced its existing debt by issuing 5.22% Senior Secured Notes due March 30, 2025. The total amount of the loan proceeds was $144.8 million, including $28.8 million to repay outstanding principal of existing debt, $21.7 million for debt service reserves and transaction costs and $94.3 million to fund the remaining system purchases. The loan is a fixed rate term loan that bears an annual interest rate of 5.22% payable quarterly. The loan has a fixed amortization schedule of the principal, payable quarterly, which began March 30, 2014 that requires repayment in full by March 30, 2025. The Note Purchase Agreement required us to maintain a debt service reserve, the balance of which was zero and $11.2 million as of June 30, 2019 and December 31, 2018, respectively, and which was included as part of long-term restricted cash in the condensed consolidated balance sheets. The notes were secured by all the assets of PPA II.

Decommissioning in PPA II - During the three months ended June 30, 2019, there was a decommissioning in PPA II, including the retirement of the 5.22% Notes outstanding unpaid debt of $76.6 million, which included the accumulated unpaid interest on the debt. See *Note 12 - Power Purchase Agreement Programs - PPA II Upgrade of Energy Servers* for additional information.

7.5% Term Loan due September 2028 - In December 2012 and later amended in August 2013, PPA IIIa entered into a $46.8 million credit agreement to help fund the purchase and installation of Energy Servers. The loan bears a fixed interest rate of 7.5% payable quarterly. The loan requires quarterly principal payments which began in March 2014. The credit agreement requires us to maintain a debt service reserve for all funded systems, the balance of which was $3.8 million and $3.7 million as of June 30, 2019 and 2018, respectively, and which was included as part of long-term restricted cash in the consolidated balance sheets. The loan is secured by all assets of PPA IIIa.

LIBOR + 5.25% Term Loan due October 2020 - In September 2013, PPA IIIb entered into a credit agreement to help fund the purchase and installation of Energy Servers. In accordance with that agreement, PPA IIIb issued floating rate debt based on LIBOR plus a margin of 5.2%, paid quarterly. The aggregate amount of the debt facility is $32.5 million. The loan is secured by all assets of PPA IIIb and requires quarterly principal payments which began in July 2014. The credit agreement requires us to maintain a debt service reserve for all funded systems, the balance of which was $1.7 million and $1.7 million June 30, 2019 and 2018, respectively, and which was included as part of long-term restricted cash in the consolidated balance sheets. In September 2013, PPA IIIb entered into pay-fixed, receive-float interest rate swap agreement to convert the floating-rate loan into a fixed-rate loan.

6.07% Senior Secured Notes - In July 2014, PPA IV issued senior secured notes amounting to $99.0 million to third parties to help fund the purchase and installation of Energy Servers. The notes bear a fixed interest rate of 6.07% payable quarterly which began in December 2015 and ends in March 2030. The notes are secured by all the assets of the PPA IV. The Note Purchase Agreement requires us to maintain a debt service reserve, the balance of which was $7.7 million as of June 30, 2019 and $6.5 million as of December 31, 2018, and which was included as part of long-term restricted cash in the consolidated balance sheets.

LIBOR + 2.5% Term Loan due December 2021 - In June 2015, PPA V entered into a $131.2 million credit agreement to fund the purchase and installation of Energy Servers. The lenders are a group of five financial institutions and the terms included commitments to a letter of credit ("LC") facility (see below). The loan was initially advanced as a construction loan during the development of the PPA V Project and converted into a term loan on February 28, 2017 (the “Term Conversion Date”). As part of the term loan’s conversion, the LC facility commitments were adjusted.

In accordance with the credit agreement, PPA V was issued a floating rate debt based on LIBOR plus a margin, paid quarterly. The applicable margins used for calculating interest expense are 2.25% for years 1-3 following the Term Conversion Date and 2.5% thereafter. The loan is secured by all the assets of the PPA V and requires quarterly principal payments which began in March 2017. In connection with the floating-rate credit agreement, in July 2015 the PPA V entered into pay-fixed, receive-float interest rate swap agreements to convert its floating-rate loan into a fixed-rate loan.

Letters of credit due December 2021 - In June 2015, PPA V entered into a $131.2 million term loan due December 2021. The agreement also included commitments to an LC facility, with the characteristics of a line of credit, with the aggregate principal amount of $6.4 million, later adjusted down to $6.2 million. The amount reserved under the letter of credit as of June 30, 2019 and December 31, 2018 was $5.0 million and $5.0 million, respectively. The unused capacity as of June 30, 2019 and December 31, 2018 was $1.2 million and $1.2 million, respectively.

Contractual Obligations and Other Commitments

The following table summarizes our contractual obligations and the debt of our consolidated PPA entities that is non-recourse to us as of June 30, 2019:

	Payments Due By Period				
	Total	Less than 1 Year	1-3 Years	3-5 Years	More than 5 Years
			(in thousands)		
Contractual Obligations and Other Commitments:					
Recourse debt[1]	$ 431,766	$ 7,858	$ 360,908	$ 38,000	$ 25,000
Non-recourse debt[2]	269,512	4,507	158,668	17,496	88,841
Operating leases	47,336	4,352	13,353	8,267	21,364
Sale-leaseback leases from managed services	64,906	4,058	16,670	17,244	26,934
Other sale-leaseback related transactions	29,498	—	9,452	10,512	9,534
Natural gas fixed price forward contracts	8,769	4,143	4,626	—	—
Grant for Delaware facility	10,469	—	10,469	—	—
Interest rate swap	9,159	706	2,157	2,663	3,633
Supplier purchase commitments	4,765	4,126	639	—	—
Renewable energy credit obligations	1,506	772	734	—	—
Accrued other current liabilities[3]	1,636	1,636	—	—	—
Asset retirement obligations	500	500	—	—	—
Total	$ 879,822	$ 32,658	$ 577,676	$ 94,182	$ 175,306

[1] Our 6% Notes and our credit agreements related to the building of our facility in Newark, Delaware each contain cross-default or cross-acceleration provisions. See "-Credit Facilities-Bloom Energy Indebtedness" above for more details.

[2] Each of the debt facilities entered into by PPA Company II, PPA Company IIIa, PPA Company IIIb, PPA Company IV and PPA Company V contain cross-default provisions. See "-Credit Facilities-PPA Entities' Indebtedness" above for more details.

[3] Accrued other current liabilities includes a liability payable in common stock in connection with a dispute settlement with the principals of a securities placement agent.

Off-Balance Sheet Arrangements

We include in our consolidated financial statements all assets and liabilities and results of operations of our PPA Entities that we have entered into and over which we have substantial control. For additional information, see *Note 12 - Power Purchase Agreement Programs.*

We have not entered into any other transactions that have generated relationships with unconsolidated entities or financial partnerships or special purpose entities. Accordingly, as of June 30, 2019 and December 31, 2018, we had no off-balance sheet arrangements.

ITEM 3 - QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

There were no significant changes to our quantitative and qualitative disclosures about market risk during the first six months of fiscal 2019. Please refer to Part II, Item 7A. Quantitative and Qualitative Disclosures about Market Risk included in our Annual Report on Form 10-K for our fiscal year ended December 31, 2018 for a more complete discussion of the market risks we encounter.

ITEM 4 - CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our reports made as defined in Rules 13-a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (Exchange Act), is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer as appropriate, to allow for timely decisions regarding required disclosure.

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act), as of June 30, 2019. Based on such evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that as of June 30, 2019, controls and procedures were effective to provide reasonable assurance that information required to be disclosed in the reports we file and submit under the Exchange Act is recorded, processed, summarized and reported as and when required, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, to allow timely decisions regarding our required disclosure.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting identified in management's evaluation pursuant to Rules 13a-15(d) or 15d-15(d) of the Exchange Act during the period covered by this Quarterly Report on Form 10-Q that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitation on Effectiveness of Controls and Procedures

Our management, including our Chief Executive Officer and Chief Financial Officer, does not expect that our disclosure controls and procedures or our internal control over financial reporting will prevent or detect all errors and all fraud. A controls system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the objectives of the controls system are met. Further, the design of a controls system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all controls systems, no evaluation of controls can provide absolute assurance that all controls issues and instances of fraud, if any, within our company have been detected. Accordingly, our disclosure controls and procedures provide reasonable assurance of achieving their objectives.

PART II - OTHER INFORMATION

ITEM 1 - LEGAL PROCEEDINGS

For a discussion of legal proceedings, see "Legal Matters" under Note 13 - *Commitments and Contingencies*, in the notes to our consolidated financial statements.

We are, and from time to time we may become, involved in legal proceedings or be subject to claims arising in the ordinary course of our business. We are not presently a party to any other legal proceedings that in the opinion of our management and if determined adversely to us, would individually or taken together have a material adverse effect on our business, operating results, financial condition or cash flows.

ITEM 1A - RISK FACTORS

You should carefully consider the risks and uncertainties described below, as well as the other information in this Quarterly Report on Form 10-Q, including our consolidated financial statements and the related notes and "Management's Discussion and Analysis of Financial Condition and Results of Operations." The occurrence of any of the events or developments described below, or of additional risks and uncertainties not presently known to us or that we currently deem immaterial, could materially and adversely affect our business, financial condition, operating results and prospects. In such an event, the market price of our Class A common stock could decline and you could lose all or a portion of your investment.

Risks Relating to Our Business, Industry and Sales

The distributed generation industry is an emerging market and distributed generation may not receive widespread market acceptance.

The distributed generation industry is still relatively nascent in an otherwise mature and heavily regulated industry, and we cannot be sure that potential customers will accept distributed generation broadly, or our Energy Server products specifically. Enterprises may be unwilling to adopt our solution over traditional or competing power sources for any number of reasons including the perception that our technology is unproven, they lack confidence in our business model, the perceived unavailability of back-up service providers to operate and maintain the Energy Servers, and lack of awareness of our product or their perception of regulatory or political headwinds. Because this is an emerging industry, broad acceptance of our products and services is subject to a high level of uncertainty and risk. If the market develops more slowly than we anticipate, our business will be harmed.

Our limited operating history and our nascent industry make evaluating our business and future prospects difficult.

From our inception in 2001 through 2009, we were focused principally on research and development activities relating to our Energy Server technology. We did not deploy our first Energy Server and did not recognize any revenue until 2009. Since that initial deployment, our business has expanded significantly over a comparatively short time, given the characteristics of the electric power industry. As a result, we have a limited history operating our business at its current scale. Furthermore, our Energy Server is a new type of product in the nascent distributed energy industry. Consequently, predicting our future revenue and appropriately budgeting for our expenses is difficult, and we have limited insight into trends that may emerge and affect our business. If actual results differ from our estimates or if we adjust our estimates in future periods, our operating results and financial position could be materially and adversely affected.

Our products involve a lengthy sales and installation cycle and, if we fail to close sales on a regular and timely basis, our business could be harmed.

Our sales cycle is typically 12 to 18 months but can vary considerably. In order to make a sale, we must typically provide a significant level of education to prospective customers regarding the use and benefits of our product and our technology. The period between initial discussions with a potential customer and the eventual sale of even a single product typically depends on a number of factors, including the potential customer's budget and decision as to the type of financing it chooses to use as well as the arrangement of such financing. Prospective customers often undertake a significant evaluation process which may further extend the sales cycle. Once a customer makes a formal decision to purchase our product, the fulfillment of the sales order by us requires a substantial amount of time. Generally, the time between the entry into a sales contract with a customer and the installation of our Energy Servers can range from nine to twelve months or more. This lengthy sales and installation cycle is subject to a number of significant risks over which we have little or no control. Because of both the long sales and long installation cycles, we may expend significant resources without having certainty of generating a sale.

These lengthy sales and installation cycles increase the risk that an installation may not be completed. In some instances, a customer can cancel an order for a particular site prior to installation, and we may be unable to recover some or all of our costs in connection with design, permitting, installation and site preparations incurred prior to cancellation. Cancellation rates can be between 10% and 20% in any given period due to factors outside of our control including an inability to install an Energy Server at the customer's chosen location because of permitting or other regulatory issues, unanticipated changes in the cost, or other reasons unique to each customer. Our operating expenses are based on anticipated sales levels, and many of our expenses are fixed. If we are unsuccessful in closing sales after expending significant resources or if we experience delays or cancellations, our business could be materially and adversely affected. Since we do not recognize revenue on the sales of our products until installation and acceptance, a small fluctuation in the timing of the completion of our sales transactions could cause operating results to vary materially from period to period.

Our Energy Servers have significant upfront costs, and we will need to attract investors to help customers finance purchases.

Our Energy Servers have significant upfront costs. In order to assist our customers in obtaining financing for our products, we have traditional lease programs with two leasing partners who have prequalified our product and provide financing for customers through various leasing arrangements. In addition to the traditional lease model, we also offer Power Purchase Agreement Programs, including Third-Party PPAs, in which financing the cost of the Energy Server is provided by an Operating Company and funded by a subsidiary investment entity (an "Investment Company") which is financed by us and/or in combination with Equity Investors. We refer to the Operating Company and its subsidiary Investment Company collectively as a PPA Entity. In recent periods, the substantial majority of our end customers have elected to finance their purchases, typically through Third Party PPAs.

We will need to grow committed financing capacity with existing partners or attract additional partners to support our growth. Generally, at any point in time, the deployment of a portion of our backlog is contingent on securing available financing. Our ability to attract third-party financing depends on many factors that are outside of our control, including the investors' ability to utilize tax credits and other government incentives, our perceived creditworthiness and the condition of credit markets generally. Our financing of customer purchases of our Energy Servers is subject to conditions such as the customer's credit quality and the expected minimum internal rate of return on the customer engagement, and if these conditions are not satisfied, we may be unable to finance purchases of our Energy Servers, which would have an adverse effect on our revenue in a particular period. If we are unable to help our customers arrange financing for our Energy Servers generally, our business will be harmed. For example, we have been working with financing sources to arrange for additional Third-Party PPA Entities, one of which will need to be finalized in order for our customers to arrange financing so that we can complete our planned installations in the balance of 2019. In addition, while we secured financing to support the installation of approximately 18 megawatts of new products in connection with the upgrade of the PPA II Project, we will need to secure additional financing in order to support our planned completion of such project in the first half of 2020.

If we are unable to procure financing partners willing to finance such deployments, our business would be negatively impacted.

The economic benefits of our Energy Servers to our customers depends on the cost of electricity available from alternative sources including local electric utility companies, which cost structure is subject to change.

We believe that a customer's decision to purchase our Energy Servers is significantly influenced by the price, the price predictability of electricity generated by our Energy Servers in comparison to the retail price and the future price outlook of electricity from the local utility grid and other renewable energy sources. The economic benefit of our Energy Servers to our customers includes, among other things, the benefit of reducing such customer's payments to the local utility company. The rates at which electricity is available from a customer's local electric utility company is subject to change and any changes in such rates may affect the relative benefits of our Energy Servers. Even in markets where we are competitive today, rates for electricity could decrease and render our Energy Servers uncompetitive. Several factors could lead to a reduction in the price or future price outlook for grid electricity, including the impact of energy conservation initiatives that reduce electricity consumption, construction of additional power generation plants (including nuclear, coal or natural gas) and technological developments by others in the electric power industry which could result in electricity being available at costs lower than those that can be achieved from our Energy Servers. If the retail price of grid electricity does not increase over time at the rate that we or our customers expect, it could reduce demand for our Energy Servers and harm our business.

Further, the local electric utility may impose "departing load," "standby," or other charges, including power factor charges, on our customers in connection with their acquisition of our Energy Servers, the amounts of which are outside of our control and which may have a material impact on the economic benefit of our Energy Servers to our customers. Changes in the

rates offered by local electric utilities and/or in the applicability or amounts of charges and other fees imposed by such utilities on customers acquiring our Energy Servers could adversely affect the demand for our Energy Servers.

In some states and countries, the current low cost of grid electricity, even together with available subsidies, does not render our product economically attractive. If we are unable to reduce our costs to a level at which our Energy Servers would be competitive in such markets, or if we are unable to generate demand for our Energy Servers based on benefits other than electricity cost savings, such as reliability, resilience, or environmental benefits, our potential for growth may be limited.

Furthermore, an increase in the price of natural gas or curtailment of availability could make our Energy Servers less economically attractive to potential customers and reduce demand.

We rely on net metering arrangements that are subject to change.

Because our Energy Servers are designed to operate at a constant output twenty-four hours a day, seven days a week, and our customers' demand for electricity typically fluctuates over the course of the day or week, there are often periods when our Energy Servers are producing more electricity than a customer may require, and such excess electricity must be exported to the local electric utility. Many, but not all, local electric utilities provide compensation to our customers for such electricity under "net metering" programs. Utility tariffs, interconnection agreements and net metering requirements are subject to changes in availability and terms. At times in the past, such changes have had the effect of significantly reducing or eliminating the benefits of such programs. Changes in the availability of, or benefits offered by, utility tariffs, the net metering requirements or interconnection agreements in place in the jurisdictions in which we operate could adversely affect the demand for our Energy Servers.

We currently face and will continue to face significant competition.

We compete for customers, financing partners, and incentive dollars with other electric power providers. Many providers of electricity, such as traditional utilities and other companies offering distributed generation products, have longer operating histories, have customer incumbency advantages, have access to and influence with local and state governments, and have access to more capital resources than do we. Significant developments in alternative technologies, such as energy storage, wind, solar, or hydro power generation, or improvements in the efficiency or cost of traditional energy sources, including coal, oil, natural gas used in combustion, or nuclear power, may materially and adversely affect our business and prospects in ways we cannot anticipate. We may also face new competitors who are not currently in the market. If we fail to adapt to changing market conditions and to compete successfully with grid electricity or new competitors, our growth will be limited which would adversely affect our business results.

We derive a substantial portion of our revenue and backlog from a limited number of customers, and the loss of or a significant reduction in orders from a large customer could have a material adverse effect on our operating results and other key metrics.

In any particular period, a substantial amount of our total revenue could come from a relatively small number of customers. As an example, in the six months ended June 30, 2019, three customers accounted for approximately 72% of our total revenue. In year ended December 31, 2018, two customers accounted for approximately 54% of our total revenue. One of these customers, the Southern Company, wholly owns a Third-Party PPA, and this entity purchases Energy Servers, that are then provided to various end customers under PPAs. The loss of any large customer order or any delays in installations of new Energy Servers with any large customer could materially and adversely affect our business results.

Risks Relating to Our Products and Manufacturing

Our future success depends in part on our ability to increase our production capacity, and we may not be able to do so in a cost-effective manner.

To the extent we are successful in growing our business, we may need to increase our production capacity. Our ability to plan, construct, and equip additional manufacturing facilities is subject to significant risks and uncertainties, including the following:

- The expansion or construction of any manufacturing facilities will be subject to the risks inherent in the development and construction of new facilities, including risks of delays and cost overruns as a result of factors outside our control such as delays in government approvals, burdensome permitting conditions, and delays in the delivery of manufacturing equipment and subsystems that we manufacture or obtain from suppliers.

- It may be difficult to expand our business internationally without additional manufacturing facilities located outside the United States. Adding manufacturing capacity in any international location will subject us to new laws and regulations including those pertaining to labor and employment, environmental and export import. In addition, it brings with it the risk of managing larger scale foreign operations.
- We may be unable to achieve the production throughput necessary to achieve our target annualized production run rate at our current and future manufacturing facilities.
- Manufacturing equipment may take longer and cost more to engineer and build than expected, and may not operate as required to meet our production plans.
- We may depend on third-party relationships in the development and operation of additional production capacity, which may subject us to the risk that such third parties do not fulfill their obligations to us under our arrangements with them.
- We may be unable to attract or retain qualified personnel.

If we are unable to expand our manufacturing facilities, we may be unable to further scale our business. If the demand for our Energy Servers or our production output decreases or does not rise as expected, we may not be able to spread a significant amount of our fixed costs over the production volume, resulting in a greater than expected per unit fixed cost, which would have a negative impact on our financial condition and our results of operations.

If we are not able to continue to reduce our cost structure in the future, our ability to become profitable may be impaired.

We must continue to reduce the manufacturing costs for our Energy Servers to expand our market. Additionally, certain of our existing service contracts were entered into based on projections regarding service costs reductions that assume continued advances in our manufacturing and services processes which we may be unable to realize. While we have been successful in reducing our manufacturing and services costs to date, the cost of components and raw materials, for example, could increase in the future. Any such increases could slow our growth and cause our financial results and operational metrics to suffer. In addition, we may face increases in our other expenses including increases in wages or other labor costs as well as installation, marketing, sales or related costs. We may continue to make significant investments to drive growth in the future. In order to expand into new electricity markets (in which the price of electricity from the grid is lower) while still maintaining our current margins, we will need to continue to reduce our costs. Increases in any of these costs or our failure to achieve projected cost reductions could adversely affect our results of operations and financial condition and harm our business and prospects. If we are unable to reduce our cost structure in the future, we may not be able to achieve profitability, which could have a material adverse effect on our business and our prospects.

If our Energy Servers contain manufacturing defects, our business and financial results could be harmed.

Our Energy Servers are complex products and they may contain undetected or latent errors or defects. In the past, we have experienced latent defects only discovered once the Energy Server is deployed in the field. Changes in our supply chain or the failure of our suppliers to otherwise provide us with components or materials that meet our specifications could also introduce defects into our products. In addition, as we grow our manufacturing volume, the chance of manufacturing defects could increase. Any manufacturing defects or other failures of our Energy Servers to perform as expected could cause us to incur significant re-engineering costs, divert the attention of our engineering personnel from product development efforts, and significantly and adversely affect customer satisfaction, market acceptance, and our business reputation.

Furthermore, we may be unable to correct manufacturing defects or other failures of our Energy Servers in a manner satisfactory to our customers, which could adversely affect customer satisfaction, market acceptance, and our business reputation.

The performance of our Energy Servers may be affected by factors outside of our control, which could result in harm to our business and financial results.

Field conditions, such as the quality of the natural gas supply and utility processes which vary by region and may be subject to seasonal fluctuations, have affected the performance of our Energy Servers and are not always possible to predict until the Energy Server is in operation. Although we believe we have designed new generations of Energy Servers to better withstand the variety of field conditions we have encountered, as we move into new geographies and deploy new service configurations, we may encounter new and unanticipated field conditions. Adverse impacts on performance may require us to incur significant re-engineering costs or divert the attention of our engineering personnel from product development efforts. Furthermore, we may be unable to adequately address the impacts of factors outside of our control in a manner satisfactory to our customers. Any of these circumstances could significantly and adversely affect customer satisfaction, market acceptance, and our business reputation.

If our estimates of useful life for our Energy Servers are inaccurate or we do not meet service and performance warranties and guaranties, or if we fail to accrue adequate warranty and guaranty reserves, our business and financial results could be harmed.

We offer certain customers the opportunity to renew their operations and maintenance service agreements on an annual basis, for up to 25 years, at prices predetermined at the time of purchase of the Energy Server. We also provide performance warranties and guaranties covering the efficiency and output performance of our Energy Servers. Our pricing of these contracts and our reserves for warranty and replacement are based upon our estimates of the life of our Energy Servers and their components, including assumptions regarding improvements in useful life that may fail to materialize. We do not have a long history with a large number of field deployments, and our estimates may prove to be incorrect. Failure to meet these performance warranties and guaranty levels may require us to replace the Energy Servers at our expense or refund their cost to the customer, or require us to make cash payments to the customer based on actual performance, as compared to expected performance, capped at a percentage of the relevant equipment purchase prices. We accrue for product warranty costs and recognize losses on service or performance warranties when required by U.S. GAAP based on our estimates of costs that may be incurred and based on historical experience. However, as we expect our customers to renew their maintenance service agreements each year, the total liability over time may be more than the accrual. Actual warranty expenses have in the past been and may in the future be greater than we have assumed in our estimates, the accuracy of which may be hindered due to our limited history operating at our current scale.

Early generations of our Energy Server did not have the useful life and did not perform at an output and efficiency level that we expected. We implemented a fleet decommissioning program for our early generation Energy Servers in our PPA I program, which resulted in a significant adjustment to revenue in the quarter ended December 31, 2015, as we would otherwise have failed to meet efficiency and output warranties. As of June 30, 2019, we had a total of 44 megawatts in total deployed early generation servers, including our first and second generation servers, out of our total installed base of 412 megawatts. We expect that our deployed early generation Energy Servers may continue to perform at a lower output and efficiency level and, as a result, the maintenance costs may exceed the contracted prices that we expect to generate if our customers continue to renew their maintenance service agreements in respect of those servers.

Our business is subject to risks associated with construction, utility interconnection, cost overruns and delays, including those related to obtaining government permits and other contingencies that may arise in the course of completing installations.

Because we generally do not recognize revenue on the sales of our Energy Servers until installation and acceptance, our financial results are dependent, to a large extent, on the timeliness of the installation of our Energy Servers. Furthermore, in some cases, the installation of our Energy Servers may be on a fixed price basis, which subjects us to the risk of cost overruns or other unforeseen expenses in the installation process.

The construction, installation, and operation of our Energy Servers at a particular site is also generally subject to oversight and regulation in accordance with national, state, and local laws and ordinances relating to building codes, safety, environmental protection, and related matters, and typically require various local and other governmental approvals and permits, including environmental approvals and permits, that vary by jurisdiction. In some cases, these approvals and permits require periodic renewal. It is difficult and costly to track the requirements of every individual authority having jurisdiction over our installations, to design our Energy Servers to comply with these varying standards, and to obtain all applicable approvals and permits. We cannot predict whether or when all permits required for a given project will be granted or whether the conditions associated with the permits will be achievable. The denial of a permit or utility connection essential to a project or the imposition of impractical conditions would impair our ability to develop the project. In addition, we cannot predict whether the permitting process will be lengthened due to complexities and appeals. Delay in the review and permitting process for a project can impair or delay our and our customers' abilities to develop that project or may increase the cost so substantially that the project is no longer attractive to us or our customers. Furthermore, unforeseen delays in the review and permitting process could delay the timing of the installation of our Energy Servers and could therefore adversely affect the timing of the recognition of revenue related to the installation, which could harm our operating results in a particular period.

In addition, the completion of many of our installations is dependent upon the availability of and timely connection to the natural gas grid and the local electric grid. In some jurisdictions, the local utility company(ies) or the municipality has denied our request for connection or has required us to reduce the size of certain projects. Any delays in our ability to connect with utilities, delays in the performance of installation-related services, or poor performance of installation-related services by our general contractors or sub-contractors will have a material adverse effect on our results and could cause operating results to vary materially from period to period.

Furthermore, we rely on the ability of our third party general contractors to install Energy Servers at our customers' sites and to meet our installation requirements. We currently work with a limited number of general contractors, which has impacted and may continue to impact our ability to make installations as planned. Our work with contractors or their sub-contractors may have the effect of us being required to comply with additional rules (including rules unique to our customers), working conditions, site remediation, and other union requirements, which can add costs and complexity to an installation project. The timeliness, thoroughness, and quality of the installation-related services performed by some of our general contractors and their sub-contractors in the past have not always met our expectations or standards and in the future may not meet our expectations and standards.

The failure of our suppliers to continue to deliver necessary raw materials or other components of our Energy Servers in a timely manner could prevent us from delivering our products within required time frames, and could cause installation delays, cancellations, penalty payments, and damage to our reputation.

We rely on a limited number of third-party suppliers for some of the raw materials and components for our Energy Servers, including certain rare earth materials and other materials that may be of limited supply. If our suppliers provide insufficient inventory at the level of quality required to meet customer demand or if our suppliers are unable or unwilling to provide us with the contracted quantities (as we have limited or in some case no alternatives for supply), our results of operations could be materially and negatively impacted. If we fail to develop or maintain our relationships with our suppliers, or if there is otherwise a shortage or lack of availability of any required raw materials or components, we may be unable to manufacture our Energy Servers or our Energy Servers may be available only at a higher cost or after a long delay. Such delays could prevent us from delivering our Energy Servers to our customers within required time frames and cause order cancellations. We have had to create our own supply chain for some of the components and materials utilized in our fuel cells. We have made significant expenditures in the past to develop our supply chain. In many cases, we entered into contractual relationships with suppliers to jointly develop the components we needed. These activities were time and capital intensive. Accordingly, the number of suppliers we have for some of our components and materials is limited and in some cases sole sourced. Some of our suppliers use proprietary processes to manufacture components. We may be unable to obtain comparable components from alternative suppliers without considerable delay, expense, or at all, as replacing these suppliers could require us either to make significant investments to bring the capability in-house or to invest in a new supply chain partner. Some of our suppliers are smaller, private companies, heavily dependent on us as a customer. If our suppliers face difficulties obtaining the credit or capital necessary to expand their operations when needed, they could be unable to supply necessary raw materials and components needed to support our planned sales and services operations, which would negatively impact our sales volumes and cash flows.

Moreover, we may experience unanticipated disruptions to operations or other difficulties with our supply chain or internalized supply processes due to exchange rate fluctuations, volatility in regional markets from where materials are obtained (particularly China and Taiwan), changes in the general macroeconomic outlook, global trade disputes, political instability, expropriation or nationalization of property, civil strife, strikes, insurrections, acts of terrorism, acts of war, or natural disasters. The failure by us to obtain raw materials or components in a timely manner or to obtain raw materials or components that meet our quantity and cost requirements could impair our ability to manufacture our Energy Servers or increase their costs or service costs of our existing portfolio of Energy Servers under maintenance services agreements. If we cannot obtain substitute materials or components on a timely basis or on acceptable terms, we could be prevented from delivering our Energy Servers to our customers within required timeframes, which could result in sales and installation delays, cancellations, penalty payments, or damage to our reputation, any of which could have a material adverse effect on our business and results of operations. In addition, we rely on our suppliers to meet quality standards, and the failure of our suppliers to meet or exceed those quality standards could cause delays in the delivery of our products, cause unanticipated servicing costs, and cause damage to our reputation.

We have, in some instances, entered into long-term supply agreements that could result in insufficient inventory and negatively affect our results of operations.

We have entered into long-term supply agreements with certain suppliers. Some of these supply agreements provide for fixed or inflation-adjusted pricing, substantial prepayment obligations and in a few cases, supplier purchase commitments. These arrangements could mean that we end up paying for inventory that we did not need or that was at a higher price than the market. Further, we face significant specific counterparty risk under long-term supply agreements when dealing with suppliers without a long, stable production and financial history. Given the uniqueness of our product, many of our suppliers do not have a long operating history and are private companies that may not have substantial capital resources. In the event any such supplier experiences financial difficulties, it may be difficult or impossible, or may require substantial time and expense, for us to recover any or all of our prepayments. We do not know whether we will be able to maintain long-term supply relationships with our critical suppliers or whether we may secure new long-term supply agreements. Additionally, many of our parts and

materials are procured from foreign suppliers, which exposes us to risks including unforeseen increases in costs or interruptions in supply arising from changes in applicable international trade regulations such as taxes, tariffs or quotas. Any of the foregoing could materially harm our financial condition and our results of operations.

We face supply chain competition, including competition from businesses in other industries, which could result in insufficient inventory and negatively affect our results of operations.

Certain of our suppliers also supply parts and materials to other businesses including businesses engaged in the production of consumer electronics and other industries unrelated to fuel cells. As a relatively low-volume purchaser of certain of these parts and materials, we may be unable to procure a sufficient supply of the items in the event that our suppliers fail to produce sufficient quantities to satisfy the demands of all of their customers, which could materially harm our financial condition and our results of operations.

We, and some of our suppliers, obtain capital equipment used in our manufacturing process from sole suppliers and, if this equipment is damaged or otherwise unavailable, our ability to deliver our Energy Servers on time will suffer.

Some of the capital equipment used to manufacture our products and some of the capital equipment used by our suppliers have been developed and made specifically for us, are not readily available from multiple vendors, and would be difficult to repair or replace if they did not function properly. If any of these suppliers were to experience financial difficulties or go out of business or if there were any damage to or a breakdown of our manufacturing equipment and we could not obtain replacement equipment in a timely manner, our business would suffer. In addition, a supplier's failure to supply this equipment in a timely manner with adequate quality and on terms acceptable to us could disrupt our production schedule or increase our costs of production and service.

Possible new tariffs could have a material adverse effect on our business.

Our business is dependent on the availability of raw materials and components for our Energy Servers, particularly electrical components common in the semiconductor industry, specialty steel products / processing and raw materials. Tariffs imposed on steel and aluminum imports have increased the cost of raw materials for our Energy Servers and decreased the available supply. Additional new tariffs or other trade protection measures which are proposed or threatened and the potential escalation of a trade war and retaliation measures could have a material adverse effect on our business, results of operations and financial condition.

Although we currently maintain alternative sources for raw materials, our business is subject to the risk of price fluctuations and periodic delays in the delivery of certain raw materials, which tariffs may exacerbate. Disruptions in the supply of raw materials and components could temporarily impair our ability to manufacture our Energy Servers for our customers or require us to pay higher prices in order to obtain these raw materials or components from other sources, which could affect our business and our results of operations. While it is too early to predict how the recently enacted tariffs on imported steel will impact our business, the imposition of tariffs on items imported by us from China or other countries could increase our costs and could have a material adverse effect on our business and our results of operations.

Risks Relating to Government Incentive Programs

Our business currently depends on the availability of rebates, tax credits and other financial incentives, and the reduction, modification, or elimination of such benefits could cause our revenue to decline and harm our financial results.

The U.S. federal government and some state and local governments provide incentives to end users and purchasers of our Energy Servers in the form of rebates, tax credits, and other financial incentives, such as system performance payments and payments for renewable energy credits associated with renewable energy generation. In addition, some countries outside the U.S. also provide incentives to end users and purchasers of our Energy Servers. We currently have operations and sell our Energy Servers in Japan, China, India, and the Republic of Korea, collectively our Asia Pacific region, where Renewable Portfolio Standards ("RPS") are in place to promote the adoption of renewable power generation, including fuel cells. Our Energy Servers have qualified for tax exemptions, incentives, or other customer incentives in many states including the states of California, Connecticut, Massachusetts, New Jersey and New York. Some states have utility procurement programs and/or renewable portfolio standards for which our technology is eligible. Our Energy Servers are currently installed in eleven U.S. states, each of which may have its own enabling policy framework. We rely on these governmental rebates, tax credits, and other financial incentives to significantly lower the effective price of the Energy Servers to our customers in the U. S. and the Asia Pacific region. Our financing partners and Equity Investors in Bloom Electrons programs may also take advantage of these financial incentives, lowering the cost of capital and energy to our customers. However, these incentives or RPS may expire on

a particular date, end when the allocated funding is exhausted, or be reduced or terminated as a matter of regulatory or legislative policy.

For example, the previous federal investment tax credit ("ITC"), a federal tax incentive for fuel cell production, expired on December 31, 2016. Without the availability of the ITC benefit incentive, we lowered the price of our Energy Servers to ensure the economics to our customers would remain the same as it was prior to losing the ITC benefit, adversely affecting our gross profit. While the ITC was reinstated by the U.S Congress on February 9, 2018 and made retroactive to January 1, 2017, under current law it will phase out on December 31, 2022.

As another example, the California Self Generation Incentive Program ("SGIP") is a program administered by the California Public Utilities Commission ("CPUC") which provides incentives to investor-owned utility customers that install eligible distributed energy resources. In July 2016, the CPUC modified the SGIP to provide a smaller allocation of the incentives available to generating technologies such as our Energy Servers and a larger allocation to storage technologies. As modified, the SGIP will require all eligible power generation sources consuming natural gas to use a minimum 50% biogas to receive SGIP funds in 2019 and 100% in 2020. In addition, the CPUC provided a further limitation on the available allocation of funds that any one participant may claim under the SGIP. The SGIP will expire on January 21, 2021 absent any extension. Our customer sites accepted benefiting from the SGIP represented approximately 0% and 5% of total sites accepted for the six months ended June 30, 2019 and 2018, respectively.

Changes in federal, state, or local programs or the RPS in the Asia Pacific region could reduce demand for our Energy Servers, impair sales financing, and adversely impact our business results. The continuation of these programs depends upon political support which to date has been bipartisan and durable. Nevertheless, one set of political activists aggressively seeks to eliminate these programs while another set seeks to deny access to these programs for any technology that relies on natural gas, regardless of the technology's positive contribution to reducing air pollution, reducing carbon emissions or enabling electric service to be more reliable and resilient.

We rely on tax equity financing arrangements to realize the benefits provided by investment tax credits and accelerated tax depreciation and, in the event these programs are terminated, our financial results could be harmed.

We expect that any Energy Server deployments through financed transactions (including our Bloom Electrons programs, our leasing programs and any Third-Party PPA Programs) will receive capital from financing parties ("Equity Investors") who derive a significant portion of their economic returns through tax benefits. Equity Investors are generally entitled to substantially all of the project's tax benefits, such as those provided by the ITC and Modified Accelerated Cost Recovery System ("MACRS") or bonus depreciation, until the Equity Investors achieve their respective agreed rates of return. The number of and available capital from potential Equity Investors is limited, we compete with other energy companies eligible for these tax benefits to access such investors, and the availability of capital from Equity Investors is subject to fluctuations based on factors outside of our control such as macroeconomic trends and changes in applicable taxation regimes. Concerns regarding our limited operating history, lack of profitability and that we are only the party who can perform operations and maintenance on our Energy Servers have made it difficult to attract investors in the past. Our ability to obtain additional financing in the future depends on the continued confidence of banks and other financing sources in our business model, the market for our Energy Servers, and the continued availability of tax benefits applicable to our Energy Servers. In addition, conditions in the general economy and financial and credit markets may result in the contraction of available tax equity financing. If we are unable to enter into tax equity financing agreements with attractive pricing terms, or at all, we may not be able to obtain the capital needed to fund our financing programs or use the tax benefits provided by the ITC and MACRS depreciation, which could make it more difficult for customers to finance the purchase of our Energy Servers. Such circumstances could also require us to reduce the price at which we are able to sell our Energy Servers and therefore harm our business, our financial condition, and our results of operations.

Risks Related to Legal Matters and Regulations

We are subject to various environmental laws and regulations that could impose substantial costs upon us and cause delays in building our manufacturing facilities.

We are subject to national, state, and local environmental laws and regulations as well as environmental laws in those foreign jurisdictions in which we operate. Environmental laws and regulations can be complex and may often change. These laws can give rise to liability for administrative oversight costs, cleanup costs, property damage, bodily injury, fines, and penalties. Recently, for example, we paid rather than contest an administrative penalty of $40,000 and assessed costs of $5,454.43 related to the start-up of upgraded units at our Delaware Fuel Cell Project before such upgraded units were inspected. Capital and operating expenses needed to comply with environmental laws and regulations can be significant, and violations may result in substantial fines and penalties or third-party damages. In addition, ensuring we are in compliance with applicable environmental laws requires significant time and management resources and could cause delays in our ability to build out,

equip and operate our facilities as well as service our fleet, which would adversely impact our business, our prospects, our financial condition, and our operating results. In addition, environmental laws and regulations such as the Comprehensive Environmental Response, Compensation and Liability Act in the United States impose liability on several grounds including for the investigation and cleanup of contaminated soil and ground water, for building contamination, for impacts to human health and for damages to natural resources. If contamination is discovered in the future at properties formerly owned or operated by us or currently owned or operated by us, or properties to which hazardous substances were sent by us, it could result in our liability under environmental laws and regulations. Many of our customers who purchase our Energy Servers have high sustainability standards, and any environmental noncompliance by us could harm our reputation and impact a current or potential customer's buying decision. The costs of complying with environmental laws, regulations, and customer requirements, and any claims concerning noncompliance or liability with respect to contamination in the future, could have a material adverse effect on our financial condition or our operating results.

The installation and operation of our Energy Servers are subject to environmental laws and regulations in various jurisdictions, and there is uncertainty with respect to the interpretation of certain environmental laws and regulations to our Energy Servers, especially as these regulations evolve over time.

Bloom is committed to compliance with applicable environmental laws and regulations including health and safety standards, and we continually review the operation of our Energy Servers for health, safety, and environmental compliance. Our Energy Servers, like other fuel cell technology-based products of which we are aware, produce small amounts of hazardous wastes and air pollutants, and we seek to ensure that they are handled in accordance with applicable regulatory standards.

Maintaining compliance with laws and regulations can be challenging given the changing patchwork of environmental laws and regulations that prevail at the federal, state, regional, and local level. Most existing environmental laws and regulations preceded the introduction of our innovative fuel cell technology and were adopted to apply to technologies existing at the time, namely large coal, oil, or gas-fired power plants. Currently, there is generally little guidance from these agencies on how certain environmental laws and regulations may or may not be applied to our technology.

For example, natural gas, which is the primary fuel used in our Energy Servers, contains benzene, which is classified as a hazardous waste if it exceeds 0.5 milligrams ("mg") per liter. A small amount of benzene found in the public natural gas pipeline (equivalent to what is present in one gallon of gasoline in an automobile fuel tank which are exempt from federal regulation) is collected by the gas cleaning units contained in our Energy Servers which are typically replaced once every 18 to 24 months by us from customers' sites. From 2010 to late 2016 and in the regular course of maintenance of the Energy Servers, we periodically replaced the units in our servers under a federal environmental exemption that permitted the handling of such units without manifesting the contents as containing a hazardous waste. Although at the time we believed that we operated under the exemption with the approval of two states that had adopted the federal exemption, the U.S. Environmental Protection Agency ("EPA") issued guidance for the first time in late 2016 that differed from our belief and conflicted with the state approvals we had obtained even though we had operated under the exemption since 2010. We have complied with the new guidance and, given the comparatively small quantities of benzene produced, we do not anticipate significant additional costs or risks from our compliance with the revised 2016 guidance. However, the EPA has asked us to show cause why it should not collect approximately $1.0 million in fines from us for the prior period, which we are contesting. Additionally, we paid a nominal fine to an agency in a different state under that state's environmental laws relating to the operation of our Energy Server under the exemption prior to the issuance of the revised EPA guidance.

Another example relates to the very small amounts of chromium in hexavalent form, or CR+6, which our Energy Servers emit at nanometer scale. This occurs any time a steel super alloy is exposed to high temperatures. CR+6 is found in small concentrations in the air generally. However, exposure to high or significant concentrations over prolonged periods of time can be carcinogenic. While the small amount of chromium emitted by our Energy Servers is initially in the hexavalent form, it converts to a non-toxic trivalent form, or CR+3, rapidly after it leaves the Energy Server. In tests we have conducted, air measurements taken 10 meters from an Energy Server show that the CR+6 is largely converted.

Our Energy Servers do not present any significant health hazard based on our modeling, testing methodology, and measurements. There are several supporting elements to this position including that the emissions from our Energy Servers are in very low concentrations, are emitted as nano-particles that convert to the non-hazardous form CR+3 rapidly, are quickly dispersed into the air, and are not emitted in close proximity to locations where people would be expected to have a prolonged exposure. Nevertheless, we have engineered a technology solution that we are deploying.

Several states in which we currently operate, including California, require permits for emissions of hazardous air pollutants based on the quantity of emissions, most of which require permits only for quantities of emissions that are higher than those observed from our Energy Servers. Other states in which we operate, including New York, New Jersey, and North Carolina, have specific exemptions for fuel cells. Some states in which we operate have CR+6 limits which are an order of

magnitude over our operating range. Within California, the Bay Area Air Quality Management District ("BAAQMD") requires a permit for emissions that are more than 0.00051 lbs/year. Other California regulations require that levels of CR+6 be below 0.00005 $\mu g/m^3$, which is the level required by Proposition 65 and which requires notification of the presence of CR+6 unless it can be shown to be at levels that do not pose a significant health risk. We have determined that the standards applicable in California in this regard are more stringent than those in any other state or foreign location in which we have installed Energy Servers to date, therefore, deployment of our solution has been focused on California's standards.

There are generally no relevant environmental testing methodology guidelines for a technology such as ours. The standard test method for analyzing emissions cannot be readily applied to our Energy Servers because it would require inserting a probe into an emission stack. Our servers do not have emission stacks; therefore, we have to construct an artificial stack on top of our server in order to conduct a test. If we used the testing methodology similar to what the air districts have used in other large scale industrial products, it would show that we would need to reduce the emissions of CR+6 from our Energy Servers to meet the most stringent requirements. However, we employed a modified test method that is designed to capture the actual operating conditions of our Energy Servers and its distinctly different design from legacy power plants and industrial equipment. Based on our modeling, measured results and analysis, we believe we are in compliance with State of California air regulations. However, it is possible that the California Air Districts will require us to abate or shut down the operations of certain of our existing Energy Servers on a temporary basis or will seek the imposition of monetary fines.

While we seek to comply with air quality and emission standards in every region in which we operate, it is possible that certain customers in other regions may request that we provide the new technology solution for their Energy Servers to comply with the stricter standards imposed by California even though they are not applicable and even though we are under no contractual obligation to do so. We plan to satisfy these requests from customers. Failure or delay in attaining regulatory approval could result in our not being able to operate in a particular local jurisdiction.

These examples illustrate that our technology is moving faster than the regulatory process in many instances. It is possible that regulators could delay or prevent us from conducting our business in some way pending agreement on, and compliance with, shifting regulatory requirements. Such actions could delay the installation of Energy Servers, could result in fines, could require modification or replacement or could trigger claims of performance warranties and defaults under customer contracts that could require us to repurchase their Energy Servers, any of which could adversely affect our business, our financial performance, and our reputation. In addition, new laws or regulations or new interpretations of existing laws or regulations could present marketing, political or regulatory challenges and could require us to upgrade or retrofit existing equipment, which could result in materially increased capital and operating expenses.

Furthermore, we have not yet determined whether our Energy Servers will satisfy regulatory requirements in the other states in the U.S. and in international locations in which we do not currently sell Energy Servers but may pursue in the future.

As a fossil fuel-based technology, we may be subject to a heightened risk of regulation, to a potential for the loss of certain incentives, and to changes in our customers' energy procurement policies.

Although the current generation of Energy Servers running on natural gas produce nearly 50% less carbon emissions compared to the average of U.S. combustion power generation, the operation of our Energy Servers does produce carbon dioxide ("CO2"), which has been shown to be a contributing factor to global climate change. As such, we may be negatively impacted by CO2-related changes in applicable laws, regulations, ordinances, rules, or the requirements of the incentive programs on which we and our customers currently rely. Changes (or a lack of change to comprehensively recognize the risks of climate change and recognize the benefit of our technology as one means to maintain reliable and resilient electric service with a lower greenhouse gas emission profile) in any of the laws, regulations, ordinances, or rules that apply to our installations and new technology could make it illegal or more costly for us or our customers to install and operate our Energy Servers on particular sites, thereby negatively affecting our ability to deliver cost savings to customers, or we could be prohibited from completing new installations or continuing to operate existing projects. Certain municipalities in California have already banned the use of distributed generation products that utilize fossil fuel. Additionally, our customers' and potential customers' energy procurement policies may prohibit or limit their willingness to procure our Energy Servers. Our business prospects may be negatively impacted if we are prevented from completing new installations or our installations become more costly as a result of laws, regulations, ordinances, or rules applicable to our Energy Servers, or by our customers' and potential customers' energy procurement policies.

Existing regulations and changes to such regulations impacting the electric power industry may create technical, regulatory, and economic barriers which could significantly reduce demand for our Energy Servers or affect the financial performance of current sites.

The market for electricity generation products is heavily influenced by U.S. federal, state, local, and foreign government regulations and policies as well as by internal policies and regulations of electric utility providers. These regulations and policies often relate to electricity pricing and technical interconnection of customer-owned electricity generation. These regulations and policies are often modified and could continue to change, which could result in a significant reduction in demand for our Energy Servers. For example, utility companies commonly charge fees to larger industrial customers for disconnecting from the electric grid or for having the capacity to use power from the electric grid for back-up purposes. These fees could change, thereby increasing the cost to our customers of using our Energy Servers and making them less economically attractive.

In addition, our project with Delmarva Power & Light Company ("the Delaware Project") is subject to laws and regulations relating to electricity generation, transmission, and sale in Delaware and at the federal level.

A law governing the sale of electricity from the Delaware Project was necessary to implement part of several incentives that Delaware offered to Bloom to build our major Manufacturing Center in Delaware. Those incentives have proven controversial in Delaware, in part because our Manufacturing Center, while a significant source of continuing manufacturing employment, has not expanded as quickly as projected. A citizen-antagonist continues to oppose the Delaware Project and seeks support from Delaware officials and others. In 2018, he unsuccessfully petitioned the Delaware Public Service Commission. Most recently, he has appealed a favorable Order of the Secretary of Delaware's Department of Natural Resources and Environmental Control to Delaware's Environmental Appeals Board (EAB), an administrative entity with authority to review the Secretary's Orders. The Secretary's Order at issue approved permits that enable the upgrade of the Delaware Project. We expect the EAB to uphold the Secretary's Order as the appeal is without merit and raises issues that are outside the scope of the permits and beyond the jurisdiction of the EAB. While we believe the appeal is without merit, if the appeal was successful, we may face adverse consequences that would negatively affect our operation of the Delaware Project. The Appeal and the opposition to the Delaware Project are examples of potentially material risks associated with electric power regulation.

At the federal level, the Federal Energy Regulatory Commission ("FERC") has authority to regulate under various federal energy regulatory laws, wholesale sales of electric energy, capacity, and ancillary services, and the delivery of natural gas in interstate commerce. Also, several of our PPA Entities are subject to regulation under FERC with respect to market-based sales of electricity, which requires us to file notices and make other periodic filings with FERC, which increases our costs and subjects us to additional regulatory oversight.

Although we generally are not regulated as a utility, federal, state, and local government statutes and regulations concerning electricity heavily influence the market for our product and services. These statutes and regulations often relate to electricity pricing, net metering, incentives, taxation, and the rules surrounding the interconnection of customer-owned electricity generation for specific technologies. In the United States, governments frequently modify these statutes and regulations. Governments, often acting through state utility or public service commissions, change and adopt different requirements for utilities and rates for commercial customers on a regular basis. Changes, or in some cases a lack of change, in any of the laws, regulations, ordinances, or other rules that apply to our installations and new technology could make it more costly for us or our customers to install and operate our Energy Servers on particular sites and, in turn, could negatively affect our ability to deliver cost savings to customers for the purchase of electricity.

We may become subject to product liability claims which could harm our financial condition and liquidity if we are not able to successfully defend or insure against such claims.

We may in the future become subject to product liability claims. Our Energy Servers are considered high energy systems because they use flammable fuels and may operate at 480 volts. Although our Energy Servers are certified to meet ANSI, IEEE, ASME, and NFPA design and safety standards, if not properly handled in accordance with our servicing and handling standards and protocols, there could be a system failure and resulting liability. These claims could require us to incur significant costs to defend. Furthermore, any successful product liability claim could require us to pay a substantial monetary award. Moreover, a product liability claim could generate substantial negative publicity about our company and our Energy Servers, which could harm our brand, our business prospects, and our operating results. While we maintain product liability insurance, our insurance may not be sufficient to cover all potential product liability claims. Any lawsuit seeking significant monetary damages either in excess of our coverage or outside of our coverage may have a material adverse effect on our business and our financial condition.

Current or future litigation or administrative proceedings could have a material adverse effect on our business, our financial condition and our results of operations.

We have been and continue to be involved in legal proceedings, administrative proceedings, claims, and other litigation that arise in the ordinary course of business. Purchases of our products have also been the subject of litigation. For information regarding pending legal proceedings, please see Part II, Item 1 of this Quarterly Report on Form 10-Q captioned "Legal Proceedings" and footnote 13 to our consolidated financial statements entitled "Commitments and Contingencies." In addition, since our Energy Server is a new type of product in a nascent market, we have in the past needed and may in the future need to seek the amendment of existing regulations, or in some cases the creation of new regulations, in order to operate our business in some jurisdictions. Such regulatory processes may require public hearings concerning our business, which could expose us to subsequent litigation.

Unfavorable outcomes or developments relating to proceedings to which we are a party or transactions involving our products such as judgments for monetary damages, injunctions, or denial or revocation of permits, could have a material adverse effect on our business, our financial condition, and our results of operations. In addition, settlement of claims could adversely affect our financial condition and our results of operations.

Risks Relating to Our Intellectual Property

Our failure to protect our intellectual property rights may undermine our competitive position, and litigation to protect our intellectual property rights may be costly.

Although we have taken many protective measures to protect our trade secrets including agreements, limited access, segregation of knowledge, password protections, and other measures, policing unauthorized use of proprietary technology can be difficult and expensive. For example, many of our engineers reside in California where it is not legally permissible to prevent them from working for a competitor if and when one should exist. Also, litigation may be necessary to enforce our intellectual property rights, to protect our trade secrets, or to determine the validity and scope of the proprietary rights of others. Such litigation may result in our intellectual property rights being challenged, limited in scope, or declared invalid or unenforceable. We cannot be certain that the outcome of any litigation will be in our favor, and an adverse determination in any such litigation could impair our intellectual property rights, our business, our prospects, and our reputation.

We rely primarily on patent, trade secret, and trademark laws and non-disclosure, confidentiality, and other types of contractual restrictions to establish, maintain, and enforce our intellectual property and proprietary rights. However, our rights under these laws and agreements afford us only limited protection and the actions we take to establish, maintain, and enforce our intellectual property rights may not be adequate. For example, our trade secrets and other confidential information could be disclosed in an unauthorized manner to third parties, our owned or licensed intellectual property rights could be challenged, invalidated, circumvented, infringed, or misappropriated or our intellectual property rights may not be sufficient to provide us with a competitive advantage, any of which could have a material adverse effect on our business, financial condition, or operating results. In addition, the laws of some countries do not protect proprietary rights as fully as do the laws of the United States. As a result, we may not be able to protect our proprietary rights adequately abroad.

Our patent applications may not result in issued patents, and our issued patents may not provide adequate protection, either of which may have a material adverse effect on our ability to prevent others from commercially exploiting products similar to ours.

We cannot be certain that our pending patent applications will result in issued patents or that any of our issued patents will afford protection against a competitor. The status of patents involves complex legal and factual questions, and the breadth of claims allowed is uncertain. As a result, we cannot be certain that the patent applications that we file will result in patents being issued or that our patents and any patents that may be issued to us in the future will afford protection against competitors with similar technology. In addition, patent applications filed in foreign countries are subject to laws, rules, and procedures that differ from those of the United States, and thus we cannot be certain that foreign patent applications related to issued U.S. patents will be issued in other regions. Furthermore, even if these patent applications are accepted and the associated patents issued, some foreign countries provide significantly less effective patent enforcement than in the United States.

In addition, patents issued to us may be infringed upon or designed around by others and others may obtain patents that we need to license or design around, either of which would increase costs and may adversely affect our business, our prospects, and our operating results.

We may need to defend ourselves against claims that we infringed, misappropriated, or otherwise violated the intellectual property rights of others, which may be time-consuming and would cause us to incur substantial costs.

Companies, organizations, or individuals, including our competitors, may hold or obtain patents, trademarks, or other proprietary rights that they may in the future believe are infringed by our products or services. Although we are not currently subject to any claims related to intellectual property, these companies holding patents or other intellectual property rights allegedly relating to our technologies could, in the future, make claims or bring suits alleging infringement, misappropriation, or other violations of such rights, or otherwise assert their rights and by seeking licenses or injunctions. Several of the proprietary components used in our Energy Servers have been subjected to infringement challenges in the past. We also generally indemnify our customers against claims that the products we supply infringe, misappropriate, or otherwise violate third party intellectual property rights, and we therefore may be required to defend our customers against such claims. If a claim is successfully brought in the future and we or our products are determined to have infringed, misappropriated, or otherwise violated a third party's intellectual property rights, we may be required to do one or more of the following:

- cease selling or using our products that incorporate the challenged intellectual property;
- pay substantial damages (including treble damages and attorneys' fees if our infringement is determined to be willful);
- obtain a license from the holder of the intellectual property right, which may not be available on reasonable terms or at all; or
- redesign our products or means of production, which may not be possible or cost-effective.

Any of the foregoing could adversely affect our business, prospects, operating results, and financial condition. In addition, any litigation or claims, whether or not valid, could harm our reputation, result in substantial costs and divert resources and management attention.

We also license technology from third parties and incorporate components supplied by third parties into our products. We may face claims that our use of such technology or components infringes or otherwise violates the rights of others, which would subject us to the risks described above. We may seek indemnification from our licensors or suppliers under our contracts with them, but our rights to indemnification or our suppliers' resources may be unavailable or insufficient to cover our costs and losses.

Risks Relating to Our Financial Condition and Operating Results

We have incurred significant losses in the past and we may not be profitable for the foreseeable future.

Since our inception in 2001, we have incurred significant net losses and have used significant cash in our business. As of June 30, 2019, we had an accumulated deficit of $2.7 billion. We expect to continue to expand our operations, including by investing in manufacturing, sales and marketing, research and development, staffing systems, and infrastructure to support our growth. We anticipate that we will incur net losses for the foreseeable future. Our ability to achieve profitability in the future will depend on a number of factors, including:

- growing our sales volume;
- increasing sales to existing customers and attracting new customers;
- attracting and retaining financing partners who are willing to provide financing for sales on a timely basis and with attractive terms;
- continuing to improve the useful life of our fuel cell technology and reducing our warranty servicing costs;
- reducing the cost of producing our Energy Servers;
- improving the efficiency and predictability of our installation process;
- improving the effectiveness of our sales and marketing activities;
- attracting and retaining key talent in a competitive marketplace; and
- the amount of stock based compensation recognized in the period.

Even if we do achieve profitability, we may be unable to sustain or increase our profitability in the future.

Our financial condition and results of operations and other key metrics are likely to fluctuate on a quarterly basis in future periods, which could cause our results for a particular period to fall below expectations, resulting in a severe decline in the price of our Class A common stock.

Our financial condition and results of operations and other key metrics have fluctuated significantly in the past and may continue to fluctuate in the future due to a variety of factors, many of which are beyond our control. For example, the amount of product revenue we recognize in a given period is materially dependent on the volume of installations of our Energy Servers in that period and the type of financing used by the customer.

In addition to the other risks described herein, the following factors could also cause our financial condition and results of operations to fluctuate on a quarterly basis:

- the timing of installations, which may depend on many factors such as availability of inventory, product quality or performance issues, or local permitting requirements, utility requirements, environmental, health, and safety requirements, weather, and customer facility construction schedules;
- size of particular installations and number of sites involved in any particular quarter;
- the mix in the type of purchase or financing options used by customers in a period, and the rates of return required by financing parties in such period;
- whether we are able to structure our sales agreements in a manner that would allow for the product and installation revenue to be recognized up front at acceptance;
- delays or cancellations of Energy Server installations;
- fluctuations in our service costs, particularly due to unaccrued costs of servicing and maintaining Energy Servers;
- weaker than anticipated demand for our Energy Servers due to changes in government incentives and policies or due to other conditions;
- fluctuations in our research and development expense, including periodic increases associated with the pre-production qualification of additional tools as we expand our production capacity;
- interruptions in our supply chain;
- the length of the sales and installation cycle for a particular customer;
- the timing and level of additional purchases by existing customers;
- unanticipated expenses or installation delays associated with changes in governmental regulations, permitting requirements by local authorities at particular sites, utility requirements and environmental, health, and safety requirements;
- disruptions in our sales, production, service or other business activities resulting from disagreements with our labor force or our inability to attract and retain qualified personnel; and
- unanticipated changes in federal, state, local, or foreign government incentive programs available for us, our customers, and tax equity financing parties.

Fluctuations in our operating results and cash flow could, among other things, give rise to short-term liquidity issues. In addition, our revenue, key operating metrics, and other operating results in future quarters may fall short of the expectations of investors and financial analysts, which could have an adverse effect on the price of our Class A common stock.

If we fail to manage our growth effectively, our business and operating results may suffer.

Our current growth and future growth plans may make it difficult for us to efficiently operate our business, challenging us to effectively manage our capital expenditures and control our costs while we expand our operations to increase our revenue. If we experience a significant growth in orders without improvements in automation and efficiency, we may need additional manufacturing capacity and we and some of our suppliers may need additional and capital intensive equipment. Any growth in manufacturing must include a scaling of quality control as the increase in production increases the possible impact of manufacturing defects. In addition, any growth in the volume of sales of our Energy Servers may outpace our ability to engage sufficient and experienced personnel to manage the higher number of installations and to engage contractors to complete installations on a timely basis and in accordance with our expectations and standards. Any failure to manage our growth effectively could materially and adversely affect our business, our prospects, our operating results, and our financial condition. Our future operating results depend to a large extent on our ability to manage this expansion and growth successfully.

If we discover a material weakness in our internal control over financial reporting or otherwise fail to maintain effective internal control over financial reporting, our ability to report our financial results on a timely and an accurate basis may adversely affect the market price of our Class A common stock.

The Sarbanes-Oxley Act of 2002 ("Sarbanes-Oxley Act") requires, among other things, that public companies evaluate the effectiveness of their internal control over financial reporting and disclosure controls and procedures. As a recently public company and as an emerging growth company, we elected to delay adopting the requirements of the Sarbanes-Oxley Act as is our option under the Sarbanes-Oxley Act. Although we did not discover any material weaknesses in internal control over financial reporting at June 30, 2019, subsequent testing by us or our independent registered public accounting firm, which has not yet performed an audit of our internal control over financial reporting, may reveal deficiencies in our internal control over financial reporting that are deemed to be material weaknesses. To comply with Section 404A, we may incur substantial cost, expend significant management time on compliance-related issues, and hire additional accounting, financial, and internal audit staff with appropriate public company experience and technical accounting knowledge. Moreover, if we are not able to comply with the requirements of Section 404A in a timely manner or if we or our independent registered public accounting firm identify deficiencies in our internal control over financial reporting that are deemed to be material weaknesses, we could be subject to sanctions or investigations by the Securities and Exchange Commission ("SEC") or other regulatory authorities, which would require additional financial and management resources. Any failure to maintain effective disclosure controls and procedures or internal control over financial reporting could have a material adverse effect on our business and operating results and cause a decline in the price of our Class A common stock. For further discussion on Section 404A compliance, see our Risk Factor: *We are an "emerging growth company," and we cannot be certain if the reduced disclosure requirements applicable to emerging growth companies will make our Class A common stock less attractive to investors and may make it more difficult to compare our performance with other public companies*.

Our ability to use our deferred tax assets to offset future taxable income may be subject to limitations that could subject our business to higher tax liability.

We may be limited in the portion of net operating loss carryforwards that we can use in the future to offset taxable income for U.S. federal and state income tax purposes. Our net operating loss carryforwards ("NOLs") will expire, if unused, beginning in 2022 and 2028, respectively. A lack of future taxable income would adversely affect our ability to utilize these NOLs. In addition, under Section 382 of the Internal Revenue Code of 1986, as amended (the "Code"), a corporation that undergoes an "ownership change" is subject to limitations on its ability to utilize its NOLs to offset future taxable income. Changes in our stock ownership as well as other changes that may be outside of our control could result in ownership changes under Section 382 of the Code, which could cause our NOLs to be subject to certain limitations. Our NOLs may also be impaired under similar provisions of state law. Our deferred tax assets, which are currently fully reserved with a valuation allowance, may expire unutilized or underutilized, which could prevent us from offsetting future taxable income.

Risks Relating to Our Liquidity

We must maintain customer confidence in our liquidity and long-term business prospects in order to grow our business.

Currently, we are the only provider able to fully support and maintain our Energy Servers. If potential customers believe we do not have sufficient capital or liquidity to operate our business over the long-term or that we will be unable to maintain their Energy Servers and provide satisfactory support, customers may be less likely to purchase or lease our products, particularly in light of the significant financial commitment required. In addition, financing sources may be unwilling to provide financing on reasonable terms. Similarly, suppliers, financing partners, and other third parties may be less likely to invest time and resources in developing business relationships with us if they have concerns about the success of our business.

Accordingly, in order to grow our business, we must maintain confidence in our liquidity and long-term business prospects among customers, suppliers, financing partners, and other parties. This may be particularly complicated by factors such as:

- our limited operating history at a large scale;
- our lack of profitability;
- unfamiliarity with or uncertainty about our Energy Servers and the overall perception of the distributed generation market;
- prices for electricity or natural gas in particular markets;
- competition from alternate sources of energy;
- warranty or unanticipated service issues we may experience;
- the environmental consciousness and perceived value of environmental programs to our customers;
- the size of our expansion plans in comparison to our existing capital base and the scope and history of operations;
- the availability and amount of tax incentives, credits, subsidies or other incentive programs; and
- the other factors set forth in this "Risk Factors" section.

Several of these factors are largely outside our control, and any negative perceptions about our liquidity or long-term business prospects, even if unfounded, would likely harm our business.

Our substantial indebtedness, and restrictions imposed by the agreements governing our, and our PPA Entities', outstanding indebtedness, may limit our financial and operating activities and may adversely affect our ability to incur additional debt to fund future needs.

As of June 30, 2019, we and our subsidiaries had approximately $668.2 million of total consolidated indebtedness, of which an aggregate of $405.8 million represented indebtedness that is recourse to us. Of this $668.2 million debt, $35.6 million represented debt under our 5% Notes, $2.4 million represented operating debt, $262.4 million represented debt of our PPA Entities, $271.5 million represented debt under our 6% Notes and $96.4 million represented debt under our 10% Notes. The agreements governing our and our PPA Entities' outstanding indebtedness contain, and other future debt agreements may contain, covenants imposing operating and financial restrictions on our business that limit our flexibility including, among other things, to:

- borrow money;
- pay dividends or make other distributions;
- incur liens;
- make asset dispositions;
- make loans or investments;
- issue or sell share capital of our subsidiaries;
- issue guaranties;
- enter into transactions with affiliates;
- merge, consolidate or sell, lease or transfer all or substantially all of our assets;

- require us to dedicate a substantial portion of cash flow from operations to the payment of principal and interest on indebtedness, thereby reducing the funds available for other purposes such as working capital and capital expenditures;
- make it more difficult for us to satisfy and comply with our obligations with respect to our indebtedness;
- subject us to increased sensitivity to interest rate increases;
- make us more vulnerable to economic downturns, adverse industry conditions, or catastrophic external events;
- limit our ability to withstand competitive pressures;
- limit our ability to invest in new business subsidiaries that are not PPA Entity-related;
- reduce our flexibility in planning for or responding to changing business, industry, and economic conditions; and/or
- place us at a competitive disadvantage to competitors that have relatively less debt than we have.

Our debt agreements and our PPA Entities' debt agreements require the maintenance of financial ratios or the satisfaction of financial tests such as debt service coverage ratios and consolidated leverage ratios. Our and our PPA Entities' ability to meet these financial ratios and tests may be affected by events beyond our control and, as a result, we cannot assure you that we will be able to meet these ratios and tests. Upon the occurrence of events such as a change in control of our company, significant asset sales or mergers or similar transactions, the liquidation or dissolution of our company or the cessation of our stock exchange listing, holders of our 6% Notes have the right to cause us to repurchase for cash any or all of such outstanding notes at a repurchase price in cash equal to 100% of the principal amount thereof, plus accrued and unpaid interest thereon. We cannot provide assurance that we would have sufficient liquidity to repurchase such notes. Furthermore, our financing and debt agreements, such as our 6% Notes and our 10% Notes, contain events of default. If an event of default were to occur, the trustee or the lenders could, among other things, terminate their commitments and declare outstanding amounts due and payable and our cash may become restricted. We cannot provide assurance that we would have sufficient liquidity to repay or refinance our indebtedness if such amounts were accelerated upon an event of default. Borrowings under other debt instruments that contain cross-acceleration or cross-default provisions may, as a result, be accelerated and become due and payable as a consequence. We may be unable to pay these debts in such circumstances. If we were unable to repay those amounts, lenders could proceed against the collateral granted to them to secure repayment of those amounts. We cannot assure you that the collateral will be sufficient to repay in full those amounts. We cannot provide assurance that the operating and financial restrictions and covenants in these agreements will not adversely affect our ability to finance our future operations or capital needs, or our ability to engage in other business activities that may be in our interest or our ability to react to adverse market developments.

If our PPA Entities default on their obligations under non-recourse financing agreements, we may decide to make payments to prevent such PPA Entities' creditors from foreclosing on the relevant collateral, as such a foreclosure would result in our losing our ownership interest in the PPA Entity or in some or all of its assets, or a material part of our assets, as the case may be. To satisfy these obligations, we may be required to use amounts distributed by our other PPA Entities as well as other sources of available cash, thereby reducing the cash available to develop our projects and to our operations. The loss of a material part of our assets or our ownership interest in one or more of our PPA Entities or some or all of their assets, or any use of our resources to support our obligations or the obligations of our PPA Entities, could have a material adverse effect on our business, our financial condition, and our results of operations.

As of June 30, 2019, we and our subsidiaries had approximately $668.2 million of total consolidated indebtedness, including $26.2 million in short-term debt and $642.0 million in long-term debt. In addition, our 10% Notes contain restrictions on our ability to issue additional debt and both the 6% Notes and 10% Notes limit our ability to provide collateral for any additional debt. Given our current level of indebtedness, the restrictions on additional indebtedness contained in the 10% Notes and the fact that most of our assets serve as collateral to secure existing debt, it may be difficult for us to secure additional debt financing at an attractive cost, which may in turn impact our ability to expand our operations and our product development activities and to remain competitive in the market.

In addition, our substantial level of indebtedness could limit our ability to obtain required additional financing on acceptable terms or at all for working capital, capital expenditures, and general corporate purposes. Any of these risks could impact our ability to fund our operations or limit our ability to expand our business, which could have a material adverse effect on our business, our financial condition, our liquidity, and our results of operations. Our liquidity needs could vary significantly and may be affected by general economic conditions, industry trends, performance, and many other factors not within our control.

We may not be able to generate sufficient cash to meet our debt service obligations.

Our ability to generate sufficient cash to make scheduled payments on our debt obligations will depend on our future financial performance, which will be affected by a range of economic, competitive, and business factors, many of which are outside of our control.

In addition, we conduct a significant volume of our operations through, and receive equity allocations from, our PPA Entities, which contribute to our cash flow. These PPA Entities are separate and distinct legal entities, do not guarantee our debt obligations, and will have no obligation, contingent or otherwise, to pay amounts due under our debt obligations or to make any funds available to pay those amounts, whether by dividend, distribution, loan, or other payments. Distributions by the PPA Entities to us are precluded under these arrangements if there is an event of default or if financial covenants, such as maintenance of applicable debt service coverage ratios, are not met even if there is not otherwise an event of default. Furthermore, under the terms of our equity financing arrangements for PPA Company IIIa and PPA Company IIIb, substantially all of the cash flows generated from these PPA Entities in excess of debt service obligations are distributed to Equity Investors until the investors achieve a targeted internal rate of return or until a fixed date in the future ("Flip Date"), which is expected to be after a period of five or more years, after which time we will receive substantially all of the remaining income (loss), tax, and tax allocation attributable to the long-term customer payments and other incentives. In the case of PPA Company IV and PPA Company V, Equity Investors receive 90% of all cash flows generated in excess of its debt service obligations and other expenses for the duration of the applicable PPA Entity without any Flip Date or other time- or return-based adjustment. Moreover, even after the occurrence of the Flip Date for the PPA Entities, we do not anticipate distributions to be material enough independently to support our ongoing cash needs, and, therefore, we will still need to generate significant cash from our product sales. It is possible that the PPA Entities may not contribute significant cash to us even if we are in compliance with the financial covenants under the project debt incurred by the PPA Entities.

Future borrowings by our PPA Entities may contain restrictions or prohibitions on the payment of dividends to us. The ability of our PPA Entities to make such payments to us may be subject to applicable laws including surplus, solvency, and other limits imposed on the ability of companies to pay dividends.

If we do not generate sufficient cash to satisfy our debt obligations, including interest payments, or if we are unable to satisfy the requirement for the payment of principal at maturity or other payments that may be required from time to time under the terms of our debt instruments, we may have to undertake alternative financing plans such as refinancing or restructuring our debt, selling assets, reducing or delaying capital investments, or seeking to raise additional capital. We cannot provide assurance that any refinancing would be possible, that any assets could be sold, or, if sold, of the timing of the sales and the amount of proceeds realized from those sales, that additional financing could be obtained on acceptable terms, if at all, or that additional financing would be permitted under the terms of our various debt instruments then in effect. Furthermore, the ability to refinance indebtedness would depend upon the condition of the finance and credit markets at the time which have in the past been, and may in the future be, volatile. Our inability to generate sufficient cash to satisfy our debt obligations or to refinance our obligations on commercially reasonable terms or on a timely basis would have an adverse effect on our business, our results of operations and our financial condition.

Under some circumstances, we may be required to or elect to make additional payments to our PPA Entities or the Power Purchase Agreement Program Equity Investors.

Our six PPA Entities are structured in a manner such that other than the amount of any equity investment we have made, we do not have any further primary liability for the debts or other obligations of the PPA Entities. However, we are required to guarantee the obligations of our wholly-owned subsidiary which invests alongside other investors in the PPA Entities. These obligations typically include the capital contribution obligations of such subsidiary to the PPA Entity as well as the representations and warranties made by and indemnification obligations of such subsidiary to Equity Investors in the applicable PPA Entity. As a result, we may be obligated to make payments on behalf of our wholly-owned subsidiary to Equity Investors in the PPA Entities in the event of a breach of these representations, warranties or covenants.

All of our PPA Entities that operate Energy Servers for end customers have significant restrictions on their ability to incur increased operating costs, or could face events of default under debt or other investment agreements if end customers are not able to meet their payment obligations under PPAs or if Energy Servers are not deployed in accordance with the project’s schedule. If our PPA Entities experience unexpected, increased costs such as insurance costs, interest expense or taxes or as a result of the acceleration of repayment of outstanding indebtedness, or if end customers are unable or unwilling to continue to purchase power under their PPAs, there could be insufficient cash generated from the project to meet the debt service obligations of the PPA Entity or to meet any targeted rates of return of Equity Investors. If a PPA Entity fails to make required debt service payments, this could constitute an event of default and entitle the lender to foreclose on the collateral securing the debt or could trigger other payment obligations of the PPA Entity. To avoid this, we could choose to contribute additional

capital to the applicable PPA Entity to enable such PPA Entity to make payments to avoid an event of default, which could adversely affect our business or our financial condition. Under PPA Company IV's note purchase agreement, PPA Company IV is obligated to offer to repay all outstanding debt in the event that at any time we fail to own (directly or indirectly) at least 50.1% of the equity interest of PPA Company IV not owned by the Equity Investor(s). Upon receipt of such offer, the lenders may waive that obligation or elect to require PPA Company IV to prepay all remaining amounts owed under PPA Company IV's project debt. The obligations under PPA Company IV have not been triggered as of June 30, 2019.

Risks Relating to Our Operations

We may have conflicts of interest with our PPA Entities.

In each of our PPA Entities, we act as the managing member and are responsible for the day-to-day administration of the project. However, we are also a major service provider for each PPA Entity in its capacity as the operator of the Energy Servers under an operations and maintenance agreement. Because we are both the administrator and the manager of our PPA Entities, as well as a major service provider, we face a potential conflict of interest in that we may be obligated to enforce contractual rights that a PPA Entity has against us in our capacity as a service provider. By way of example, the PPA Entity may have a right to payment from us under a warranty provided under the applicable operations and maintenance agreement, and we may be financially motivated to avoid or delay this liability by failing to promptly enforce this right on behalf of the PPA Entity. While we do not believe that we had any conflicts of interest with our PPA Entities as of June 30, 2019, conflicts of interest may arise in the future which cannot be foreseen at this time. In the event that prospective future Equity Investors and debt financing partners perceive there to exist any such conflicts, it could harm our ability to procure financing for our PPA Entities in the future, which could have a material adverse effect on our business.

If we are unable to attract and retain key employees and hire qualified management, technical, engineering, and sales personnel, our ability to compete and successfully grow our business could be harmed.

We believe that our success and our ability to reach our strategic objectives are highly dependent on the contributions of our key management, technical, engineering, and sales personnel. The loss of the services of any of our key employees could disrupt our operations, delay the development and introduction of our products and services and negatively impact our business, prospects, and operating results. In particular, we are highly dependent on the services of Dr. Sridhar, our Chairman and President and Chief Executive Officer, and other key employees. None of our key employees is bound by an employment agreement for any specific term. We cannot assure you that we will be able to successfully attract and retain senior leadership necessary to grow our business. Furthermore, there is increasing competition for talented individuals in our field, and competition for qualified personnel is especially intense in the San Francisco Bay Area where our principal offices are located. Our failure to attract and retain our executive officers and other key management, technical, engineering, and sales personnel could adversely impact our business, our prospects, our financial condition, and our operating results. In addition, we do not have "key person" life insurance policies covering any of our officers or other key employees.

A breach or failure of our networks or computer or data management systems could damage our operations and our reputation.

Our business is dependent on the security and efficacy of our networks and computer and data management systems. For example, all of our Energy Servers are connected to and controlled and monitored by our centralized remote monitoring service, and we rely on our internal computer networks for many of the systems we use to operate our business generally. Although we take protective measures and endeavor to modify them as circumstances warrant, the security of our infrastructure, including the network that connects our Energy Servers to our remote monitoring service, may be vulnerable to breaches, unauthorized access, misuse, computer viruses, or other malicious code and cyber-attacks that could have a material adverse impact on our business and our Energy Servers in the field. A breach or failure of our networks or computer or data management systems due to intentional actions such as cyber-attacks, negligence, or other reasons could seriously disrupt our operations or could affect our ability to control or to assess the performance in the field of our Energy Servers and could result in disruption to our business and potentially legal liability. In addition, if certain of our IT systems failed, our production line might be affected, which could impact our business and operating results. These events, in addition to impacting our financial results, could result in significant costs or reputational consequences.

Our headquarters and other facilities are located in an active earthquake zone, and an earthquake or other types of natural disasters or resource shortages could disrupt and harm our results of operations.

We conduct a majority of our operations in the San Francisco Bay area in an active earthquake zone, and certain of our facilities are located within known flood plains. The occurrence of a natural disaster such as an earthquake, drought, flood, localized extended outages of critical utilities or transportation systems, or any critical resource shortages could cause a

significant interruption in our business, damage or destroy our facilities, our manufacturing equipment, or our inventory, and cause us to incur significant costs, any of which could harm our business, our financial condition, and our results of operations. The insurance we maintain against fires, earthquakes and other natural disasters may not be adequate to cover our losses in any particular case.

Expanding operations internationally could expose us to additional risks.

Although we currently primarily operate in the United States, we will seek to expand our business internationally. We currently have operations in Japan, China, India, and the Republic of Korea, collectively our Asia Pacific region. Managing any international expansion will require additional resources and controls including additional manufacturing and assembly facilities. Any expansion internationally could subject our business to risks associated with international operations, including:

- conformity with applicable business customs, including translation into foreign languages and associated expenses;
- lack of availability of government incentives and subsidies;
- challenges in arranging, and availability of, financing for our customers;
- potential changes to our established business model;
- cost of alternative power sources, which could be meaningfully lower outside the United States;
- availability and cost of natural gas;
- difficulties in staffing and managing foreign operations in an environment of diverse culture, laws, and customers, and the increased travel, infrastructure, and legal and compliance costs associated with international operations;
- installation challenges which we have not encountered before which may require the development of a unique model for each country;
- compliance with multiple, potentially conflicting and changing governmental laws, regulations, and permitting processes including environmental, banking, employment, tax, privacy, and data protection laws and regulations such as the EU Data Privacy Directive;
- compliance with U.S. and foreign anti-bribery laws including the Foreign Corrupt Practices Act and the U.K. Anti-Bribery Act;
- difficulties in collecting payments in foreign currencies and associated foreign currency exposure;
- restrictions on repatriation of earnings;
- compliance with potentially conflicting and changing laws of taxing jurisdictions where we conduct business and compliance with applicable U.S. tax laws as they relate to international operations, the complexity and adverse consequences of such tax laws, and potentially adverse tax consequences due to changes in such tax laws; and
- regional economic and political conditions.

As a result of these risks, any potential future international expansion efforts that we may undertake may not be successful.

We are an "emerging growth company," and we cannot be certain if the reduced disclosure requirements applicable to emerging growth companies will make our Class A common stock less attractive to investors and may make it more difficult to compare our performance with other public companies.

We are an emerging growth company ("EGC") as defined in the U.S. legislation Jumpstart Our Business Startups Act of 2012 (the "JOBS Act"), and we intend to take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not EGC, including not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. We may take advantage of these exemptions for so long as we are an EGC, which could be until December 31, 2023, the last day of the fiscal year following the fifth anniversary of our IPO. We cannot predict if investors will find our Class A common stock less attractive because we rely on these exemptions. If some investors find our Class A common stock less attractive as a result, there may be a less active trading market for our Class A common stock, and our stock price may be more volatile.

An EGC may elect to provide financial statements in conformance with the U.S. GAAP requirement for transition periods to comply with new or revised accounting standards. With our not making this election, Section 102(b)(2) of the JOBS

Act allows us to delay our adoption of new or revised accounting standards until those standards apply to private companies. As a result, our financial statements may not be comparable to companies that comply with public company revised accounting standards effective dates.

Risks Relating to Ownership of Our Common Stock

The stock price of our Class A common stock has been and may continue to be volatile.

The market price of our Class A common stock has been and may continue to be volatile. In addition to factors discussed in this Quarterly Report on Form 10-Q, the market price of our Class A common stock may fluctuate significantly in response to numerous factors, many of which are beyond our control, including:

- overall performance of the equity markets;
- actual or anticipated fluctuations in our revenue and other operating results;
- changes in the financial projections we may provide to the public or our failure to meet these projections;
- failure of securities analysts to initiate or maintain coverage of us, changes in financial estimates by any securities analysts who follow our company or our failure to meet these estimates or the expectations of investors;
- recruitment or departure of key personnel;
- the economy as a whole and market conditions in our industry;
- new laws, regulations, subsidies, or credits or new interpretations of them applicable to our business;
- negative publicity related to problems in our manufacturing or the real or perceived quality of our products;
- rumors and market speculation involving us or other companies in our industry;
- announcements by us or our competitors of significant technical innovations, acquisitions, strategic partnerships, or capital commitments;
- lawsuits threatened or filed against us;
- other events or factors including those resulting from war, incidents of terrorism or responses to these events;
- the expiration of contractual lock-up or market standoff agreements; and
- sales or anticipated sales of shares of our Class A common stock by us or our stockholders.

In addition, the stock markets have experienced extreme price and volume fluctuations that have affected and continue to affect the market prices of equity securities of many companies. Stock prices of many companies have fluctuated in a manner unrelated or disproportionate to the operating performance of those companies. In the past, stockholders have instituted securities class action litigation following periods of market volatility. If we were to become involved in securities litigation, it could subject us to substantial costs, divert resources and the attention of management from our business, and adversely affect our business.

Sales of substantial amounts of our Class A common stock in the public markets, or the perception that they might occur, could cause the market price of our Class A common stock to decline.

The market price of our Class A common stock could decline as a result of sales of a large number of shares of our Class A common stock in the public market as and when our Class B common stock converts to Class A common stock. The perception that these sales might occur may also cause the market price of our common stock to decline. We had a total of 59,407,578 shares of our Class A common stock and 53,806,485 shares of our Class B common stock outstanding as of June 30, 2019. The lock up for our Class B shares expired on January 21, 2019 and these shares are now freely tradeable once converted into Class A shares, except for any shares purchased by our “affiliates” as defined in Rule 144 under the Securities Act of 1933, as amended ("Securities Act").

Further, as of June 30, 2019, we had an aggregate of $296.2 million in convertible debt under which the outstanding principal and interest may be converted, at the option of the holders, into an aggregate of 26.3 million shares of Class B common stock. Upon conversion into Class A common stock, these shares are freely tradeable, except to the extent these shares are held by our “affiliates” as defined in Rule 144 under the Securities Act.

In addition, as of June 30, 2019, we had options and RSUs outstanding that, if fully exercised or settled, would result in the issuance of 22,636,373 shares of Class B common stock. We have filed a registration statement on Form S-8 to register shares reserved for future issuance under our equity compensation plans. Subject to the satisfaction of applicable vesting requirements the shares issued upon exercise of outstanding stock options or settlement of outstanding RSUs will be available for immediate resale in the United States in the open market.

Moreover, certain holders of our common stock have rights, subject to some conditions, to require us to file registration statements for the public resale of such shares or to include such shares in registration statements that we may file for us or other stockholders.

The dual class structure of our common stock and the voting agreements among certain stockholders have the effect of concentrating voting control of our Company with KR Sridhar, our Chairman and Chief Executive Officer, and also with those stockholders who held our capital stock prior to the completion of our IPO including our directors, executive officers and significant stockholders, which limits or precludes your ability to influence corporate matters including the election of directors and the approval of any change of control transaction, and may adversely affect the trading price of our Class A common stock.

Our Class B common stock has ten votes per share, and our Class A common stock has one vote per share. As of June 30, 2019 and after giving effect to the voting agreements between KR Sridhar, our Chairman and Chief Executive Officer, and certain holders of Class B common stock, our directors, executive officers, significant stockholders of our common stock, and their respective affiliates collectively held a substantial majority of the voting power of our capital stock. Because of the ten-to-one voting ratio between our Class B and Class A common stock, the holders of our Class B common stock collectively will continue to control a majority of the combined voting power of our common stock and therefore are able to control all matters submitted to our stockholders for approval until the earliest to occur of (i) immediately prior to the close of business on July 27, 2023, (ii) immediately prior to the close of business on the date on which the outstanding shares of Class B common stock represent less than five percent (5%) of the aggregate number of shares of Class A common stock and Class B common stock then outstanding, (iii) the date and time or the occurrence of an event specified in a written conversion election delivered by KR Sridhar to our Secretary or Chairman of the Board to so convert all shares of Class B common stock, or (iv) immediately following the date of the death of KR Sridhar. This concentrated control limits or precludes Class A stockholders' ability to influence corporate matters while the dual class structure remains in effect, including the election of directors, amendments of our organizational documents, and any merger, consolidation, sale of all or substantially all of our assets, or other major corporate transaction requiring stockholder approval. In addition, this may prevent or discourage unsolicited acquisition proposals or offers for our capital stock that Class A stockholders may feel are in their best interest as one of our stockholders.

Future transfers by holders of Class B common stock will generally result in those shares converting to Class A common stock, subject to limited exceptions such as certain transfers effected for estate planning purposes. The conversion of Class B common stock to Class A common stock will have the effect, over time, of increasing the relative voting power of those remaining holders of Class B common stock who retain their shares in the long-term.

The conversion of the 6% Convertible Promissory Note could result in a significant stockholder with substantial voting control.

The holders of the 6% Convertible Promissory Notes have the options to convert the outstanding principal and interest under the 6% Convertible Promissory Note to Class B common stock at conversion price of $11.25 at any time after the IPO and prior to maturity of the 6% Convertible Promissory Note in December 2020. As of June 30, 2019, an aggregate of 21,321,100 shares of Class B common stock is issuable to the Canada Pension Plan Investment Board ("CPPIB") upon the conversion of the outstanding principal and interest under the 6% Convertible Promissory Note. This, along with 312,575 shares of Class B common stock CPPIB which CPPIB acquired from the exercise of a warrant at IPO, would result in CPPIB having approximately 0.00% of the total voting power with respect to all shares of our Class A and Class B common stock, voting as a single class and would provide CPPIB significant influence over matters presented to the stockholders for approval and may result in voting decisions by CPPIB which are not in the best interests of our stockholders generally.

The dual class structure of our common stock may adversely affect the trading market for our Class A common stock.

S&P Dow Jones and FTSE Russell have recently announced changes to their eligibility criteria for inclusion of shares of public companies on certain indices, including the S&P 500, namely, to exclude companies with multiple classes of shares of common stock from being added to such indices. In addition, several shareholder advisory firms have announced their opposition to the use of multiple class structures. As a result, the dual class structure of our common stock may prevent the inclusion of our Class A common stock in such indices and may cause shareholder advisory firms to publish negative commentary about our corporate governance practices or otherwise seek to cause us to change our capital structure. Any such exclusion from indices could result in a less active trading market for our Class A common stock. Any actions or publications

by shareholder advisory firms critical of our corporate governance practices or capital structure could also adversely affect the value of our Class A common stock.

If securities or industry analysts do not publish research or publish inaccurate or unfavorable research about our business, the market price of our Class A common stock and trading volume could decline.

The market price for our Class A common stock depends in part on the research and reports that securities or industry analysts publish about us or our business. If industry analysts cease coverage of us, the trading price for our Class A common stock would be negatively affected. In addition, if one or more of the analysts who cover us downgrade our Class A common stock or publish inaccurate or unfavorable research about our business, our Class A common stock price would likely decline. If one or more of these analysts cease coverage of us or fail to publish reports on us regularly, demand for our Class A common stock could decrease, which might cause our Class A common stock price and trading volume to decline.

We do not intend to pay dividends for the foreseeable future.

We have never declared or paid any cash dividends on our capital stock and do not intend to pay any cash dividends in the foreseeable future. We anticipate that we will retain all of our future earnings for use in the development of our business and for general corporate purposes. Any determination to pay dividends in the future will be at the discretion of our board of directors. Accordingly, investors must rely on sales of their Class A common stock after price appreciation, which may never occur, as the only way to realize any future gains on their investments.

Provisions in our charter documents and under Delaware law could make an acquisition of our company more difficult, may limit attempts by our stockholders to replace or remove our current management, may limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers, or employees, and may limit the market price of our Class A common stock.

Provisions in our restated certificate of incorporation and amended and restated bylaws may have the effect of delaying or preventing a change of control or changes in our management. Our restated certificate of incorporation and amended and restated bylaws include provisions that:

- our board of directors will be classified into three classes of directors with staggered three year terms;
- permit the board of directors to establish the number of directors and fill any vacancies and newly created directorships;
- require super-majority voting to amend some provisions in our restated certificate of incorporation and amended and restated bylaws;
- authorize the issuance of "blank check" preferred stock that our board of directors could use to implement a stockholder rights plan;
- only the chairman of our board of directors, our chief executive officer, or a majority of our board of directors will be authorized to call a special meeting of stockholders;
- prohibit stockholder action by written consent, which thereby requires all stockholder actions be taken at a meeting of our stockholders;
- a dual class common stock structure in which holders of our Class B common stock may have the ability to control the outcome of matters requiring stockholder approval even if they own significantly less than a majority of the outstanding shares of our common stock, including the election of directors and significant corporate transactions such as a merger or other sale of our company or substantially all of its assets;
- the board of directors is expressly authorized to make, alter, or repeal our bylaws; and
- establish advance notice requirements for nominations for election to our board of directors or for proposing matters that can be acted upon by stockholders at annual stockholder meetings.

In addition, our restated certificate of incorporation and our amended and restated bylaws provide that the Court of Chancery of the State of Delaware will be the exclusive forum for: any derivative action or proceeding brought on our behalf; any action asserting a breach of fiduciary duty; any action asserting a claim against us arising pursuant to the Delaware General Corporation Law, our restated certificate of incorporation or our amended and restated bylaws; or any action asserting a claim against us that is governed by the internal affairs doctrine. Our restated certificate of incorporation and our amended and restated bylaws provide that unless we consent in writing to the selection of an alternative forum, the federal district courts of the United States of America shall be the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act. These choice of forum provisions may limit a stockholder's ability to bring a claim in a judicial forum

that it finds favorable for disputes with us or any of our directors, officers, or other employees, which thereby may discourage lawsuits with respect to such claims. Alternatively, if a court were to find the choice of forum provision contained in our restated certificate of incorporation and our amended and restated bylaws to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could harm our business, our operating results, and our financial condition.

On December 19, 2018, the Delaware Chancery Court issued an opinion that invalidated provisions in a Delaware corporation's certificate of incorporation or bylaws that purport to limit to federal court the forum in which a stockholder could bring a claim under the Securities Act, which creates some uncertainty about the enforceability of exclusive forum provisions generally. If a court were to find the choice of forum provision contained in our amended and restated certificate of incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could harm our business and financial condition.

Moreover, Section 203 of the Delaware General Corporation Law may discourage, delay, or prevent a change in control of our company. Section 203 imposes certain restrictions on mergers, business combinations, and other transactions between us and holders of 15% or more of our common stock.

ITEM 2 - UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

None.

ITEM 3 - DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4 - MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5 - OTHER INFORMATION

On August 8, 2019, the Company's Board of Directors approved an amendment and restatement of the Company's Bylaws to affect the following changes:

- Provides that the Chairman of the Board or a person designated by the Board shall chair meetings of stockholders; provides additional information regarding procedures for meeting (Section 1.6)
- Clarifies the definition of irrevocable proxy (Section 1.7)
- Clarifies fixing of record date (Section 1.8)
- Provides list of documents required to be submitted by a stockholder who nominates an individual for election as a director (Section 1.11.1(b)(x))
- Changes notification deadlines for shareholder proxy matters to conform to Delaware law (Section 1.11.1(b)(iv)
- Removed paragraph requiring all securities class actions be brought in federal court (Section 11)
- Other nonmaterial, clarifying amendments.

A copy of the Amended and Restated Bylaws is filed herewith as Exhibit 3.2.

ITEM 6 - EXHIBITS

Index to Exhibits

The exhibits listed below are filed or incorporated by reference as part of this Quarterly Report on Form 10-Q.

			Incorporated by Reference			
Exhibit Number		**Description**	**Form**	**File No.**	**Exhibit**	**Filing Date**
3.1		Restated Certificate of Incorporation.	10-Q	001-38598	3.1	9/7/2018
3.2	*	Amended and Restated Bylaws, effective August 8, 2019				
10.1	*	Equity Capital Contribution Agreement between the Company, SP Diamond State Class B Holdings, LLC, Diamond State Generation Partners, LLC, and Diamond State Generation Holdings, LLC, dated June 14, 2019 †				
10.2	*	Third Amended and Restated Limited Liability Company Agreement of Diamond State Generation Partners LLC dated June 14, 2019†				
10.3	*	Fuel Cell System Supply and Installation Agreement between the Company and Diamond State Generation Partners LLC, dated June 14, 2019 †				
10.4	*	Amended and Restated Master Operations and Maintenance Agreement between the Company and Diamond State Generation Partners LLC, dated June 14, 2019 †				
10.5	*	Repurchase Agreement between the Company and Diamond State Generation Partners LLC, dated June 14, 2019 †				
10.6	*	Third Amended and Restated Limited Liability Company Agreement of Diamond State Generation Holdings, LLC dated June 14, 2019 †				
10.7	*	Annex 1 (Definitions) to Equity Capital Contribution Agreement (Ex 10.1) and Limited Liability Agreements (Exs. 10.2 and 10.6) †				
10.8	*	Purchase, Use and Maintenance Agreement between the Company and 2018 ESA Project Company, LLC dated June 28, 2019 †				
10.9	*	Annexes to Purchase, Use and Maintenance Agreement between the Company and 2018 ESA Project Company, LLC dated June 28, 2019 †				
31.1	*	Certification of Chief Executive Officer pursuant to Rule 13a-14(a) and 15d-14(a) of the Securities and Exchange Act of 1934, as amended, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002				

31.2	*	Certification of Chief Financial Officer pursuant to Rule 13a-14(a) and 15d-14(a) of the Securities and Exchange Act of 1934, as amended, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002				
32.1	**	Certification of the Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002				
101.INS	*	XBRL Instance Document				
101.SCH	*	XBRL Taxonomy Extension Schema Document				
101.CAL	*	XBRL Taxonomy Extension Calculation Linkbase Document				
101.DEF	*	XBRL Taxonomy Extension Definition Linkbase Document				
101.LAB	*	XBRL Taxonomy Extension Label Linkbase Document				
101.PRE	*	XBRL Taxonomy Extension Presentation Linkbase Document				

^ Executive Compensation Plans and Arrangements.

* Filed herewith.

** The certifications furnished in Exhibit 32.1 hereto are deemed to accompany this Quarterly Report on Form 10-Q and will not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liability of that section, nor shall it be deemed incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended.

† Portions of this exhibit are redacted as permitted under Regulation S-K, Rule 601.

Signatures

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

BLOOM ENERGY CORPORATION

Date: August 13, 2019

By: /s/ KR Sridhar

KR Sridhar
Founder, President, Chief Executive Officer and Director
(Principal Executive Officer)

Date: August 13, 2019

By: /s/ Randy Furr

Randy Furr
Executive Vice President and
Chief Financial Officer
(Principal Financial and Accounting Officer)

BLOOM ENERGY CORPORATION

(a Delaware corporation)

AMENDED AND RESTATED BYLAWS

As effective August 8, 2019

BLOOM ENERGY CORPORATION

(a Delaware corporation)

AMENDED AND RESTATED BYLAWS

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BLOOM ENERGY CORPORATION

(a Delaware corporation)

AMENDED AND RESTATED BYLAWS

As Effective August 8, 2019

ARTICLE I: STOCKHOLDERS

Section 1.1: Annual Meetings. An annual meeting of stockholders shall be held for the election of directors at such date and time as the Board of Directors (the "***Board***") of Bloom Energy Corporation (the "***Corporation***") shall each year fix. The meeting may be held either at a place, within or without the State of Delaware as permitted by the Delaware General Corporation Law (the "***DGCL***"), or by means of remote communication as the Board in its sole discretion may determine. Any proper business may be transacted at the annual meeting.

Section 1.2: Special Meetings. Special meetings of stockholders for any purpose or purposes shall be called in the manner set forth in the Restated Certificate of Incorporation of the Corporation (as the same may be amended or restated from time to time, the "***Certificate of Incorporation***"). A special meeting may be held either at a place, within or without the State of Delaware, or by means of remote communication as the Board in its sole discretion may determine. Business transacted at special meetings of stockholders shall be limited to the purpose or purposes stated in the notice of meeting.

Section 1.3: Notice of Meetings. Notice of all meetings of stockholders shall be given in writing or by electronic transmission in the manner provided by applicable law (including, without limitation, as set forth in Section 7.1.1 of these Bylaws) stating the date, time and place, if any, of the meeting, the means of remote communication, if any, by which stockholders and proxy holders may be deemed to be present in person and vote at such meeting, and the record date for determining the stockholders entitled to vote at the meeting. In the case of a special meeting, such notice shall also set forth the purpose or purposes for which the meeting is called. Unless otherwise required by applicable law or the Certificate of Incorporation, notice of any meeting of stockholders shall be given not less than ten (10), nor more than sixty (60), days before the date of the meeting to each stockholder of record entitled to vote at such meeting.

Section 1.4: Adjournments. The chairperson of the meeting shall have the power to adjourn the meeting to another time, date and place (if any), whether or not a quorum is present. Any meeting of stockholders, annual or special, may be adjourned from time to time, and notice need not be given of any such adjourned meeting if the time, date and place (if any) thereof and the means of remote communication (if any) by which stockholders and proxy holders may be deemed to be present in person and vote at such adjourned meeting are announced at the meeting at which the adjournment is taken; *provided*, *however*, that if the adjournment is for more than thirty (30) days or after the adjournment a new record date is fixed for the adjourned meeting, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting. At the adjourned meeting, the Corporation may transact any business that might have been transacted

at the original meeting. To the fullest extent permitted by law, the Board may postpone, reschedule or cancel any previously scheduled special or annual meeting of stockholders before it is to be held, regardless of whether any notice or public disclosure with respect to any such meeting has been sent or made pursuant to Section 1.3 hereof or otherwise, in which case notice shall be provided to the stockholders of the new date, time and place, if any, of the meeting as provided in Section 1.3 above.

Section 1.5: Quorum. Except as otherwise provided by applicable law, the Certificate of Incorporation or these Bylaws, at each meeting of stockholders the holders of a majority of the voting power of the shares of stock issued and outstanding and entitled to vote at the meeting, present in person or represented by proxy, shall constitute a quorum for the transaction of business; *provided*, *however*, that where a separate vote by a class or classes or series of stock is required by applicable law or the Certificate of Incorporation, the holders of a majority of the voting power of the shares of such class or classes or series of the stock issued and outstanding and entitled to vote on such matter, present in person or represented by proxy at the meeting, shall constitute a quorum entitled to take action with respect to the vote on such matter. If a quorum shall fail to attend any meeting, the chairperson of the meeting or, if directed to be voted on by the chairperson of the meeting, the holders of a majority of the voting power of the shares entitled to vote who are present in person or represented by proxy at the meeting, may adjourn the meeting, without notice other than announcement at the meeting. Shares of the Corporation's stock belonging on the record date for the meeting to the Corporation (or to another corporation, if a majority of the shares entitled to vote in the election of directors of such other corporation are held, directly or indirectly, by the Corporation), shall neither be entitled to vote nor be counted for quorum purposes; *provided*, *however*, that the foregoing shall not limit the right of the Corporation or any other corporation to vote any shares of the Corporation's stock held by it in a fiduciary capacity and to count such shares for purposes of determining a quorum. A quorum, once established at a meeting, shall not be broken by the withdrawal of enough votes to leave less than a quorum.

Section 1.6: Organization. Meetings of stockholders shall be presided over by the Chairperson of the Board or such person as the Board may designate. Such person shall be chairperson of the meeting and, subject to Section 1.10 of these Bylaws, shall determine the order of business and prescribe such rules, regulations and procedures at the meeting and do all such acts and things as are necessary and desirable for the proper conduct of the meeting, including without limitation, the establishment of procedures for the maintenance of order and safety, limitations on the time allotted to questions or comments on the affairs of the Corporation, restrictions on entry to such meeting after the time prescribed for the commencement thereof and regulation of the opening and closing of polls and the manner of voting. The Secretary of the Corporation shall act as secretary of the meeting, but in such person's absence the chairperson of the meeting may appoint any person to act as secretary of the meeting.

Section 1.7: Voting; Proxies. Each stockholder of record entitled to vote at a meeting of stockholders may authorize another person or persons to act for such stockholder by proxy. Such a proxy may be prepared, transmitted and delivered in any manner permitted by applicable law. A duly executed proxy shall be irrevocable if it states that it is irrevocable and if and only as long as it is coupled with an interest sufficient in law to support an irrevocable power. A stockholder may revoke any proxy which is not irrevocable by attending the meeting and voting in person or by filing

an instrument in writing revoking the proxy or another duly executed proxy bearing a later date with the Secretary of the Corporation. Except as may be required in the Certificate of Incorporation, directors shall be elected by a plurality of the votes of the shares present in person or represented by proxy at the meeting and entitled to vote on the election of directors. Unless otherwise provided by applicable law, rule or regulation applicable to the Corporation or its securities, the rules or regulations of any stock exchange applicable to the Corporation, the Certificate of Incorporation or these Bylaws, every matter other than the election of directors shall be decided by the affirmative vote of the holders of a majority of the voting power of the shares of stock entitled to vote on such matter that are present in person or represented by proxy at the meeting and are voted for or against the matter (or if there are two or more classes or series of stock entitled to vote as separate classes, then in the case of each class or series, the holders of a majority of the voting power of the shares of stock of that class or series present in person or represented by proxy at the meeting voting for or against such matter).

Section 1.8: Fixing Date for Determination of Stockholders of Record. In order that the Corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, the Board may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board, and which record date shall, unless otherwise required by law, not be more than sixty (60) nor less than ten (10) days before the date of such meeting. If the Board so fixes a date, such date shall also be the record date for determining the stockholders entitled to vote at such meeting unless the Board determines, at the time it fixes the record date, that a later date on or before the date of the meeting shall be the date for making such determination. If no record date is fixed by the Board, the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day on which notice is given, or, if notice is waived, at the close of business on the day next preceding the day on which the meeting is held. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; *provided*, *however*, that the Board may fix a new record date for determination of stockholders entitled to notice of or to vote at the adjourned meeting, and in such case shall fix the same date or an earlier date as the record date for the stockholders entitled to notice of such adjourned meeting.

In order that the Corporation may determine the stockholders entitled to receive payment of any dividend or other distribution or allotment of any rights, or entitled to exercise any rights in respect of any change, conversion or exchange of stock or for the purpose of any other lawful action, the Board may fix, in advance, a record date, which shall not precede the date upon which the resolution fixing the record date is adopted by the Board and which shall not be more than sixty (60) days prior to such action. If no such record date is fixed by the Board, then the record date for determining stockholders for any such purpose shall be at the close of business on the day on which the Board adopts the resolution relating thereto.

Section 1.9: List of Stockholders Entitled to Vote. The Secretary shall prepare, at least ten (10) days before every meeting of stockholders, a complete list of stockholders entitled to vote at the meeting (*provided*, *however*, if the record date for determining the stockholders entitled to vote is less than ten (10) days before the date of the meeting, the list shall reflect the stockholders entitled to vote as of the tenth (10th) day before the meeting date), arranged in alphabetical order

and showing the address of each stockholder and the number of shares registered in the name of each stockholder. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting, for a period of at least ten (10) days prior to the meeting, (a) on a reasonably accessible electronic network as permitted by applicable law (*provided* that the meeting is held solely by means of remote communication and the information required to gain access to the list is provided with the notice of the meeting), or (b) during ordinary business hours, at the principal place of business of the Corporation. If the meeting is held at a location where stockholders may attend in person, the list shall also be produced and kept at the time and place of the meeting during the whole time thereof and may be inspected by any stockholder who is present at the meeting. If the meeting is held solely by means of remote communication, then the list shall be open to the examination of any stockholder during the whole time of the meeting on a reasonably accessible electronic network, and the information required to access the list shall be provided with the notice of the meeting. Except as otherwise provided by law, the list shall presumptively determine the identity of the stockholders entitled to vote at the meeting and the number of shares held by each of them.

Section 1.10: Inspectors of Elections.

1.10.1 Applicability. Unless otherwise required by the Certificate of Incorporation or by the DGCL, the following provisions of this Section 1.10 shall apply only if and when the Corporation has a class of voting stock that is: (a) listed on a national securities exchange; (b) authorized for quotation on an interdealer quotation system of a registered national securities association; or (c) held of record by more than two thousand (2,000) stockholders. In all other cases, observance of the provisions of this Section 1.10 shall be optional, and at the discretion of the Board.

1.10.2 Appointment. The Corporation shall, in advance of any meeting of stockholders, appoint one or more inspectors of election to act at the meeting and make a written report thereof. The Corporation may designate one or more persons as alternate inspectors to replace any inspector who fails to act. If no inspector or alternate is able to act at a meeting of stockholders, the person presiding at the meeting shall appoint one or more inspectors to act at the meeting.

1.10.3 Inspector's Oath. Each inspector of election, before entering upon the discharge of his duties, shall take and sign an oath faithfully to execute the duties of inspector with strict impartiality and according to the best of such inspector's ability.

1.10.4 Duties of Inspectors. At a meeting of stockholders, the inspectors of election shall (a) ascertain the number of shares outstanding and the voting power of each share, (b) determine the shares represented at a meeting and the validity of proxies and ballots, (c) count all votes and ballots, (d) determine and retain for a reasonable period of time a record of the disposition of any challenges made to any determination by the inspectors, and (e) certify their determination of the number of shares represented at the meeting, and their count of all votes and ballots. The inspectors may appoint or retain other persons or entities to assist the inspectors in the performance of the duties of the inspectors.

1.10.5 Opening and Closing of Polls. The date and time of the opening and the closing of the polls for each matter upon which the stockholders will vote at a meeting shall be announced by

the chairperson of the meeting at the meeting. No ballot, proxies or votes, nor any revocations thereof or changes thereto, shall be accepted by the inspectors after the closing of the polls.

1.10.6 Determinations. In determining the validity and counting of proxies and ballots, the inspectors shall be limited to an examination of the proxies, any envelopes submitted with those proxies, any information provided in connection with proxies pursuant to the DGCL, ballots and the regular books and records of the Corporation, except that the inspectors may consider other reliable information for the limited purpose of reconciling proxies and ballots submitted by or on behalf of banks, brokers, their nominees or similar persons which represent more votes than the holder of a proxy is authorized by the record owner to cast or more votes than the stockholder holds of record. If the inspectors consider other reliable information for the limited purpose permitted herein, the inspectors at the time they make their certification of their determinations pursuant to this Section 1.10 shall specify the precise information considered by them, including the person or persons from whom they obtained the information, when the information was obtained, the means by which the information was obtained and the basis for the inspectors' belief that such information is accurate and reliable.

Section 1.11: Notice of Stockholder Business; Nominations.

1.11.1 Annual Meeting of Stockholders.

(a) Nominations of persons for election to the Board and the proposal of other business to be considered by the stockholders may be made at an annual meeting of stockholders only: (i) pursuant to the Corporation's notice of such meeting (or any supplement thereto), (ii) by or at the direction of the Board or any committee of the Board authorized by the Board to take such action or (iii) by any stockholder of the Corporation who was a stockholder of record at the time of giving of the notice provided for in this Section 1.11 (the "***Record Stockholder***") at the time of the annual meeting, who is entitled to vote at such meeting and who complies with the notice and other procedures set forth in this Section 1.11 in all applicable respects. For the avoidance of doubt, the foregoing clause (iii) shall be the exclusive means for a stockholder to make nominations or propose business (other than business included in the Corporation's proxy materials pursuant to Rule 14a-8 under the Securities Exchange Act of 1934, as amended (such act, and the rules and regulations promulgated thereunder, the "***Exchange Act***")), at an annual meeting of stockholders, and such stockholder must fully comply with the notice and other procedures set forth in this Section 1.11 to make such nominations or propose business before an annual meeting.

(b) For nominations or other business to be properly brought before an annual meeting by a Record Stockholder pursuant to Section 1.11.1(a) of these Bylaws:

(i) the Record Stockholder must have given timely notice thereof in writing to the Secretary of the Corporation and provide any updates or supplements to such notice at the times and in the forms required by this Section 1.11;

(ii) such other business (other than the nomination of persons for election to the Board) must otherwise be a proper matter for stockholder action;

(iii) if the Proposing Person (as defined below) has provided the Corporation with a Solicitation Notice (as defined below), such Proposing Person must, in the case of a proposal other than the nomination of persons for election to the Board, have delivered a proxy statement and form of proxy to holders of at least the percentage of the Corporation's voting shares required under applicable law to carry any such proposal, or, in the case of a nomination or nominations, have delivered a proxy statement and form of proxy to holders of a percentage of the Corporation's voting shares reasonably believed by such Proposing Person to be sufficient to elect the nominee or nominees proposed to be nominated by such Record Stockholder, and must, in either case, have included in such materials the Solicitation Notice; and

(iv) if no Solicitation Notice relating thereto has been timely provided pursuant to this Section 1.11, the Proposing Person proposing such business or nomination must not have solicited a number of proxies sufficient to have required the delivery of such a Solicitation Notice under this Section 1.11.

To be timely, a Record Stockholder's notice must be delivered to, or mailed and received and received by, the Secretary at the principal executive offices of the Corporation, in a form that the Board determines acceptable, not later than the close of business on the 90th day nor earlier than the close of business on the 120th day prior to the first anniversary of the preceding year's annual meeting (except in the case of the Corporation's first annual meeting following its initial public offering, for which such notice shall be timely if delivered in the same time period as if such meeting were a special meeting governed by Section 1.11.2 of these Bylaws); *provided*, *however*, that in the event that the date of the annual meeting is more than thirty (30) days before or more than sixty (60) days after such anniversary date, notice by the Record Stockholder to be timely must be so delivered (A) no earlier than the close of business on the 120th day prior to such annual meeting and (B) no later than the close of business on the later of the 90th day prior to such annual meeting or the close of business on the tenth (10th) day following the day on which Public Announcement (as defined below) of the date of such meeting is first made by the Corporation. In no event shall an adjournment or postponement of an annual meeting for which notice has been given commence a new time period (or extend any time period) for providing the Record Stockholder's notice. Such Record Stockholder's notice shall set forth:

(x) as to each person whom the Record Stockholder proposes to nominate for election or reelection as a director:

(i) the name, age, business address and residence address of such person;

(ii) the principal occupation or employment of such nominee;

(iii) the class, series and number of any shares of stock of the Corporation that are directly or indirectly beneficially owned or owned of record by such person or any Associated Person (as defined in Section 1.11.3(c));

(iv) the date or dates such shares were acquired and the investment intent of such acquisition;

(v) all other information relating to such person that would be required to be disclosed in solicitations of proxies for election of directors, or would be otherwise required, in each case pursuant to and in accordance with Section 14(a) (or any successor provision) under the Exchange Act and the rules and regulations thereunder (including such person's written consent to being named in the proxy statement as a nominee, to the public disclosure of information regarding or related to such person provided to the Corporation by such person or otherwise pursuant to this Section 1.11 and to serving as a director if elected), with a representation of an intent to serve a full term as a director if so elected);

(vi) the Corporation's questionnaire for director nominees containing information regarding the background and qualifications of the nominee (in the form provided by the Secretary at the request of the Record Stockholder);

(vii) a written representation and agreement that the nominee has read and agrees, if elected, to comply with all of the Corporation's corporate governance, conflict of interest, confidentiality, and stock ownership and trading policies and guidelines, and any other policies and guidelines applicable to directors;

(viii) a written representation and agreement that the nominee is not and will not become a party to a voting agreement, arrangement or understanding with any party as to how such nominee will vote or act on any issue if elected as a director, except such as is already existing and has been fully disclosed to the Corporation prior to or concurrently with the submission of this nomination; and

(ix) whether such person meets the independence requirements of the stock exchange upon which the Corporation's Class A Common Stock is primarily traded, it being understood that the Corporation may require any such proposed nominee to furnish such other information as it may reasonably require to determine whether the nominee would be considered "independent" pursuant to application rules and regulations.

(y) as to any other business that the Record Stockholder proposes to bring before the meeting, a brief description of the business desired to be brought before the meeting, the text of the proposal or business (including the text of any resolutions proposed for consideration and in the event that such business includes a proposal to amend the Bylaws, the text of the proposed amendment), the reasons for conducting such business at the meeting and any material interest in such business of such Proposing Person (other than as a Stockholder), including any anticipated benefit to any Proposing Person therefrom; and

(z) as to the Proposing Person giving the notice:

(i) the current name and address of such Proposing Person, including, if applicable, their name and address as they appear on the Corporation's stock ledger, if different;

(ii) the class or series and number of shares of stock of the Corporation that are directly or indirectly owned of record or beneficially owned by such Proposing Person,

including any shares of any class or series of the Corporation as to which such Proposing Person has a right to acquire beneficial ownership at any time in the future;

(iii) whether and the extent to which any derivative interest in the Corporation's equity securities (including without limitation any option, warrant, convertible security, stock appreciation right, or similar right with an exercise or conversion privilege or a settlement payment or mechanism at a price related to any class or series of shares of the Corporation or with a value derived in whole or in part from the value of any class or series of shares of the Corporation, whether or not such instrument or right shall be subject to settlement in the underlying class or series of shares of the Corporation or otherwise, and any cash-settled equity swap, total return swap, synthetic equity position or similar derivative arrangement, as well as any rights to dividends on the shares of any class or series of shares of the Corporation that are separated or separable from the underlying shares of the Corporation) or any short interest in any security of the Corporation (for purposes of this Bylaw a person shall be deemed to have a short interest in a security if such person directly or indirectly, through any contract, arrangement, understanding, relationship or otherwise, has the opportunity to profit or share in any profit derived from any increase or decrease in the value of the subject security, including through performance-related fees) is held directly or indirectly by or for the benefit of such Proposing Person, including without limitation whether and the extent to which any ongoing hedging or other transaction or series of transactions has been entered into by or on behalf of, or any other agreement, arrangement or understanding (including without limitation any short position or any borrowing or lending of shares) has been made, the effect or intent of which is to mitigate loss to or manage risk or benefit of share price changes for, or to increase or decrease the voting power of, such Proposing Person with respect to any share of stock of the Corporation;

(iv) any other material relationship between such Proposing Person, on the one hand, and the Corporation, any affiliate of the Corporation or any principal competitor of the Corporation, on the other hand;

(v) any direct or indirect material interest in any material contract or agreement with the Corporation, any affiliate of the Corporation or any principal competitor of the Corporation (including, in any such case, any employment agreement, collective bargaining agreement or consulting agreement);

(vi) any other information relating to such Proposing Person that would be required to be disclosed in a proxy statement or other filing required to be made in connection with solicitations of proxies or consents by such Proposing Person in support of the nomination or business proposed to be brought before the meeting pursuant to Section 14(a) (or any successor provision) under the Exchange Act and the rules and regulations thereunder (the disclosures to be made pursuant to the foregoing clauses (iv) through (vi) are referred to as "***Disclosable Interests***"). For purposes hereof "Disclosable Interests" shall not include any information with respect to the ordinary course business activities of any broker, dealer, commercial bank, trust company or other nominee who is a Proposing Person solely as a result of being the stockholder directed to prepare and submit the notice required by these Bylaws on behalf of a beneficial owner;

(vii) such Proposing Person's written consent to the public disclosure of information provided to the Corporation pursuant to this Section 1.11;

(viii) a complete written description of any agreement, arrangement or understanding (whether oral or in writing) (including any knowledge that another person or entity is Acting in Concert (as defined in Section 1.11.3(c)) with such Proposing Person) between or among such Proposing Person, any of its respective affiliates or associates and any other person Acting in Concert with any of the foregoing persons in connection with the proposal of such nomination or other business;

(ix) as to each person whom such Proposing Person proposes to nominate for election or re-election as a director, any agreement, arrangement or understanding of such person with any other person or entity other than the Corporation with respect to any direct or indirect compensation, reimbursement or indemnification in connection with being a nominee for director or service or action as a director;

(x) a representation that the Record Stockholder is a holder of record of stock of the Corporation entitled to vote at such meeting and intends to appear in person or by proxy at the meeting to propose such business or nomination;

(xi) a representation whether such Proposing Person intends (or is part of a group that intends) to deliver a proxy statement and/or form of proxy to holders of, in the case of a proposal, at least the percentage of the Corporation's voting shares required under applicable law to carry the proposal or, in the case of a nomination or nominations, a sufficient number of holders of the Corporation's voting shares to elect such nominee or nominees (an affirmative statement of such intent being a "***Solicitation Notice***") and/or otherwise solicit proxies from stockholders in support of such proposal or nomination;

(xii) any proxy, contract, arrangement, or relationship pursuant to which the Proposing Person has a right to vote, directly or indirectly, any shares of any security of the Corporation, and.

(xiii) such other information relating to any proposed item of business as the Corporation may reasonably require to determine whether such proposed item of business is a proper matter for stockholder action.

A stockholder providing written notice required by this Section 1.11 will update and supplement such notice in writing, if necessary, so that the information provided or required to be provided in such notice is true and correct in all material respects as of (i) the record date for the meeting and (ii) the close of business on the fifth (5th) business day prior to the meeting and, in the event of any adjournment or postponement thereof, the close of business on the fifth (5th) business day prior to such adjourned or postponed meeting. In the case of an update and supplement pursuant to clause (i) of the foregoing sentence, such update and supplement will be received by the Secretary of the Corporation at the principal executive office of the Corporation not later than five (5) business days after the record date for the meeting, and in the case of an update and supplement pursuant to clause (ii) of the foregoing sentence, such update and supplement will be received by the Secretary of the Corporation at the principal executive office of the Corporation not later than two (2) business

days prior to the date for the meeting, and, in the event of any adjournment or postponement thereof, two (2) business days prior to such adjourned or postponed meeting.

(c) Notwithstanding anything in the second sentence of Section 1.11.1(b) of these Bylaws to the contrary, in the event that the number of directors to be elected to the Board is increased and there is no Public Announcement by the Corporation naming all of the nominees for director or specifying the size of the increased Board at least seventy five (75) days prior to the first anniversary of the preceding year's annual meeting (or, if the annual meeting is held more than thirty (30) days before or sixty (60) days after such anniversary date, at least seventy five (75) days prior to such annual meeting), a stockholder's notice required by this Section 1.11 shall also be considered timely, but only with respect to nominees for any new positions created by such increase, if it shall be delivered to the Secretary of the Corporation at the principal executive office of the Corporation no later than the close of business on the tenth (10th) day following the day on which such Public Announcement is first made by the Corporation.

(d) Notwithstanding anything in Section 1.11 or any other provision of the Bylaws to the contrary, any person who has been determined by a majority of the Whole Board to have violated Section 2.11 of these Bylaws or a Board Confidentiality Policy (as defined in Section 2.11 of these Bylaws) while serving as a director of the Corporation in the preceding five (5) years shall be ineligible to be nominated or to serve as a member of the Board, absent a prior waiver for such nomination or service approved by two-thirds of the Whole Board.

1.11.2 Special Meetings of Stockholders. Only such business shall be conducted at a special meeting of stockholders as shall have been brought before the meeting pursuant to the Corporation's notice of such meeting. Nominations of persons for election to the Board may be made at a special meeting of stockholders at which directors are to be elected pursuant to the Corporation's notice of such meeting (a) by or at the direction of the Board or any committee thereof or (b) provided that the Board has determined that directors shall be elected at such meeting, by any stockholder of the Corporation who is a stockholder of record at the time of giving of notice of the special meeting, who shall be entitled to vote at the meeting and who complies with the notice and other procedures set forth in this Section 1.11 in all applicable respects. In the event the Corporation calls a special meeting of stockholders for the purpose of electing one or more directors to the Board, any such stockholder may nominate a person or persons (as the case may be), for election to such position(s) as specified in the Corporation's notice of meeting, if the stockholder's notice required by Section 1.11.1(b) of these Bylaws shall be delivered to the Secretary of the Corporation at the principal executive offices of the Corporation (i) no earlier than the 120th day prior to such special meeting and (ii) no later than the close of business on the later of the 90th day prior to such special meeting or the tenth (10th) day following the day on which Public Announcement is first made of the date of the special meeting and of the nominees proposed by the Board to be elected at such meeting.

1.11.3 General.

(a) Only such persons who are nominated in accordance with the procedures set forth in this Section 1.11 shall be eligible to be elected at a meeting of stockholders and serve as directors and only such business shall be conducted at a meeting of stockholders as shall have been brought before the meeting in accordance with the procedures set forth in this Section 1.11. Except as otherwise provided by law or these Bylaws, the chairperson of the meeting shall have the power

and duty to determine whether a nomination or any other business proposed to be brought before the meeting was made or proposed, as the case may be, in accordance with the procedures set forth in this Section 1.11 and, if any proposed nomination or business is not in compliance herewith, to declare that such defective proposal or nomination shall be disregarded. Notwithstanding the foregoing provisions of this Section 1.11, unless otherwise required by law, if the stockholder (or a Qualified Representative of the stockholder (as defined below)) does not appear at the annual or special meeting of stockholders of the Corporation to present a nomination or proposed business, such nomination shall be disregarded and such proposed business shall not be transacted, notwithstanding that proxies in respect of such vote may have been received by the Corporation.

(b) Notwithstanding the foregoing provisions of this Section 1.11, a stockholder shall also comply with all applicable requirements of the Exchange Act and the rules and regulations thereunder with respect to the matters set forth herein. Nothing in this Section 1.11 shall be deemed to affect any rights of (a) stockholders to request inclusion of proposals in the Corporation's proxy statement pursuant to Rule 14a-8 under the Exchange Act or (b) the holders of any series of Preferred Stock to elect directors pursuant to any applicable provisions of the Certificate of Incorporation.

(c) For purposes of this Section 1.11 the following definitions shall apply:

(A) a person shall be deemed to be "***Acting in Concert***" with another person if such person knowingly acts (whether or not pursuant to an express agreement, arrangement or understanding) in concert with, or toward a common goal relating to the management, governance or control of the Corporation in substantial parallel with, such other person where (1) each person is conscious of the other person's conduct or intent and this awareness is an element in their decision-making processes and (2) at least one additional factor suggests that such persons intend to act in concert or in substantial parallel, which such additional factors may include, without limitation, exchanging information (whether publicly or privately), attending meetings, conducting discussions or making or soliciting invitations to act in concert or in substantial parallel; provided that a person shall not be deemed to be Acting in Concert with any other person solely as a result of the solicitation or receipt of revocable proxies or consents from such other person in response to a solicitation made pursuant to, and in accordance with, Section 14(a) (or any successor provision) of the Exchange Act by way of a proxy or consent solicitation statement filed on Schedule 14A. A person Acting in Concert with another person shall be deemed to be Acting in Concert with any third party who is also Acting in Concert with such other person;

(B) "***Associated Person***" shall mean with respect to any subject stockholder or other person (including any proposed nominee) (1) any person directly or indirectly controlling, controlled by or under common control with such stockholder or other person, (2) any beneficial owner of shares of stock of the Corporation owned of record or beneficially by such stockholder or other person, (3) any associate (as defined in Rule 405 under the Securities Act of 1933, as amended), of such stockholder or other person, and (4) any person directly or

indirectly controlling, controlled by or under common control or Acting in Concert with any such Associated Person;

(C) "***Proposing Person***" shall mean (1) the stockholder providing the notice of business proposed to be brought before an annual meeting or nomination of persons for election to the Board at a stockholder meeting, (2) the beneficial owner or beneficial owners, if different, on whose behalf the notice of business proposed to be brought before the annual meeting or nomination of persons for election to the Board at a stockholder meeting is made, and (3) any Associated Person on whose behalf the notice of business proposed to be brought before the annual meeting or nomination of persons for election to the Board at a stockholder meeting is made;

(D) "***Public Announcement***" shall mean disclosure in a press release reported by a national news service or in a document publicly filed by the Corporation with the Securities and Exchange Commission pursuant to Section 13, 14 or 15(d) of the Exchange Act; and

(E) to be considered a "***Qualified Representative***" of a stockholder, a person must be a duly authorized officer, manager or partner of such stockholder or must be authorized by a writing executed by such stockholder or an electronic transmission delivered by such stockholder to act for such stockholder as a proxy at the meeting of stockholders and such person must produce such writing or electronic transmission, or a reliable reproduction thereof, at the annual meeting; provided, however, that if the stockholder is (1) a general or limited partnership, any general partner or person who functions as a general partner of the general or limited partnership or who controls the general or limited partnership shall be deemed a Qualified Representative, (2) a corporation or a limited liability company, any officer or person who functions as the substantial equivalent of an officer of the corporation or limited liability company or any officer, director, general partner or person who functions as an officer, director or general partner of any entity ultimately in control of the corporation or limited liability company shall be deemed a Qualified Representative or (z) a trust, any trustee of such trust shall be deemed a Qualified Representative. The Secretary of the Corporation, or any other person who shall be appointed to serve as secretary of the meeting, may require, on behalf of the Corporation, reasonable and appropriate documentation to verify the status of a person purporting to be a "Qualified Representative" for purposes hereof.

ARTICLE II: BOARD OF DIRECTORS

Section 2.1: Number; Qualifications. The total number of directors constituting the Board (the "***Whole Board***") shall be fixed from time to time in the manner set forth in the Certificate of Incorporation. No decrease in the authorized number of directors constituting the Whole Board shall shorten the term of any incumbent director. Directors need not be stockholders of the Corporation. The Certificate of Incorporation or these Bylaws may prescribe other qualifications for directors.

Section 2.2: Election; Resignation; Removal; Vacancies. Election of directors need not be by written ballot, unless otherwise directed by the Board. Subject to the special rights of holders of any series of Preferred Stock to elect directors and as set forth in the Certificate of Incorporation, the Board shall be divided into three classes, designated as Class I, Class II and Class III. Each class shall consist, as nearly as may be possible, of one-third of the Whole Board. Each director shall hold office until the annual meeting at which such director's term expires and until such director's successor is elected and qualified or until such director's earlier death, resignation, disqualification, or removal. Any director may resign by delivering a resignation in writing or by electronic transmission to the Corporation at its principal office or to the Chairperson of the Board, the Chief Executive Officer, or the Secretary. Such resignation shall be effective upon delivery unless it is specified to be effective at a later time or upon the happening of an event. Subject to the special rights of holders of any series of Preferred Stock to elect directors, directors may be removed only as provided by the Certificate of Incorporation and applicable law. All vacancies occurring in the Board and any newly created directorships resulting from any increase in the authorized number of directors shall be filled in the manner set forth in the Certificate of Incorporation.

Section 2.3: Regular Meetings. Regular meetings of the Board may be held at such places, within or without the State of Delaware, and at such times as the Board may from time to time determine. Notice of regular meetings need not be given if the date, times and places thereof are fixed by resolution of the Board.

Section 2.4: Special Meetings. Special meetings of the Board may be called by the Chairperson of the Board, the Chief Executive Officer, the Lead Independent Director or a majority of the members of the Board then in office and may be held at any time, date or place, within or without the State of Delaware, as the person or persons calling the meeting shall fix. Notice of the time, date and place of such meeting shall be given, orally, in writing or by electronic transmission (including electronic mail), by the person or persons calling the meeting to all directors at least four (4) days before the meeting if the notice is mailed, or at least twenty-four (24) hours before the meeting if such notice is given by telephone, hand delivery, telegram, telex, mailgram, facsimile, electronic mail or other means of electronic transmission. Any oral notice given personally or by telephone may be communicated either to the director or to a person at the office of the director who the person giving the notice has reason to believe will promptly communicate it to the director. The notice need not specify the purpose or the place of the meeting, if the meeting is to be held at the principal executive office of the Corporation or by conference, telephone or similar communication equipment. Unless otherwise indicated in the notice, any and all business may be transacted at a special meeting.

Section 2.5: Remote Meetings Permitted. Members of the Board, or any committee of the Board, may participate in a meeting of the Board or such committee by means of conference telephone or other communications equipment by means of which all persons participating in the meeting can hear each other, and participation in a meeting pursuant to conference telephone or other communications equipment shall constitute presence in person at such meeting.

Section 2.6: Quorum; Vote Required for Action. At all meetings of the Board, a majority of the Whole Board shall constitute a quorum for the transaction of business. If a quorum shall fail

to attend any meeting, a majority of those present may adjourn the meeting to another place, date or time without further notice thereof. Except as otherwise provided herein or in the Certificate of Incorporation, or required by law, the vote of a majority of the directors present at a meeting at which a quorum is present shall be the act of the Board.

Section 2.7: Organization. Meetings of the Board shall be presided over by (a) the Chairperson of the Board, or (b) in the absence of such person, the Lead Independent Director, or (c) in such person's absence, by the Chief Executive Officer, or (d) in such person's absence, by a chairperson chosen by the Board at the meeting. The Secretary shall act as secretary of the meeting, but in such person's absence the chairperson of the meeting may appoint any person to act as secretary of the meeting.

Section 2.8: Unanimous Action by Directors in Lieu of a Meeting. Any action required or permitted to be taken at any meeting of the Board, or of any committee thereof, may be taken without a meeting if all members of the Board or such committee, as the case may be, consent thereto in writing or by electronic transmission, and the writing or writings or electronic transmission or transmissions are filed with the minutes of proceedings of the Board or committee, as applicable. Such filing shall be in paper form if the minutes are maintained in paper form and shall be in electronic form if the minutes are maintained in electronic form.

Section 2.9: Powers. Except as otherwise provided by the Certificate of Incorporation or the DGCL, the business and affairs of the Corporation shall be managed by or under the direction of the Board.

Section 2.10: Compensation of Directors. Members of the Board, as such, may receive, pursuant to a resolution of the Board, fees and other compensation for their services as directors, including without limitation their services as members of committees of the Board.

Section 2.11: Confidentiality. Each director shall maintain the confidentiality of, and shall not share with any third party person or entity (including third parties that originally sponsored, nominated or designated such director (the "***Sponsoring Party***")), any non-public information learned in his or her capacity as a director, including communications among Board members in their capacities as directors. The Board may adopt a board confidentiality policy further implementing and interpreting this bylaw (a "***Board Confidentiality Policy***"). All directors are required to comply with this bylaw and any such Board Confidentiality Policy unless such director or the Sponsoring Party for such director has entered into a specific written agreement with the Corporation, in either case as approved by the Board, providing otherwise with respect to such confidential information.

ARTICLE III: COMMITTEES

Section 3.1: Committees. The Board may, by resolution adopted by a majority of the Whole Board, designate one or more committees, each committee to consist of one or more of the

directors of the Corporation. The Board may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee. In the absence or disqualification of a member of the committee, the member or members thereof present at any meeting of such committee who are not disqualified from voting, whether or not such member or members constitute a quorum, may unanimously appoint another member of the Board to act at the meeting in place of any such absent or disqualified member. Any such committee, to the extent provided in a resolution of the Board, shall have and may exercise all the powers and authority of the Board in the management of the business and affairs of the Corporation and may authorize the seal of the Corporation to be affixed to all papers that may require it; but no such committee shall have the power or authority in reference to the following matters: (a) approving, adopting, or recommending to the stockholders any action or matter expressly required by the DGCL to be submitted to stockholders for approval or (b) adopting, amending or repealing any bylaw of the Corporation.

Section 3.2: Committee Rules. Each committee shall keep records of its proceedings and make such reports as the Board may from time to time request. Unless the Board otherwise provides, each committee designated by the Board may make, alter and repeal rules for the conduct of its business. In the absence of such rules, each committee shall conduct its business in the same manner as the Board conducts its business pursuant to Article II of these Bylaws. Except as otherwise provided in the Certificate of Incorporation, these Bylaws or the resolution of the Board designating the committee, any committee may create one or more subcommittees, each subcommittee to consist of one or more members of the committee, and may delegate to any such subcommittee any or all of the powers and authority of the committee.

ARTICLE IV: OFFICERS; CHAIRPERSON; LEAD INDEPENDENT DIRECTOR

Section 4.1: Generally. The officers of the Corporation shall consist of a Chief Executive Officer (who may also be the Chairperson of the Board and/or the President), a President, a Secretary and a Treasurer and may consist of such other officers, including, without limitation, a Chief Financial Officer, and one or more Vice Presidents, as may from time to time be appointed by the Board. All officers shall be elected by the Board; *provided*, *however*, that the Board may empower the Chief Executive Officer of the Corporation to appoint any officer other than the Chief Executive Officer, the President, the Chief Financial Officer or the Treasurer. Except as otherwise provided by law, by the Certificate of Incorporation or these Bylaws or by the resolution of the Board electing any officer, each officer shall hold office until such officer's successor is duly elected and qualified or until such officer's earlier resignation, death, disqualification or removal. Any number of offices may be held by the same person. Any officer may resign by delivering a resignation in writing or by electronic transmission to the Corporation at its principal office or to the Chairperson of the Board, the Chief Executive Officer, or the Secretary. Such resignation shall be effective upon delivery unless it is specified to be effective at some later time or upon the happening of some later event. Any vacancy occurring in any office of the Corporation by death, resignation, removal or otherwise may be filled by the Board and the Board may, in its discretion, leave unfilled, for such period as it may determine, any offices. Each such successor shall hold office for the unexpired term of such officer's predecessor and until a successor is duly elected and qualified or until such officer's earlier resignation, death, disqualification or removal.

Section 4.2: Chief Executive Officer. Subject to the control of the Board and such supervisory powers, if any, as may be given by the Board, the powers and duties of the Chief Executive Officer of the Corporation are:

(a) to act as the general manager and, subject to the control of the Board, to have general supervision, direction and control of the business and affairs of the Corporation;

(b) subject to Section 1.6 of these Bylaws, to preside at all meetings of the stockholders;

(c) subject to Section 1.2 of these Bylaws, to call special meetings of the stockholders to be held at such times and, subject to the limitations prescribed by law or by these Bylaws, at such places as he or she shall deem proper; and

(d) to affix the signature of the Corporation to all deeds, conveyances, mortgages, guarantees, leases, obligations, bonds, certificates and other papers and instruments in writing which have been authorized by the Board or which, in the judgment of the Chief Executive Officer, should be executed on behalf of the Corporation; to sign certificates for shares of stock of the Corporation (if any); and, subject to the direction of the Board, to have general charge of the property of the Corporation and to supervise and control all officers, agents and employees of the Corporation.

The person holding the office of President shall be the Chief Executive Officer of the Corporation unless the Board shall designate another officer to be the Chief Executive Officer.

Section 4.3: Chairperson of the Board. Subject to the provisions of Section 2.7 of these Bylaws, the Chairperson of the Board shall have the power to preside at all meetings of the Board and shall have such other powers and duties as provided in these Bylaws and as the Board may from time to time prescribe.

Section 4.4: Lead Independent Director. The Board may, in its discretion, elect a lead independent director from among its members that are Independent Directors (as defined below) (such director, the "***Lead Independent Director***"). He or she shall preside at all meetings at which the Chairperson of the Board is not present and shall exercise such other powers and duties as may from time to time be assigned to him or her by the Board or as prescribed by these Bylaws. For purposes of these Bylaws, "***Independent Director***" has the meaning ascribed to such term under the rules of the exchange upon which the Corporation's Class A Common Stock is primarily traded.

Section 4.5: President. The person holding the office of Chief Executive Officer shall be the President of the Corporation unless the Board shall have designated one individual as the President and a different individual as the Chief Executive Officer of the Corporation. Subject to the provisions of these Bylaws and to the direction of the Board, and subject to the supervisory powers of the Chief Executive Officer (if the Chief Executive Officer is an officer other than the President), and subject to such supervisory powers and authority as may be given by the Board to the Chairperson of the Board, and/or to any other officer, the President shall have the responsibility for the general management and control of the business and affairs of the Corporation and the general supervision and direction of all of the officers, employees and agents of the Corporation (other than

the Chief Executive Officer, if the Chief Executive Officer is an officer other than the President) and shall perform all duties and have all powers that are commonly incident to the office of President or that are delegated to the President by the Board.

Section 4.6: Chief Financial Officer. The person holding the office of Chief Financial Officer shall be the Treasurer of the Corporation unless the Board shall have designated another officer as the Treasurer of the Corporation. Subject to the direction of the Board and the Chief Executive Officer, the Chief Financial Officer shall perform all duties and have all powers that are commonly incident to the office of Chief Financial Officer, or as the Board may from time to time prescribe.

Section 4.7: Treasurer. The person holding the office of Treasurer shall have custody of all monies and securities of the Corporation. The Treasurer shall make such disbursements of the funds of the Corporation as are authorized and shall render from time to time an account of all such transactions. The Treasurer shall also perform such other duties and have such other powers as are commonly incident to the office of Treasurer, or as the Board or the Chief Executive Officer may from time to time prescribe.

Section 4.8: Vice President. Each Vice President shall have all such powers and duties as are commonly incident to the office of Vice President or that are delegated to him or her by the Board or the Chief Executive Officer. A Vice President may be designated by the Board to perform the duties and exercise the powers of the Chief Executive Officer or President in the event of the Chief Executive Officer's or President's absence or disability.

Section 4.9: Secretary. The Secretary shall issue or cause to be issued all authorized notices for, and shall keep, or cause to be kept, minutes of all meetings of the stockholders and the Board. The Secretary shall have charge of the corporate minute books and similar records and shall perform such other duties and have such other powers as are commonly incident to the office of Secretary, or as the Board or the Chief Executive Officer may from time to time prescribe.

Section 4.10: Delegation of Authority. The Board may from time to time delegate the powers or duties of any officer of the Corporation to any other officers or agents of the Corporation, notwithstanding any provision hereof.

Section 4.11: Removal. Any officer of the Corporation shall serve at the pleasure of the Board and may be removed at any time, with or without cause, by the Board; *provided* that if the Board has empowered the Chief Executive Officer to appoint any officer of the Corporation, then such officer may also be removed by the Chief Executive Officer. Such removal shall be without prejudice to the contractual rights of such officer, if any, with the Corporation and an election of an officer shall not of itself create contractual rights.

ARTICLE V: STOCK

Section 5.1: Certificates; Uncertificated Shares. The shares of capital stock of the Corporation shall be uncertificated shares; *provided*, *however*, that the resolution of the Board that the shares of capital stock of the Corporation shall be uncertificated shares shall not apply to shares represented by a certificate until such certificate is surrendered to the Corporation (or the transfer

agent or registrar, as the case may be). Notwithstanding the foregoing, the Board may provide by resolution or resolutions that some or all of any or all classes or series of its stock shall be certificated shares. Every holder of stock represented by certificates shall be entitled to have a certificate signed by any two officers of the Corporation authorized to sign stock certificates representing the number of shares registered in certificate form. Any or all of the signatures on the certificate may be a facsimile. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed upon a certificate shall have ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the Corporation with the same effect as if such person were an officer, transfer agent or registrar at the date of issue.

Section 5.2: Lost, Stolen or Destroyed Stock Certificates; Issuance of New Certificates or Uncertificated Shares. The Corporation may issue a new certificate of stock or uncertificated shares in the place of any certificate previously issued by it, alleged to have been lost, stolen or destroyed, upon the making of an affidavit of that fact by the person claiming the certificate of stock to be lost, stolen or destroyed, and the Corporation may require the owner of the lost, stolen or destroyed certificate, or such owner's legal representative, to agree to indemnify the Corporation and/or to give the Corporation a bond sufficient to indemnify it, against any claim that may be made against it on account of the alleged loss, theft or destruction of any such certificate or the issuance of such new certificate or uncertificated shares.

Section 5.3: Other Regulations. Subject to applicable law, the Certificate of Incorporation and these Bylaws, the issue, transfer, conversion and registration of shares represented by certificates and of uncertificated shares shall be governed by such other regulations as the Board may establish.

ARTICLE VI: INDEMNIFICATION

Section 6.1: Indemnification of Officers and Directors. Each person who was or is made a party to, or is threatened to be made a party to, or is involved in any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative, legislative or any other type whatsoever (a "***Proceeding***"), by reason of the fact that such person (or a person of whom such person is the legal representative), is or was a director or officer of the Corporation or, while serving as a director or officer of the Corporation, is or was serving at the request of the Corporation as a director, officer, employee, agent or trustee of another corporation, or of a partnership, joint venture, trust or other enterprise, including service with respect to employee benefit plans (for purposes of this Article VI, an "***Indemnitee***"), shall be indemnified and held harmless by the Corporation to the fullest extent permitted by the DGCL as the same exists or may hereafter be amended (but, in the case of any such amendment, only to the extent that such amendment permits the Corporation to provide broader indemnification rights than such law permitted the Corporation to provide prior to such amendment), against all expenses, liability and loss (including attorneys' fees, judgments, fines, ERISA excise taxes and penalties and amounts paid or to be paid in settlement) reasonably incurred or suffered by such Indemnitee in connection therewith, provided such Indemnitee acted in good faith and in a manner that the Indemnitee reasonably believed to be in or not opposed to the best interests of the Corporation, and, with respect to any criminal Proceeding, had no reasonable cause to believe the Indemnitee's conduct was unlawful. Such indemnification shall continue as to an Indemnitee who has ceased to be a director or officer of the Corporation and shall inure to the

benefit of such Indemnitees' heirs, executors and administrators. Notwithstanding the foregoing, subject to Section 6.5 of these Bylaws, the Corporation shall indemnify any such Indemnitee seeking indemnity in connection with a Proceeding (or part thereof) initiated by such Indemnitee only if such Proceeding (or part thereof) was authorized by the Board or such indemnification is authorized by an agreement approved by the Board.

Section 6.2: Advance of Expenses. The Corporation shall pay all expenses (including attorneys' fees) incurred by an Indemnitee in defending any Proceeding in advance of its final disposition; *provided*, *however*, that if the DGCL then so requires, the advancement of such expenses shall be made only upon delivery to the Corporation of an undertaking, by or on behalf of such Indemnitee, to repay such amounts if it shall ultimately be determined that such Indemnitee is not entitled to be indemnified under this Article VI or otherwise.

Section 6.3: Non-Exclusivity of Rights. The rights conferred on any person in this Article VI shall not be exclusive of any other right that such person may have or hereafter acquire under any statute, provision of the Certificate of Incorporation, Bylaws, agreement, vote or consent of stockholders or disinterested directors, or otherwise. Additionally, nothing in this Article VI shall limit the ability of the Corporation, in its discretion, to indemnify or advance expenses to persons whom the Corporation is not obligated to indemnify or advance expenses pursuant to this Article VI.

Section 6.4: Indemnification Contracts. The Board is authorized to cause the Corporation to enter into indemnification contracts with any director, officer, employee or agent of the Corporation, or any person serving at the request of the Corporation as a director, officer, employee, agent or trustee of another corporation, partnership, joint venture, trust or other enterprise, including employee benefit plans, providing indemnification or advancement rights to such person. Such rights may be greater than those provided in this Article VI.

Section 6.5: Right of Indemnitee to Bring Suit. The following shall apply to the extent not in conflict with any indemnification contract provided for in Section 6.4 of these Bylaws.

6.5.1 Right to Bring Suit. If a claim under Section 6.1 or 6.2 of these Bylaws is not paid in full by the Corporation within sixty (60) days after a written claim has been received by the Corporation, except in the case of a claim for an advancement of expenses, in which case the applicable period shall be twenty (20) days, the Indemnitee may at any time thereafter bring suit against the Corporation to recover the unpaid amount of the claim. If successful in whole or in part in any such suit, or in a suit brought by the Corporation to recover an advancement of expenses pursuant to the terms of an undertaking, the Indemnitee shall be entitled to be paid, to the fullest extent permitted by law, the expense of prosecuting or defending such suit. In any suit brought by the Indemnitee to enforce a right to indemnification hereunder (but not in a suit brought by the Indemnitee to enforce a right to an advancement of expenses) it shall be a defense that the Indemnitee has not met any applicable standard of conduct which makes it permissible under the DGCL (or other applicable law) for the Corporation to indemnify the Indemnitee for the amount claimed.

6.5.2 Effect of Determination. Neither the absence of a determination prior to the commencement of such suit that indemnification of the Indemnitee is proper in the circumstances because the Indemnitee has met the applicable standard of conduct set forth in applicable law, nor

an actual determination that the Indemnitee has not met such applicable standard of conduct, shall create a presumption that the Indemnitee has not met the applicable standard of conduct or, in the case of such a suit brought by the Indemnitee, be a defense to such suit.

6.5.3 Burden of Proof. In any suit brought by the Indemnitee to enforce a right to indemnification or to an advancement of expenses hereunder, or brought by the Corporation to recover an advancement of expenses pursuant to the terms of an undertaking, the burden of proving that the Indemnitee is not entitled to be indemnified, or to such advancement of expenses, under this Article VI, or otherwise, shall be on the Corporation.

Section 6.6: Nature of Rights. The rights conferred upon Indemnitees in this Article VI shall be contract rights and such rights shall continue as to an Indemnitee who has ceased to be a director, officer or trustee and shall inure to the benefit of the Indemnitee's heirs, executors and administrators. Any amendment, repeal or modification of any provision of this Article VI that adversely affects any right of an Indemnitee or an Indemnitee's successors shall be prospective only, and shall not adversely affect any right or protection conferred on a person pursuant to this Article VI with respect to any Proceeding involving any occurrence or alleged occurrence of any action or omission to act that took place prior to such amendment, repeal or modification.

Section 6.7: Insurance. The Corporation may purchase and maintain insurance, at its expense, to protect itself and any director, officer, employee or agent of the Corporation or another corporation, partnership, joint venture, trust or other enterprise against any expense, liability or loss, whether or not the Corporation would have the power to indemnify such person against such expense, liability or loss under the DGCL.

ARTICLE VII: NOTICES

Section 7.1: Notice.

7.1.1 Form and Delivery. Except as otherwise specifically required in these Bylaws (including, without limitation, Section 7.1.2 of these Bylaws) or by applicable law, all notices required to be given pursuant to these Bylaws shall be in writing and may (a) in every instance in connection with any delivery to a member of the Board, be effectively given by hand delivery (including use of a delivery service), by depositing such notice in the mail, postage prepaid, or by sending such notice by overnight express courier, facsimile, electronic mail or other form of electronic transmission and (b) be effectively delivered to a stockholder when given by hand delivery, by depositing such notice in the mail, postage prepaid or, if specifically consented to by the stockholder as described in Section 7.1.2 of these Bylaws, by sending such notice by facsimile, electronic mail or other form of electronic transmission. Any such notice shall be addressed to the person to whom notice is to be given at such person's address as it appears on the records of the Corporation. The notice shall be deemed given (a) in the case of hand delivery, when received by the person to whom notice is to be given or by any person accepting such notice on behalf of such person, (b) in the case of delivery by mail, upon deposit in the mail, (c) in the case of delivery by overnight express courier, when dispatched, and (d) in the case of delivery via facsimile, electronic mail or other form of electronic transmission, at the time provided in Section 7.1.2 of these Bylaws.

7.1.2 Electronic Transmission. Without limiting the manner by which notice otherwise may be given effectively to stockholders, any notice to stockholders given by the Corporation under any provision of the DGCL, the Certificate of Incorporation, or these Bylaws shall be effective if given by a form of electronic transmission consented to by the stockholder to whom the notice is given in accordance with Section 232 of the DGCL. Any such consent shall be revocable by the stockholder by written notice to the Corporation. Any such consent shall be deemed revoked if (a) the Corporation is unable to deliver by electronic transmission two consecutive notices given by the Corporation in accordance with such consent and (b) such inability becomes known to the Secretary or an Assistant Secretary of the Corporation or to the transfer agent, or other person responsible for the giving of notice; *provided*, *however*, the inadvertent failure to treat such inability as a revocation shall not invalidate any meeting or other action. Notice given pursuant to this Section 7.1.2 shall be deemed given: (i) if by facsimile telecommunication, when directed to a number at which the stockholder has consented to receive notice; (ii) if by electronic mail, when directed to an electronic mail address at which the stockholder has consented to receive notice; (iii) if by a posting on an electronic network together with separate notice to the stockholder of such specific posting, upon the later of such posting and the giving of such separate notice; and (iv) if by any other form of electronic transmission, when directed to the stockholder.

7.1.3 Affidavit of Giving Notice. An affidavit of the Secretary or an Assistant Secretary or of the transfer agent or other agent of the Corporation that the notice has been given in writing or by a form of electronic transmission shall, in the absence of fraud, be prima facie evidence of the facts stated therein.

Section 7.2: Waiver of Notice. Whenever notice is required to be given under any provision of the DGCL, the Certificate of Incorporation or these Bylaws, a written waiver of notice, signed by the person entitled to notice, or waiver by electronic transmission by such person, whether before or after the time stated therein, shall be deemed equivalent to notice. Attendance of a person at a meeting shall constitute a waiver of notice of such meeting, except when the person attends a meeting for the express purpose of objecting at the beginning of the meeting to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at, nor the purpose of, any regular or special meeting of the stockholders, directors or members of a committee of directors need be specified in any waiver of notice.

ARTICLE VIII: INTERESTED DIRECTORS

Section 8.1: Interested Directors. No contract or transaction between the Corporation and one or more of its members of the Board or officers, or between the Corporation and any other corporation, partnership, association or other organization in which one or more of its directors or officers are members of the board of directors or officers, or have a financial interest, shall be void or voidable solely for this reason, or solely because the director or officer is present at or participates in the meeting of the Board or committee thereof that authorizes the contract or transaction, or solely because his, her or their votes are counted for such purpose, if: (a) the material facts as to his, her or their relationship or interest and as to the contract or transaction are disclosed or are known to the Board or the committee, and the Board or committee in good faith authorizes the contract or transaction by the affirmative votes of a majority of the disinterested directors, even though the disinterested directors be less than a quorum; (b) the material facts as to his, her or their relationship

or interest and as to the contract or transaction are disclosed or are known to the stockholders entitled to vote thereon, and the contract or transaction is specifically approved in good faith by vote of the stockholders; or (c) the contract or transaction is fair as to the Corporation as of the time it is authorized, approved or ratified by the Board, a committee thereof, or the stockholders.

Section 8.2: Quorum. Interested directors may be counted in determining the presence of a quorum at a meeting of the Board or of a committee which authorizes the contract or transaction.

ARTICLE IX: MISCELLANEOUS

Section 9.1: Fiscal Year. The fiscal year of the Corporation shall be determined by resolution of the Board.

Section 9.2: Seal. The Board may provide for a corporate seal, which may have the name of the Corporation inscribed thereon and shall otherwise be in such form as may be approved from time to time by the Board.

Section 9.3: Form of Records. Any records maintained by the Corporation in the regular course of its business, including its stock ledger, books of account and minute books, may be kept on or by means of, or be in the form of any other information storage device or method, electronic or otherwise, *provided* that the records so kept can be converted into clearly legible paper form within a reasonable time. The Corporation shall so convert any records so kept upon the request of any person entitled to inspect such records pursuant to any provision of the DGCL.

Section 9.4: Reliance Upon Books and Records. A member of the Board, or a member of any committee designated by the Board shall, in the performance of such person's duties, be fully protected in relying in good faith upon the books and records of the Corporation and upon such information, opinions, reports or statements presented to the Corporation by any of the Corporation's officers or employees, or committees of the Board, or by any other person as to matters the member reasonably believes are within such other person's professional or expert competence and who has been selected with reasonable care by or on behalf of the Corporation.

Section 9.5: Certificate of Incorporation Governs. In the event of any conflict between the provisions of the Certificate of Incorporation and Bylaws, the provisions of the Certificate of Incorporation shall govern.

Section 9.6: Severability. If any provision of these Bylaws shall be held to be invalid, illegal, unenforceable or in conflict with the provisions of the Certificate of Incorporation, then such provision shall nonetheless be enforced to the maximum extent possible consistent with such holding and the remaining provisions of these Bylaws (including without limitation, all portions of any section of these Bylaws containing any such provision held to be invalid, illegal, unenforceable or in conflict with the Certificate of Incorporation, that are not themselves invalid, illegal, unenforceable or in conflict with the Certificate of Incorporation) shall remain in full force and effect.

Section 9.7: Time Periods. In applying any provision of these Bylaws which requires that an act be done or not be done a specified number of days prior to an event or that an act be

done during a period of a specified number of days prior to an event, calendar days shall be used, the day of the doing of the act shall be excluded, and the day of the event shall be included.

ARTICLE X: AMENDMENT

Notwithstanding any other provision of these Bylaws, any alteration, amendment or repeal of these Bylaws, and any adoption of new Bylaws, shall require the approval of the Board or the stockholders of the Corporation as expressly provided in the Certificate of Incorporation.

ARTICLE XI: EXCLUSIVE FORUM

Unless the Corporation consents in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware (or, if the Court of Chancery does not have jurisdiction, the federal district court for the District of Delaware) shall, to the fullest extent permitted by law, be the sole and exclusive forum for (i) any derivative action or proceeding brought on behalf of the Corporation, (ii) any action asserting a claim of breach of a fiduciary duty owed by, or other wrongdoing by, any director, officer or other employee or agent of the Corporation to the Corporation or the Corporation's stockholders, (iii) any action asserting a claim against the Corporation arising pursuant to any provision of the DGCL or the Certificate of Incorporation or these Bylaws (as either may be amended from time to time), (iv) any action to interpret, apply, enforce or determine the validity of the Certificate of Incorporation of the Corporation or these Bylaws or (i) any action asserting a claim governed by the internal affairs doctrine, except for, as to each of (i) through (v) above, any claim as to which such court determines that there is an indispensable party not subject to the jurisdiction of such court (and the indispensable party does not consent to the personal jurisdiction of such court within ten (10) days following such determination), which is vested in the exclusive jurisdiction of a court or forum other than such court, or for which such court does not have subject matter jurisdiction.

Any person or entity purchasing or otherwise acquiring any interest in any security of the Corporation shall be deemed to have notice of and consented to the provisions of this Article XI.

CERTIFICATION OF AMENDED AND RESTATED BYLAWS
OF
BLOOM ENERGY CORPORATION
(a Delaware corporation)

I, Shawn M. Soderberg, certify that I am Secretary of Bloom Energy Corporation, a Delaware corporation (the "***Corporation***"), that I am duly authorized to make and deliver this certification, that the attached Bylaws are a true and complete copy of the Amended and Restated Bylaws of the Corporation in effect as of the date of this certificate.

Dated: August 8, 2019

/s/ Shawn M. Soderberg

Shawn M. Soderberg
Executive Vice President, General Counsel and Secretary

EXECUTION VERSION

REDACTED EXHIBIT: This Exhibit contains certain identified information that has been excluded because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed. Redacted information is identified by [*].

EQUITY CAPITAL CONTRIBUTION AGREEMENT

with respect to

DIAMOND STATE GENERATION PARTNERS, LLC

by and among

BLOOM ENERGY CORPORATION

SP DIAMOND STATE CLASS B HOLDINGS, LLC,

DIAMOND STATE GENERATION HOLDINGS, LLC

and

DIAMOND STATE GENERATION PARTNERS, LLC

dated as of June 14, 2019

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EQUITY CAPITAL CONTRIBUTION AGREEMENT

This Equity Capital Contribution Agreement (this "Agreement") is made and entered into as of June [__], 2019 (the "Effective Date") by and among Diamond State Generation Holdings, LLC, a Delaware limited liability company ("DSGH"), SP Diamond State Class B Holdings, LLC, a Delaware limited liability company ("Southern"), Diamond State Generation Partners, LLC, a Delaware limited liability company (the "Company"), and solely with respect to Section 3.1, Article 7 and Article 8, Bloom Energy Corporation, a Delaware corporation ("Bloom").

Preliminary Statements

WHEREAS, Bloom is the sole member of Clean Technologies and Clean Technologies and Mehietia are the sole members of DSGH, which, as of the Effective Date, owns one hundred percent (100%) of the issued and outstanding membership interests in the Company;

WHEREAS, the Company currently owns a 30 MW solid oxide fuel cell generation project composed of Systems purchased pursuant to that certain Master Energy Server Purchase Agreement, by and between the Company and Bloom, dated April 13, 2012 (such Bloom Systems, the "Existing Systems" and together with the related Existing BOF and its partial ownership in the Shared Assets and intangible rights and obligations in connection with all of the foregoing, the "Existing Project");

WHEREAS, subject to the terms and conditions of (i) the Repurchase Agreement, Bloom intends to repurchase the Existing Systems from the Company and (ii) the CapEx Agreement, Bloom intends to sell a portfolio of New Systems having an aggregate nameplate capacity of up to 27.5 MW to be operated in accordance with the Tariff and the REPS Act (collectively, the "New Systems" together with the related New Systems BOF its partial ownership in the Shared Assets and intangible rights and obligations in connection with all of the foregoing, the "New Project") to the Company and the Company intends to purchase such New Systems from Bloom and to sell the Existing Systems to Bloom.

WHEREAS, subject to the terms and conditions herein, on the Effective Date (i) Southern will make an Initial Funding to the Company in the amount set forth on the Projected Contribution Schedule and DSGH will cause the Company to issue Class B Membership Interests to Southern and (ii) DSGH's membership interests in the Company will be converted into the Class A Membership Interests in the Company, in each case pursuant to the LLC Agreement;

WHEREAS, subject to the terms and conditions herein, on the Effective Date and each Subsequent Funding Date, Southern will make additional Capital Contributions to the Company in amounts determined pursuant to and as provided in this Agreement in order to finance the purchase of the New Systems pursuant to the CapEx Agreement;

NOW, THEREFORE, in consideration of the respective representations, warranties, covenants, agreements, and conditions in this Agreement, and other good and valuable consideration, the sufficiency of which is hereby acknowledged, the parties to this Agreement agree as follows:

Article 1
DEFINED TERMS

1.1 Defined Terms. Capitalized terms not otherwise defined in this Agreement have the meanings given such terms in Annex I.

ARTICLE 2
CAPITAL CONTRIBUTIONS; MEMBERSHIP INTERESTS

2.1 Initial Funding and Issuance of Class B Membership Interests.

(a) Issuance of Membership Interests. Subject to the terms and conditions in this Agreement, at the Closing, (i) Southern will make its initial Funding ("Initial Funding") to the Company as provided in Section 2.2(a) and will commit under this Agreement to make further Capital Contributions and, in exchange, (ii) DSGH will cause the Company to (x) issue to Southern the Class B Membership Interests in the Company and (y) convert DSGH's membership interests into Class A Membership Interests.

2.2 Capital Contributions.

(a) Initial Funding. On the Effective Date, (x) Southern will make a Capital Contribution in immediately available funds for the Deposit (as defined in the CapEx Agreement) payment under the CapEx Agreement, plus [*] towards costs incurred by Bloom in entering into the Transaction Documents, in a total amount set forth in the flow of funds memorandum attached hereto as Exhibit A ("Initial Flow of Funds Memorandum") prepared in connection with the Effective Date and in accordance with Section 2.4 below, and (y) DSGH will cause the Company to use such Capital Contribution in accordance with the Initial Flow of Funds Memorandum and will take, and will cause the Company to take, such actions as are contemplated under the Transaction and Project Documents on such date.

(b) Subsequent Fundings. Within one (1) Business Day after the Company's receipt of a monthly Payment Notice under the CapEx Agreement (each, a "Monthly Payment Notice"), the Company shall advise Southern of the number of New Systems covered by the Monthly Payment Notice, provide Southern with a notice of required funding in the form attached to this Agreement as Exhibit B (the "Funding Notice"), which shall include (i) a copy of the Monthly Payment Notice and (ii) a request for a capital contribution from Southern equal to the amount set forth in the Monthly Payment Notice (the "Monthly Contribution"); provided, however, that once Southern has funded an amount equal to the "Maximum Aggregate Southern Portfolio Purchase Price" (as defined in the CapEx Agreement) (taking into consideration any contributions by any Affiliate of Southern to 2016 ESA Project Company, LLC), should the Class B Member advise Bloom that it is ceasing purchases under the CapEx Agreement, then the funding obligations under this Section 2.2(b) shall also cease, as long as full funding has occurred for all New Systems ordered under the CapEx Agreement. Subject to the foregoing, four (4) Business Days following receipt of the Funding Notice, (x) Southern will make a Capital Contribution in immediately available funds in an amount equal to the Monthly Contribution (each, a "Subsequent Funding"), up to the overall maximum amount equal to the Maximum Aggregate Southern Portfolio Purchase Price as

detailed in a flow of funds memorandum prepared in connection with each Subsequent Funding and in accordance with Section 2.4 below, and (y) DSGH will cause the Company to use such Capital Contribution in accordance with the flow of funds and will take, and will cause the Company to take, such actions as are contemplated under the Transaction and Project Documents on such date. The date each Subsequent Funding is due will be a "Subsequent Funding Date".

(c) All Capital Contributions made pursuant to Sections 2.2(a) and 2.2(b) shall be used by the Company to pay the corresponding amounts to Bloom as they become due and payable pursuant to the terms of the CapEx Agreement.

2.3 Closing.

The Closing will take place concurrent with the mutual execution and delivery of this Agreement by the Parties which execution shall be deemed to confirm that all of the conditions in Section 5.2 and Section 5.3 have either been satisfied or waived in writing by the Party entitled to the benefit of such conditions. Each of the documents to be delivered pursuant to Section 5.2 and Section 5.3 shall be deemed to be delivered simultaneously, and no such document shall be of any force or effect until all such documents are delivered and this Agreement is executed and delivered by all Parties hereto.

2.4 Funding Mechanics.

(a) The Parties acknowledge that, other than as agreed to by the Parties, after the Effective Date there will be only one Funding Date per calendar month. In no event will any Funding Date occur later than the Funding Termination Date other than as agreed to by the Parties. An executed Funding Notice shall be provided to Southern at least four (4) Business Days prior to the applicable Funding Date; provided, that no Funding Notice shall be required for the Capital Contributions to occur on the Effective Date.

(b) On or prior to each Funding Date, Southern will transfer its Funding Payments by wire transfer of immediately available funds to the following account (or to such other account as the Company may from time to time advise it in writing):

Holder Name: Diamond State Generation Partners, LLC
Bank Name: Deutsche Bank Trust Company Americas
Account Number: [*]
ABA Number: [*]
Account Name: [*]
FFC: [*]
Re: Diamond State Generation
Attn: [*]

2.5 Conditions Precedent to the Obligations of Southern on Each Subsequent Funding Date.

The obligation of Southern to make each Subsequent Funding on each Subsequent Funding Date will be subject only to the satisfaction of the following condition (any or all of which may be waived in whole or in part by Southern in its sole discretion):

(a) The Company shall be obligated to make payment to Bloom on each applicable Subsequent Funding Date pursuant to the corresponding Monthly Payment Notice under the CapEx Agreement.

(b) By the final Funding Date, Bloom shall have delivered to Southern a final appraisal, valuation, and cost segregation report concerning the Portfolio from Marshall & Stevens, together with a reliance letter in favor of Southern, both in form and substance satisfactory to Southern.

(c) DSGH shall have issued in favor of Southern (and has thereafter maintained) (1) one or more letters of credit with aggregate face value of not less than $[*] within five (5) Business Days of the Effective Date, with face value increasing to not less than $[*] by July 5, 2019; and (2) one or more letters of credit with aggregate face value of not less than $[*] no later than October 31, 2019; *provided*, that the amounts required under this Section 2.5(c) shall be reduced on a dollar-for-dollar basis to reflect any draws by Southern on the applicable letter(s).

(d) [*].

ARTICLE 3
REPRESENTATIONS AND WARRANTIES

3.1 Representations and Warranties of Bloom.

Bloom represents and warrants to Southern as of the date hereof (except with respect to clauses (e), (f), (i)(ii), and (k)(ii) of this Section 3.1) as follows:

(a) Organization, Good Standing, Etc. Each of DSGH and the Company is a limited liability company duly formed, validly existing and in good standing under the laws of the State of Delaware. Bloom is a corporation duly formed, validly existing and in good standing under the laws of the State of Delaware. Each of DSGH and the Company has the limited liability company power and authority to own, lease and operate its properties and to carry on its business as being conducted on the date hereof in each jurisdiction where the character of its property or nature of its activities makes such a qualification necessary. Bloom has the corporate power and authority to own, lease and operate its properties and to carry on its business as being conducted on the date hereof in each jurisdiction where the character of its property or nature of its activities makes such a qualification necessary. Each of Bloom, DSGH, and the Company has provided Southern with true and correct copies of its organizational documents.

(b) Authority. Each of DSGH and the Company has the limited liability company power and authority to enter into this Agreement and the other Transaction and Project Documents to which it is a party, to perform its obligations hereunder and thereunder, and to consummate the transactions contemplated hereby or thereby. Bloom has the corporate power and authority to enter

into any Transaction and Project Documents to which it is a party, to perform its obligations thereunder, and to consummate the transactions contemplated thereby. The execution and delivery by DSGH and the Company of this Agreement and each other Transaction and Project Document to which it is a party, and the consummation by each of them of the transactions contemplated hereunder and thereunder, have been duly authorized by all necessary limited liability company action required on their respective parts. The execution and delivery by Bloom of each Transaction and Project Document to which it is a party, and the consummation by Bloom of the transactions contemplated thereunder, have been duly authorized by all necessary corporate action required on its part. Each of Bloom, DSGH and the Company has duly executed and delivered each Transaction and Project Document to which it is a party. This Agreement (assuming due authorization, execution and delivery by Southern) constitutes, and upon execution and delivery by Bloom, DSGH and the Company of the other Transaction and Project Documents to which it is respectively a party, the Transaction and Project Documents will constitute, the valid and binding obligations of each of Bloom, DSGH and the Company, respectively, enforceable against each of them in all material respects in accordance with their respective terms, subject as to enforceability to applicable bankruptcy, insolvency, reorganization, moratorium and similar laws affecting enforcement of creditors' rights and remedies generally and to general principles of equity (regardless of whether enforcement is sought in a proceeding at law or in equity).

(c) No Conflicts. The execution and delivery by Bloom, DSGH and the Company, as applicable, of this Agreement and the other Transaction and Project Documents to which it is a party do not, and the performance by each of Bloom, DSGH and the Company of its obligations hereunder and thereunder will not, (i) violate or require any filing or notice (that has not been filed or made) under any Applicable Law applicable to Bloom, DSGH or the Company, (ii) conflict with, or cause a breach of, or require consent under any provision in the certificate of incorporation, bylaws or other organizational document of Bloom or the certificate of formation, limited liability company agreement or other organizational document of DSGH or the Company, as applicable, or any Material Contract to which Bloom, DSGH, or the Company is a party.

(d) Absence of Litigation. None of Bloom, DSGH or the Company is subject to any pending or, to the Knowledge of Bloom, threatened injunction, judgment, order, decree, ruling or charge, any pending action, litigation, suit, proceeding or investigation before or by any court, arbitrator or other Governmental Authority or before any arbitrator which would reasonably be expected to have a material adverse effect on such party's ability to perform its obligations under the Transaction Documents to which it is a party. None of Bloom, DSGH or the Company has received a notice of any change to either the REPS Act or the Tariff and to the Knowledge of Bloom there has been no change to the REPS Act or the Tariff.

(e) Ownership. DSGH will own of record and beneficially, one hundred percent (100%) of the membership interests of the Company immediately prior to the Closing and before giving effect to the transactions contemplated by this Agreement. There are no outstanding options, warrants, calls, puts, convertible securities or other contracts of any nature obligating DSGH or the Company to issue, deliver or sell membership interests or other securities in the Company except as provided herein or as provided under the LLC Agreement or Permitted Encumbrances. The Company has no subsidiaries. Except as provided in this Agreement and the other Transaction

Documents, no Person has or will have a right to acquire an ownership interest in the New Systems or the Project (excluding Energy and RECs) owned or to be acquired by the Company. The Company is not a party to or otherwise subject to any legal, regulatory, or contractual restriction (other than as set forth herein or in the LLC Agreement) restricting the ability of the Company to pay dividends or make similar distributions to the Company or other holders of its respective equity interests.

(f) Valid Interests. Upon execution and delivery by Southern and DSGH of the LLC Agreement and, if not the same day, on the Effective Date, the Class B Membership Interests will constitute membership interests in the Company, and are being issued free and clear of any Liens except for obligations imposed on members of the Company under the LLC Agreement.

(g) Taxes.

(i) All Tax Returns required to have been filed by or with respect to the Company have been timely filed, and each such Tax Return correctly and completely reflects, in all material respects, Liabilities for Taxes and all other material information required to be reported thereon. All Taxes owed by the Company (whether or not shown on any Tax Return) have been timely paid except to the extent such Taxes are not yet due.

(ii) There is no action or audit currently proposed in writing, threatened in writing or pending against, or with respect to, the Company in respect of any Taxes. The Company has not extended the time within which to file any Tax Return which has not yet been filed. No written claim has ever been received from a Taxing Authority in a jurisdiction where the Company does not file Tax Returns that the Company is or may be subject to taxation by that jurisdiction or that it must file Tax Returns in such jurisdiction. There are no Liens on any of the assets or properties of the Company with respect to Taxes other than Permitted Liens.

(iii) The Company has withheld and timely paid all material Taxes required to have been withheld and paid by it.

(iv) The Company has not entered into any material Contract with a Taxing Authority with respect to Taxes.

(v) The Company is not a party to, a beneficiary of, or subject to any Tax allocation or sharing agreement.

(vi) The Company has been since inception and continues to be classified as "disregarded as an entity separate from its owner," within the meaning of Treasury regulation section 301.7701-3(a), for United States federal income Tax purposes.

(vii) Seller is not a foreign person within the meaning of Section 1445(f)(3) of the Code. The Company has not been a United States real

property holding corporation within the meaning of Section 897(c)(2) of the Code during the applicable period specified in Section 897(c)(1)(A)(ii) of the Code.

(h) Financial Statements; No Undisclosed Liabilities. The Company has provided to Southern (i) the audited consolidated financial statements of DSGH (including the consolidated balance sheet and the related consolidated statements of operations, members' equity and cash flows) as of and for the period ended December 31, 2018 and (ii) the unaudited consolidated financial statements of the Company (including the consolidated balance sheet and the related consolidated statements of operations, members' equity and cash flows) as of and for the period ended March 31, 2019, ((i) and (ii) collectively, the "Financial Statements"). The Financial Statements (A) have been prepared from the books and records of DSGH and the Company in accordance with GAAP (except as may be stated therein or in the notes thereto and subject to audit and year-end adjustments and the absence of footnotes) and (B) present fairly in all material respects the financial condition and results of operations of DSGH and the

Company, as applicable, as of the dates or for the periods set forth therein. The Company has no Liabilities except Liabilities (x) reflected, disclosed or reserved for in the Financial Statements, (y) which have arisen after March 31, 2019 in the Ordinary Course of Business or (z) incurred in connection with the transactions contemplated by this Agreement.

(i) Compliance with Laws.

(i) As of the date of this Agreement, other than Environmental Laws (which are addressed in Section 3.1(k)) and other than Tax matters (which are addressed in Section 3.1(g)), the Company is in compliance in all material respects with all Applicable Laws, and has not received written notice from a Governmental Authority of an actual or potential violation of any Applicable Laws.

(ii) As of the Effective Date and each Subsequent Funding Date, other than Environmental Laws (which are addressed in Section 3.1(k)) and other than Tax matters (which are addressed in Section 3.1(g)), the Company will be in compliance with all Applicable Laws other than such non-compliance that would not reasonably be expected to have a Material Adverse Effect, and none of them has received written notice from a Governmental Authority of an actual or potential violation of any Applicable Laws.

(j) Governmental Approvals and Filings. No Governmental Approval of or filing with any Governmental Authority for a Governmental Approval is required to be obtained or made by Bloom, DSGH or the Company for the execution, delivery and performance by Bloom, DSGH or the Company of any Transaction Document to which it is a party or the consummation of the transactions contemplated therein, other than (i) filings or approvals as set forth on Schedule 3.1(j) and (ii) any other Governmental Approval or filings that have been obtained or are ministerial in nature or can reasonably be expected to be obtained or made in the ordinary course on commercially reasonable terms and conditions when needed, and each such Governmental Approval that has been obtained and remains necessary is in full force and effect.

(k) Environmental Matters.

(i) As of the Effective Date, the Company is and at all times has been in compliance with all Environmental Laws, other than as set forth on Schedule 3.1(k), and (ii) none of Bloom, DSGH or the Company has received written notice from any Governmental Authority of an actual or potential violation of, or liability under, any Environmental Laws.

(ii) As of the Effective Date and each Subsequent Funding Date, (i) the Company is and at all times has been in compliance with all Environmental Laws, other than any failures to comply that would not reasonably be expected to have a Material Adverse Effect, and (ii) none of Bloom, DSGH or the Company has received written notice related to the Project from any Governmental Authority of an actual or potential violation of, or liability under, any Environmental Laws.

(l) Governmental Authorizations. Schedule 3.1(l) sets forth all material Government Approvals necessary for the construction, operation, ownership and maintenance of the Systems owned or to be acquired by the Company. There are no other Government Approvals necessary other than those that are ministerial in nature or can reasonably be expected to be obtained on commercially reasonable terms and conditions when needed.

(m) Insurance. Schedule 3.1(m) lists all of the insurance maintained by, or for the benefit of, the Company, all of which is valid and in full force and effect. None of Bloom, DSGH or the Company has taken any action that has rendered such insurance unenforceable.

(n) Real Property. The Company owns no fee simple real property. Schedule 3.1(n) lists all Site Leases and easements or rights of way for transmission lines from the Site Leases to the Interconnection Point (or Delivery Point (as defined in the QFCP-RC Tariff)), as applicable, with the PJM Grid and identifies any material reciprocal easement or operating agreements relating thereto. The Company has good and valid title to the leasehold estates in each Site, in each case free and clear of all Liens, except Permitted Liens. The Company has peaceful and undisturbed possession under all the Site Leases, such leases are valid and in full force and effect and binding and enforceable in accordance with their respective terms; and there is not, under any of such leases, any existing default, event of default or event which with notice or lapse of time or both would constitute a default. Except as set forth on Schedule 3.1(n), none of the rights of the Company under any of the Site Leases will be subject to termination or modification as a result of the consummation of the transactions contemplated by this Agreement.

(o) Personal Property. The Company does not own any material personal property other than the Existing Systems and the type of assets which the Company is expected to own or possess in order to perform under the Transaction Documents.

(p) Liens. All assets owned by the Company are free and clear of all Liens, other than Permitted Liens.

(q) Material Contracts. Schedule 3.1(q) lists all Material Contracts (other than the Transaction Documents) to which the Company is a party and each such Material Contract, and each Transaction Document, has not been amended, terminated or otherwise modified except as set forth on such schedule. Each Material Contract listed in Schedule 3.1(q), and each Transaction Document, is in full force and effect and is binding on Bloom, DSGH, the Company or their Affiliates and to Bloom's Knowledge, on any counterparties thereto other than Bloom, DSGH, the Company or their Affiliates, except as enforceability may be limited by applicable bankruptcy and similar laws affecting the enforcement of creditors' rights and general equitable principles. Except as shown on Schedule 3.1(q), none of Bloom, DSGH, the Company or their Affiliates and to Bloom's Knowledge, no counterparties thereto are in default respect under any Material Contract or any Transaction Document.

(r) QFCP- RC Tariff Notices. None of Bloom, DSGH or the Company has received any written notice from any Governmental Agency challenging or questioning the validity of the QFCP-RC Tariff.

(s) Employee Matters. The Company does not have any employees nor has the Company maintained, sponsored, administered or participated in any employee benefit plan or arrangement, including any employee benefit plan subject to ERISA.

(t) Affiliate Transactions. Except for the Transaction and Project Documents, there are no existing contracts, agreements, understandings, or commercial relationships between the Company, on the one hand, and Bloom, DSGH or any Affiliate of either one, on the other hand. The Company does not have any outstanding debt to an Affiliate thereof.

(u) Reserved.

(v) PUHCA.

(i) DSGH is a "holding company" under PUHCA solely with respect to its ownership of the Company and is not subject to, or is exempt from, and following the commencement of the generation of electric energy for sale by the New Systems, will not be subject to, or will be exempt from FERC access to books and records regulation pursuant to Section 366.3(a) of FERC's regulations under PUHCA.

(ii) The Company is not a "holding company" under PUHCA, and the Company is not, and, following the commencement of the generation of electric energy for sale by the New Systems, will not be subject to, regulation under PUHCA except with respect to regulations applicable to Exempt Wholesale Generators.

(w) State Utility Regulation. The Company is not subject to regulation as a "retail electricity supplier," an "electric supplier" or a "public utility'' under the laws of the State of Delaware.

(x) Acknowledgement. Bloom, DSGH and the Company acknowledge that, except with respect to the representations and warranties expressly made by Southern in this

Agreement and the Transaction Documents, Southern has not made any representations or warranties, either express or implied, under this Agreement or any of the other Transaction Documents or otherwise, nor has any of Bloom, DSGH or the Company relied on any representation or warranty not expressly made in this Agreement or the other Transaction Documents.

(y) Intellectual Property. Bloom has full legal title and ownership or right to use, the patents, patent rights, other patent applications, Governmental Authorizations, licenses, trade secrets, trademarks, trademark rights, service marks, trade names or trade name rights or franchises, domain names, copyrights, inventions and intellectual property rights (the "IP Rights") necessary to conduct its Systems-related business as now operated and the business proposed to be operated in connection with the Transaction Documents. Neither Bloom, DSGH nor the Company has any reason to believe, and neither Bloom nor any of its Affiliates has received any notice (which is material to Bloom's or its Affiliate' ability to perform their obligations under the Transaction Documents) that the conduct of its Systems-related business as now operated and the business proposed to be operated in connection with the Transaction Documents conflicts with, violates, infringes upon or misappropriates, or will conflict with, infringe upon or misappropriate, the valid IP Rights of any other Person.

(z) Disclosure. None of the statements, documents, certificates or other items prepared or supplied by Bloom, DSGH, the Company or any of their Affiliates with respect to the transactions contemplated hereby, taken as a whole, contains an untrue statement of a material fact or omits to state a material fact necessary to make the statements contained therein not misleading in light of the circumstances under which such statements were made.

(aa) Systems. As of the date on which a New System is delivered to the Company under the CapEx Agreement, none of the following activities has been completed with respect to such New System: (i) completion of critical tests necessary for proper operation of such System, (ii) synchronization of such System onto the electric distribution and transmission system of the relevant utility, and (iii) the commencement of daily operation of such System.

(bb) Related Company. Neither DSGH nor the Company is related to Delmarva Power & Light Company d/b/a Delmarva Power within the meaning of Code Section 267 or Code Section 707, except, as it relates to the Company, through Persons that have direct or indirect ownership in Southern.

3.2 Representations and Warranties of Southern.

Southern represents and warrants to DSGH as of the date hereof (except as specifically noted below) as follows:

(a) Organization, Good Standing, Etc. It is a limited liability company duly formed, validly existing and in good standing under the laws of the jurisdiction of its incorporation, and has the corporate power and authority to own, lease and operate its properties and to carry on its business as being conducted on the date hereof in each jurisdiction where the character of its property or nature of its activities makes such a qualification necessary.

(b) Authority. It has the limited liability power and authority to enter into the Transaction Documents to which it is a party, to perform its obligations under such agreements, and to consummate the transactions contemplated therein. The execution and delivery by it of each Transaction Document to which it is a party, and the consummation by it of the transactions contemplated thereunder, have been duly authorized by all necessary company action. Each such Transaction Document has been duly executed and delivered by it. This Agreement (assuming due authorization, execution and delivery by Bloom, DSGH and the Company) constitutes, and upon execution and delivery by Southern of the other Transaction Documents to which it is a party, the Transaction Documents will constitute, the valid and binding obligations of Southern, enforceable against it in accordance with their respective terms, subject as to enforceability to applicable bankruptcy, insolvency, reorganization, moratorium and similar laws affecting enforcement of creditors' rights and remedies generally and to general principles of equity (regardless of whether enforcement is sought in a proceeding at law or in equity).

(c) No Conflicts. The execution and delivery by Southern of the Transaction Documents to which it is a party do not, and the performance by it of its obligations under such agreements will not, (i) violate any Applicable Law, (ii) conflict with or cause a breach of any provision in the charter, bylaws or other organizational document of Southern, (iii) cause a breach of, constitute a default under, cause the acceleration of, create in any party the right to accelerate, terminate, modify or cancel, or require any authorization, consent, waiver or approval under any contract, license, instrument, decree, judgment or other arrangement to which Southern is a party or under which it is bound or to which any of its assets is subject (or result in the imposition of a Lien upon any such assets), except (in the case of clause (i) and (iii) of this Section 3.2(c) for any that would not reasonably be expected to have a material adverse effect on the ability of Southern to execute and deliver and perform its obligations under the Transaction Documents to which it is a party.

(d) Absence of Litigation. It is not subject to any outstanding injunction, judgment, order, decree, ruling or charge or, to Southern's Knowledge, is not threatened with being made a party to any action, suit, proceeding, hearing or investigation of, in, or before any Governmental Authority or before any arbitrator that would adversely affect its ability to complete the transactions contemplated in the Transaction Documents to which it is a party.

(e) Accredited Investor. It is an "Accredited Investor" as such term is defined in Regulation D under the Securities Act of 1933 as amended (the "Securities Act"). It has had a reasonable opportunity to ask questions of and receive answers from Bloom, DSGH and their Affiliates (other than Mehietia) concerning DSGH, the Class B Membership Interests and the Company. Southern understands that the Class B Membership Interests have not been registered under the Securities Act in reliance on an exemption therefrom, and that DSGH is under no obligation to register such membership interests. Southern will not sell, hypothecate or otherwise transfer such membership interests without registering or qualifying them under the Securities Act and applicable state securities laws or any other Applicable Laws unless the transfer is exempted from registration or qualification under such laws. Southern is acquiring the Class B Membership Interests for its own account and not for the account of any other Person and not with a view to distribution or resale to others.

(f) Information and Investment Intent. Southern recognizes that investment in the Class B Membership Interests involves substantial risks. It acknowledges that any financial projections that may have been provided to it are based on assumptions of future operating results based on assumptions about certain events (many of which are beyond the control of Bloom, DSGH or the Company). It understands that no assurances or representations can be given that the actual results of the operations of the Company will conform to the projected results for any period. Southern has relied solely on its own legal, tax and financial advisers for its evaluation of an investment in the Class B Membership Interests and not on the advice of Bloom, DSGH, the Company, their Affiliates or any of their respective legal, tax or financial advisers.

(g) Acknowledgement. Except with respect to the representations and warranties expressly made by Bloom in this Agreement or Bloom, DSGH, the Company or any of their Affiliates in the other Transaction Documents, Southern acknowledges that none of Bloom, DSGH, the Company or their Affiliates has made any representation or warranty, nor has Southern relied on any representation or warranty not expressly made in this Agreement or the other Transaction Documents.

(h) PUHCA. Prior to the Effective Date, it is not a holding company under PUHCA and following the Effective Date, if it is a holding company, it is a holding company solely by virtue of its ownership of one or more Exempt Wholesale Generators.

(i) FPA. Prior to the Effective Date, and continuing until such time as it becomes the Managing Member of the Company, it is not a "public utility" under the FPA.

(j) [Reserved.]

(k) Encumbrance on the Class B Membership Interests. As of the Effective Date, any security interest that has been granted with respect to the Class B Membership Interests by Southern will comply with the requirements of Section 9.5(b) of the LLC Agreement.

(l) Related Company. Southern is not related to Delmarva Power & Light Company d/b/a Delmarva Power within the meaning of Code Section 267 or Code Section 707.

ARTICLE 4
CERTAIN COVENANTS

4.1 Confidentiality. The confidentiality provisions contained in that certain Mutual Non-Disclosure Agreement dated June 5, 2018 (the "NDA") shall no longer be effective as of the Effective Date (other than with respect to any obligations of [*] which shall not be affected hereby), and, thereafter, the provisions of Section 11.12 of the LLC Agreement shall apply with respect to the confidentiality obligations of the Parties.

ARTICLE 5
CONDITIONS TO CLOSING

5.1 Conditions to the Obligations of Each Party. The respective obligations of each party to effect the transactions contemplated hereby are subject to the fulfillment or waiver by written consent of Bloom, DSGH and Southern, where permissible, at or prior to the Effective Date, of each of the following conditions:

(a) No preliminary or permanent governmental order, injunction or other order, decree or ruling issued by a court or other Governmental Authority of competent jurisdiction nor any statute, rule, regulation or executive order promulgated or enacted by any governmental agency of competent jurisdiction shall be in effect which would have the effect of (i) making the consummation of the transactions contemplated hereby illegal or (ii) otherwise prohibiting the consummation of the transactions contemplated hereby. In addition, there shall not be pending by any Governmental Authority any action that seeks to restrain or prevent the consummation of the transactions contemplated by this Agreement.

(b) The Company shall have received all of the consents from Governmental Authorities listed on Schedule 3.1(j).

(c) Since the date hereof, there shall not have occurred and be continuing any events that, individually or in the aggregate, have had or reasonably would be expected to have a Material Adverse Effect with respect to the Project or the Company.

5.2 Conditions Precedent to the Obligations of Southern on the Effective Date. The obligation of Southern to make the Initial Funding on the Effective Date will be subject to the satisfaction of each of the following conditions (any or all of which may be waived in whole or in part by Southern in its sole discretion):

(a) Southern has received fully executed copies of this Agreement, the other Transaction Documents, the LLC Agreement, the MOMA, the Administrative Services Agreement, the CapEx Agreement, the Repurchase Agreement and the [*];

(b) Southern has received fully executed copies of each of the Transaction Documents other than those set forth in clause 5.2(a), in and substance satisfactory to Southern, each of which shall be in the form attached hereto;

(c) Southern has received fully executed copies of all other Material Contracts not referenced Section 5.2(a) and Section 5.2(b), in form and substance satisfactory to Southern;

(d) Southern has received a legal opinion of (i) Morris James, LLP, as Delaware counsel to Bloom and DSGH, with respect certain state regulatory matters; and (ii) Orrick Herrington & Sutcliffe LLP as counsel to Bloom, DSGH and the Company with respect to constitutional matters concerning the QFCP-RC Tariff;

(e) Southern has received a letter from DPL regarding the continued applicability of the QFCP-RC Tariff following completion of the transactions contemplated by the Southern Tax Equity Documents, in a form substantially similar in form and substance to that certain draft letter received from DPL, dated September 14, 2018;

(f) Southern has received (i) from each of Bloom, DSGH and the Company (A) an incumbency certificate dated as of the date hereof, (B) a good standing certificate, dated no more than thirty (30) days prior to the date of this Agreement, from the applicable Secretary of State, (C) resolutions of the board of directors, or other equivalent governing and managing body, authorizing and approving the execution of this Agreement and each of the other Transaction Documents to which it is a party, and the transactions contemplated hereunder and thereunder, certified by a secretary or an assistant secretary as of the date hereof, and (D) formation documents certified by a secretary or an assistant secretary as of the date hereof and (ii) from an authorized officer of the Company, a certificate dated as of the date hereof to the effect that the conditions set forth in Sections 5.2(h), 5.2(i) and 5.2(j) have been satisfied;

(g) Southern has received evidence, in such form and substance as is reasonably acceptable to Southern, from holders of Indebtedness of the Company, that such Indebtedness has been satisfied in full and terminated and that all Encumbrances securing obligations under such Indebtedness have been, or concurrently with Closing are being, released, such that the Company shall not have any Indebtedness immediately subsequent to the Closing; and (2) none of the assets of the Company shall be subject to any Encumbrances as of the Closing, other than Permitted Encumbrances (not including for the purposes hereof, Encumbrances set forth in clause (c) of the definition of Permitted Encumbrance);

(h) Each of the representations and warranties of Bloom, DSGH or the Company or their Affiliates in this Agreement or any other Transaction Document shall be true and correct when made and on and as of the Effective Date as if made on and as of such time, except to the extent that any such representation or warranty shall have been expressly made only as of an earlier date in which case such representation and warranty was true and correct as of such earlier date;

(i) Each of Bloom, DSGH, the Company and their Affiliates shall have performed or complied in all material respects with all conditions, agreements and covenants required by this Agreement and the other Transaction Documents to be performed or complied with by it on or prior to the Effective Date;

(j) Each of Bloom, DSGH and the Company has received all necessary third party consents, waivers, authorizations and approvals in connection with the execution, delivery and performance of this Agreement and each of the Transaction Documents to which it is a party and the transactions contemplated hereunder and thereunder, each of which consents, waivers, authorizations and approvals have been required by Southern and are in such forms as reasonably satisfactory to Southern, and copies of the same have been delivered to Southern;

(k) Southern has received the Base Case Model and the Project Budget, each in form and substance satisfactory to Southern;

(l) Southern has received evidence that (i) the FERC 203 Application has been filed with FERC, and (ii) any filing regarding the reactive power for the Project has been filed;

(m) Southern has received a copy of the Independent Engineer Report (and, if not addressed to Southern, then a reliance letter in connection therewith) in form and substance

reasonably satisfactory to Southern, regarding (i) the technical aspects of the New Systems, and (ii) the maintenance program for the New Systems pursuant to the MOMA;

(n) The findings of Southern's customary due diligence review, including with respect to any environmental compliance issues, are reasonably satisfactory to Southern;

(o) None of Bloom, DSGH, the Company and the Project Company (i) has admitted in writing its inability to pay its debts generally as they become due, (ii) has filed a petition or answer seeking reorganization or arrangement under the federal bankruptcy laws or any other applicable law or statute of the United States of America or any State, district or territory thereof, (iii) has made an assignment for the benefit of creditors, (iv) has consented to the appointment of a receiver of the whole or any substantial part of its assets, (v) has had a petition in bankruptcy filed against it, (vi) has had a court of competent jurisdiction enter an order, judgment, or decree appointing a receiver of the whole or any substantial part of such entity's assets or (vii) has had, under the provisions of any other law for the relief or aid of debtors, any court of competent jurisdiction assume custody or control of the whole or any substantial part of such entity's assets;

(p) The Company (i) has entered into all PJM Agreements, DPL Agreements and all other agreements and made all filings and other arrangements necessary for the transmission, interconnection and delivery of the New Project's Energy to the PJM Grid and (ii) shall be a PJM member (or shall have contracted with a market participant in PJM to perform its PJM obligations and such market participant shall have entered into all required PJM Agreements and shall be in compliance therewith);

(q) The Company is an Exempt Wholesale Generator; and

(r) Southern has received consents and/or estoppel certificates from the landlords under the Red Lion Site Lease and the Brookside Site Lease.

5.3 Conditions Precedent to the Obligations of Bloom and DSGH on the Effective Date. The obligation of Bloom and DSGH to effect the transactions contemplated hereby will be subject to the satisfaction of each of the following conditions (any or all of which may be waived in whole or in part by Bloom and DSGH, each in its sole discretion):

(a) DSGH has received fully executed copies of this Agreement, the other Transaction Documents, the LLC Agreement, the MOMA, the Administrative Services Agreement, the CapEx Agreement, the Repurchase Agreement, and the Class B Member Guaranty;

(b) DSGH has received fully executed copies of each of the Transaction Documents other than those set forth in clause 2.5(a), in form and substance satisfactory to DSGH, each of which shall be in the form attached hereto;

(c) DSGH has received (i) from each of Southern and Class B Guarantor (A) an incumbency certificate dated as of the date hereof, (B) a good standing certificate, dated no more than thirty (30) days prior to the date of this Agreement, from the applicable Secretary of State, (C) resolutions of the board of directors, or other equivalent governing and managing body,

authorizing and approving the execution of this Agreement and each of the other Transaction Documents to which it is a party, and the transactions contemplated hereunder and thereunder, certified by a secretary or an assistant secretary as of the date hereof, and (D) formation documents certified by a secretary or an assistant secretary as of the date hereof and (ii) from an authorized officer of Southern and Class B Guarantor a certificate dated as of the date hereof to the effect that the conditions set forth in Sections 5.3(d) and 5.3(e) have been satisfied;

(d) Each of the representations and warranties of Southern or its Affiliates in this Agreement or any other Transaction Document shall be true and correct when made and on and as of the Effective Date as if made on and as of such time, except to the extent that any such representation or warranty shall have been expressly made only as of an earlier date in which case such representation and warranty was true and correct in all material respects as of such earlier date;

(e) Each of Southern and Class B Guarantor has received all necessary third party consents, waivers, authorizations and approvals in connection with the execution, delivery and performance of this Agreement and each of the Transaction Documents to which it is a party and the transactions contemplated hereunder and thereunder, each of which consents, waivers, authorizations and approvals is in form reasonably satisfactory to DSGH, and copies of the same have been delivered to DSGH.

ARTICLE 6
[RESERVED]

ARTICLE 7
INDEMNIFICATION

7.1 Indemnification.

(a) Bloom agrees to indemnify, defend and hold harmless the Class B Indemnified Parties from and against any and all Class B Indemnified Costs; provided, however, except with respect to Class B Indemnified Costs (i) resulting from fraud or willful misconduct, (ii) resulting from failure to pay any amount due to Class B Indemnified Parties under this Agreement or the LLC Agreement, or (iii) resulting from a Third Party Claim, in no event will Bloom's aggregate obligation (including any prior indemnity payments by Bloom under this Agreement or under the LLC Agreement) to indemnify the Class B Indemnified Parties hereunder exceed the total Capital Contributions made by the Class B Member as of the date this indemnification obligations arises. Southern agrees for itself and all Class B Indemnified Parties that the Bloom indemnification being provided hereunder is in lieu of an indemnity and any claim or right against the Class A Member and, by accepting the indemnity from Bloom under this Section 7.1(a) Southern and the Class B Indemnified Parties waive and release the Class A Member and its members (other than Bloom) from any liability of any kind under this Agreement.

(b) Southern agrees to indemnify, defend and hold harmless the Class A Indemnified Parties from and against any and all Class A Indemnified Costs; provided, however, except with respect to Class A Indemnified Costs (w) resulting from fraud or willful misconduct, (x) resulting from failure to pay any amount due to Class A Indemnified Parties under this Agreement

or the LLC Agreement, or (y) resulting from a Third Party Claim, in no event will Southern's aggregate obligation (including any prior indemnity payments by Southern under this Agreement or under the LLC Agreement) to indemnify the Class A Indemnified Parties hereunder exceed DSGH's initial Capital Account balance shown on Schedule 4.2(d) of the LLC Agreement.

(c) Bloom agrees to indemnify the Class B Indemnified Parties from and against any Tariff Damages. In the event that Bloom owes any indemnification obligations pursuant to this Section 7.1(c) and has failed to pay such amounts, the Class B Indemnified Parties may draw on the then remaining Tariff Damages Collateral maintained by DSGH pursuant to Section 11.15 of the LLC Agreement. For the avoidance of doubt, neither DSGH nor Mehetia (nor any of Mehetia's direct or indirect owners or any Affiliates of Mehetia or such owners) shall have any liability to Southern for any Tariff Damages except that Southern may draw on the then remaining Tariff Damages Collateral.

"Tariff Damages" means the amount necessary, if treated as a pre-tax cash distribution to Southern, for Southern to achieve an after-tax Southern IRR (as set forth in the Base Case Model) equal to [*]% based on an updated Base Case Model updating the most recently-updated Base Case Model agreed by the Parties pursuant to Section 2.7(a) of the CapEx Agreement and further updated solely to reflect (a) if the Tariff Event results in a reduction in the "Disbursement Rates" (as defined in the QFCP-RP Tariff or the corresponding figure in the Base Case Model) applicable to the New Systems pursuant to the Tariff, such reduced "Disbursement Rates", or (b) if the New Systems are thereafter ineligible for service under the Tariff, a "Disbursement Rate" equal to $0.00; provided, however, in no event shall "Tariff Damages" as of any date exceed the amounts set forth below, based on the date of the initial reduction in revenues to the Company (the "Tariff Damages Cap"):

Date	**Amount**
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]

If the initial reduction in revenue falls in between two of the dates above, the amount of Tariff Damages will be an amount in between the two corresponding amounts, pro rata based on the number of days from the first of the two applicable dates above to the date of the initial reduction in revenue.

Notwithstanding the foregoing, the Tariff Damages Cap shall be automatically and immediately reduced on a dollar-for-dollar basis by the amount of any payments received by the Class B Indemnified Parties pursuant to Section 7.1(c).

The parties acknowledge and agree that it would be impracticable or impossible to determine with precision the amount of damages resulting from a Tariff Event. It is therefore understood and agreed by the parties that: (a) the Class B Indemnified Parties may be damaged by a Tariff Event; (b) it would be impractical or impossible to fix the actual damages resulting therefrom; and (c) the amounts of the Tariff Damages are in the nature of liquidated damages, and not a penalty, and are fair and reasonable estimate of compensation for the losses that may reasonably be anticipated to incur by such failure. Bloom hereby (i) waives any argument that its failure to comply with its obligations set forth in this section would not cause irreparable harm, (ii) agrees that it shall be estopped from arguing the invalidity, or otherwise questioning the reasonableness, of the liquidated damages provided for herein, and (iii) agrees that it will consent to the entry of judgment ordering payment of such liquidated damages in any court of competent jurisdiction.

The foregoing indemnity is provided in place of and in lieu of all representations, warranties, covenants or other indemnities regarding the Tariff by the Company, Bloom or DSGH pursuant to this Agreement and the LLC Agreement. Further, neither the Company, DSGH, nor Bloom shall have any liability to Southern related to any Tariff Event except as expressly set forth in this Section 7.1(c) unless such Tariff Event results from any breach of an expressly-stated representation, warranty or covenant of such Party pursuant to any Transaction Document (other than this Agreement or the LLC Agreement), and any recovery pursuant to this Section 7.1(c) shall be included in the consideration of the applicable Class B Indemnified Party(ies)'s damages resulting from any such breach; provided, however, that neither DSGH nor Mehetia (nor any of Mehetia's direct or indirect owners or any Affiliates of Mehetia or such owners) shall have any liability to Southern for any Tariff Damages except that Southern may draw on the then remaining Tariff Damages Collateral.

(d) Bloom agrees to indemnify the Class B Indemnified Parties for any reduction of the Assumed Tax Benefits resulting from the fair market value of the New Systems, as reflected on Southern Company's originally filed federal income tax return for 2019, being lower than that shown in the Base Case Model (the "Assumed Tax Benefits Damages"), provided, however that (i) Bloom's indemnity obligation under this Section 7.1(d) shall not exceed the Tax Indemnity Cap, and (ii) Bloom's indemnity obligations under this Section 7.1(d) shall expire automatically and without further action by any Party on October 1, 2020. In the event that Bloom owes any indemnification obligations pursuant to this Section 7.1(d) and has failed to pay such amounts, the Class B Indemnified Parties may draw on the then remaining Assumed Tax Benefits Collateral maintained by DSGH pursuant to Section 11.16 of the LLC Agreement. For the avoidance of doubt, neither DSGH nor Mehetia (nor any of Mehetia's direct or indirect owners or any Affiliates of Mehetia or such owners) shall have any liability to Southern for any Assumed Tax Benefits Damages except that Southern may draw on the then remaining Assumed Tax Benefits Collateral.

"Assumed Tax Benefits" means the periodic assumed federal income tax reductions resulting from items of loss, deduction and credits, to be allocated to the Class B Indemnified Parties under the LLC Agreement, as reflected in the Base Case Model, calculated using the highest marginal rate in effect each year under Code Section 11(b)(1) and determined for all periods without regard

to whether the Class B Indemnified Parties have any income, gains, or tax liability against which it is permitted to offset such loss, deduction or credit.

"Tax Indemnity Cap" means $[*].

Southern agrees in connection with the process of determining fair market value of the New Systems as follows: (i) it will provide Bloom notice of any objections or adverse feedback from the Internal Revenue Service, (ii) it will provide Bloom with advance notice and opportunity to review and comment on any filings or communications between Southern and the Internal Revenue Service, (iii) it will include Marshall & Stevens in discussions with the Internal Revenue Service (as allowed by Bloom), and (iv) it will reasonably consider Bloom feedback. Southern's parent company will have sole discretion as to all contents of its income tax returns.

(e) Other than with respect to Indemnified Costs resulting from Third Party Claims, no claim for indemnification may be made with respect to any Indemnified Costs until the aggregate amount of such costs for which indemnification is (or previously has been) sought by the Indemnified Party under all Transaction Documents exceeds One Hundred Thousand Dollars ($100,000) and once such threshold amount of claim has been reached, the relevant Indemnified Party and its Affiliates shall have the right to be indemnified only to the extent the amount of Indemnified Costs claimed exceed such threshold amount. Claims for indemnification under this Agreement and the other Transaction Documents shall not be duplicative of one another and shall not allow for duplicative recoveries.

(f) At any time that the closing price for Bloom Common Stock on a national securities exchange is less than $[*][*], or if Bloom Common Stock is no longer traded on a national securities exchange, then Southern shall have the right to require, by written notice delivered to Bloom, that Bloom either (a) provide supplemental Tariff Damages Collateral in the amount of the difference between the then-applicable Tariff Damages and the Tariff Damages Collateral then-available to Southern pursuant to the LLC Agreement, or (b) make a payment to Southern in the amount of such difference. Bloom shall either provide such supplemental Tariff Damages Collateral or make such cash payment (such decision to be made at Bloom's sole discretion) within eight (8) Business Days of its receipt of such notice.

(g) In the event that the [*], then within ten (10) Business Days Bloom will increase the amount of the Tariff Damages Collateral to equal [*].

7.2 Direct Claims.

In any case in which an Indemnified Party seeks indemnification under Section 7.1 that is not subject to Section 7.3 because no Third Party Claim is involved, the Indemnified Party shall promptly notify the Indemnifying Party in writing of any amounts that the Indemnified Party claims are subject to indemnification under the terms of this Article 7. The failure of the Indemnified Party to exercise promptness in such notification shall not amount to a waiver of such claim, except to the extent the resulting delay materially and adversely prejudices the position of the Indemnifying Party with respect to such claim.

7.3 Third Party Claims.

An Indemnified Party shall give written notice to the Indemnifying Party promptly after it has actual knowledge of commencement or assertion of any Third Party Claim in respect of which the Indemnified Party may seek indemnification under Section 7.1. Such notice shall state the nature and basis of such Third Party Claim and the events and the amounts thereof to the extent known. Any failure to so notify the Indemnifying Party shall not relieve the Indemnifying Party from any liability that the Indemnifying Party may have to the Indemnified Party under this Article 7, except to the extent the failure to give such notice materially and adversely prejudices the Indemnifying Party. In case any such action, proceeding or claim is brought against an Indemnified Party, so long as it has acknowledged in writing to the Indemnified Party that it is liable for such Third Party Claim pursuant to this Section 7.3, the Indemnifying Party shall be entitled to participate in and, unless in the reasonable judgment of the Indemnified Party a conflict of interests between it and the Indemnifying Party may exist in respect of such Third Party Claim or such Third Party Claim is a Third Party Penalty Claim, to assume the defense thereof, with counsel selected by the Indemnifying Party and reasonably satisfactory to the Indemnified Party, and after notice from the Indemnifying Party to the Indemnified Party of its election so to assume the defense thereof, the Indemnifying Party shall not be liable to the Indemnified Party for any legal or other expenses subsequently incurred by the latter in connection with the defense thereof other than reasonable costs of investigation or defending such portion of such Third Party Penalty Claim; provided nothing contained herein shall permit DSGH to control or participate in any Tax contest or dispute involving Southern or any Affiliate of Southern, or permit Southern to control or participate in any Tax contest or dispute involving any Affiliate of DSGH other than the Company; and, provided, further, the Parties agree that the handling of any Tax contests involving the Company will be governed by Section 7.7 of the LLC Agreement. In the event that (i) the Indemnifying Party advises an Indemnified Party that the Indemnifying Party will not contest a claim for indemnification hereunder, (ii) the Indemnifying Party fails, within thirty (30) days of receipt of any indemnification notice to notify, in writing, such Indemnified Party of its election, to defend, settle or compromise, at its sole cost and expense, any such Third Party Claim (or discontinues its defense at any time after it commences such defense) or (iii) in the reasonable judgment of the Indemnified Party, a conflict of interests between it and the Indemnifying Party exists in respect of such Third Party Claim or the action or claim is a Third Party Penalty Claim, then the Indemnified Party may, at its option, defend, settle or otherwise compromise or pay such action or claim or Third Party Claim in each case, at the sole cost and expense of the Indemnifying Party. In any event, unless and until the Indemnifying Party elects in writing to assume and does so assume the defense of any such claim, proceeding or action, the Indemnifying Party shall be liable for the Indemnified Party's reasonable costs and expenses arising out of the defense, settlement or compromise of any such action, claim or proceeding. The Indemnified Party shall cooperate to the extent commercially reasonable with the Indemnifying Party in connection with any negotiation or defense of any such action or claim by the Indemnifying Party. The Indemnifying Party shall keep the Indemnified Party fully apprised at all times as to the status of the defense or any settlement negotiations with respect thereto. If the Indemnifying Party elects to defend any such action or claim, then the Indemnified Party shall be entitled to participate in such defense with counsel of its choice at its sole cost and expense unless otherwise specified herein; provided that any such participation of the Indemnified Party shall be at the Indemnifying Party's sole cost and expense to the extent such participation relates to a Third

Party Penalty Claim. If the Indemnifying Party does not assume such defense, the Indemnified Party shall keep the Indemnifying Party apprised at all times as to the status of the defense; provided, however, that the failure to keep the Indemnifying Party so informed shall not affect the obligations of the Indemnifying Party hereunder. The Indemnifying Party shall not be liable for any settlement of any action, claim or proceeding effected without its written consent; provided, however, that the Indemnifying Party shall not unreasonably withhold, delay or condition any such consent. Notwithstanding anything in this Section 7.3 to the contrary, the Indemnifying Party shall not, without the Indemnified Party's prior written consent, (x) settle or compromise any claim or consent to entry of judgment in respect thereof which involves any condition other than payment of money by the Indemnified Party, (y) settle or compromise any claim or consent to entry of judgment in respect thereof without first demonstrating to the Indemnified Party the ability to pay such claim or judgment, or (z) settle or compromise any claim or consent to entry of judgment in respect thereof that does not include, as an unconditional term thereof, the giving by the claimant or the plaintiff to the Indemnified Party, a full and complete release from all liability in respect of such claim.

7.4 No Duplication.

Any liability for indemnification under this Article 7 shall be determined without duplication of recovery. Without limiting the generality of the prior sentence, if a statement of facts, condition or event constitutes a breach of more than one representation, warranty, covenant or agreement which is subject to the indemnification obligation in Section 7.1, only one recovery of Indemnified Costs per Indemnified Party shall be allowed.

7.5 Sole Remedy.

Except in the case of fraud, willful misconduct or failure to pay, and except for claims brought under the CapEx Agreement, the MOMA and Article IX of the LLC Agreement, the enforcement of the claims of the Parties under this Article 7 are the sole and exclusive remedies that a Party shall have under this Agreement for the recovery of Indemnified Costs; provided, however, that notwithstanding anything to the contrary in this Agreement, each Party hereby reserves all equitable remedies.

7.6 Survival.

All representations, warranties, covenants and obligations made or undertaken by a Party in this Agreement or in any other Transaction Document are material, have been relied upon by the other Parties and shall survive until the final date for any assertion of claims as forth in Section 7.7, if and as applicable, or as otherwise provided in the Transaction Documents.

7.7 Final Date for Assertion of Indemnity Claims.

All claims by an Indemnified Party for indemnification pursuant to this Article 7 resulting from breaches of representations or warranties in Section 3.1 and Section 3.2 shall be forever barred unless the other party is notified within eighteen (18) months after the final Subsequent Funding Date; provided, that notwithstanding the foregoing, the representations in Section 3.1(g), and Section 3.1(k) shall survive until that date which is sixty (60) days after the applicable statute

of limitations expires and the representations in Section 3.1(a), Section 3.1(b), Section 3.1(e) and Section 3.1(f) shall survive indefinitely; and provided further that if written notice of a claim for indemnification has been given by an Indemnified Party on or prior to the last day of the respective foregoing period, then the obligation of the other party to indemnify such Indemnified Party pursuant to this Article 7 shall survive with respect to such claim until such claim is finally resolved.

7.8 Mitigation and Limitations on Indemnified Costs. Notwithstanding anything to the contrary contained herein:

(a) Reasonable Steps to Mitigate. Each Indemnified Party will take, at the Indemnifying Party's own reasonable cost and expense, all reasonable commercial steps identified by Indemnifying Party to the Indemnified Parties to mitigate all Indemnified Costs (other than any such Indemnified Costs that are Taxes), which steps may include availing itself of any defenses, limitations, rights of contribution, claims against third Persons and other rights at law or equity. The Indemnified Parties will provide such evidence and documentation of the nature and extent of the Indemnified Costs as may be reasonably requested by the Indemnifying Party.

(b) Net of Insurance Benefits. All Indemnified Costs shall be net of insurance recoveries from insurance policies of the Company (including under the existing title policies) to the extent that any proceeds of such policies, less any costs, expenses or premiums incurred by the Company in connection therewith, are distributed by the Company to the Indemnified Party; provided, however, such amount shall account for any costs or expenses incurred by the Indemnified Party in connection with obtaining insurance proceeds with respect to any breach or nonperformance hereunder.

(c) No Consequential Damages. Indemnified Costs shall not include, and an Indemnifying Party shall have no obligation to indemnify any Indemnified Party for or in respect of, any punitive, consequential or exemplary damages of any nature including but not limited to damages for lost profits or revenues or the loss or use of such profits or revenue, loss by reason of plant shutdown or inability to operate at rated capacity, increased operating expenses of plant or equipment, increased costs of purchasing or providing equipment, materials, labor, services, costs of replacement, power or capital, debt service fees or penalties, inventory or use charges, damages to reputation, damages for lost opportunities, or claims of the Company's customers, members or affiliates, regardless of whether said claim is based upon contract, warranty, tort (including negligence and strict liability) or other theory of law unless payable by such Indemnified Party as part of a Third Party Claim; provided, however, that the lost profits or revenues (and the loss or use thereof) language set forth in this Section 7.8(c) shall not be interpreted to exclude from Indemnified Costs any damages, losses, claims, liabilities, demands charges, suits, Taxes, penalties, costs or expenses that would otherwise be included within the definition of Indemnified Costs because they result from a reduction in the profits of the Project Company, the Company, or both.

7.9 Payment of Indemnification Claims.

All claims for indemnification shall be paid by Indemnifying Party in immediately available funds in U.S. dollars. Any undisputed portion of an indemnification claim shall be paid promptly by the Indemnifying Party to the Indemnified Parties involved. An Indemnifying Party

may dispute any portion of an indemnification claim, provided, however, that such disputed indemnification claim shall be paid promptly by the Indemnifying Party to the Indemnified Party together with interest at a market rate upon the final determination of the payable amount of the claim (if any) by a court of competent jurisdiction.

7.10 Repayment; Subrogation.

If the amount of any Indemnified Costs, at any time after the making of an indemnity payment in respect thereof, is reduced by recovery, settlement or otherwise under any insurance coverage (excluding any proceeds from self-insurance or flow through insurance policies) or under any claim, recovery, settlement or payment by or against any other entity, the amount of such reduction, less any costs, expenses or premiums incurred in connection therewith, must promptly be repaid by the Indemnified Party to the Indemnifying Party net of any Taxes imposed upon the Indemnified Party in respect of such amounts, but taking into account any Tax benefit the Indemnified Party receives as a result of such repayment. Upon making any indemnity payment (other than any indemnity payment relating to Taxes), the Indemnifying Party will, to the extent of such indemnity payment, be subrogated to all rights of the Indemnified Party against any third party, except third parties that provide insurance coverage to the Indemnified Party or its Affiliates, in respect of the Indemnified Costs to which the indemnity payment relates. Without limiting the generality or effect of any other provision hereof, each such indemnified Party and the Indemnifying Party shall duly execute upon request all instruments reasonably necessary to evidence and perfect the above described subrogation rights, and otherwise cooperate in the prosecution of such claims at the direction of the Indemnifying Party. Nothing in this Section 7.10 will be construed to require any Party to obtain or maintain any insurance coverage.

ARTICLE 8
GENERAL PROVISIONS

8.1 Exhibits and Schedules. All Exhibits and Schedules are incorporated herein by reference.

8.2 Disclosure Schedules.

Any matter disclosed in any section of the Schedules shall be deemed disclosed for all purposes and all sections of the Schedules to the extent it is readily apparent from a reading of the disclosure that such disclosure is applicable to such other sections.

8.3 Amendment, Modification and Waiver.

This Agreement may not be amended or modified except by an instrument in writing signed by each of the Parties to this Agreement. Any failure of Bloom or DSGH to comply with any obligation, covenant, agreement, or condition contained herein may be waived only if set forth in an instrument in writing signed by Southern, and any failure of Southern to comply with any obligation, covenant, agreement or condition contained herein may be waived only if set forth in an instrument in writing signed by Bloom and DSGH, but any such waiver or failure to insist upon

strict compliance with such obligation, covenant, agreement or condition shall not operate as a waiver of, or estoppel with respect to, any other failure.

8.4 Severability.

If any term or other provision of this Agreement is invalid, illegal, or incapable of being enforced by any rule of Applicable Law, or public policy, all other conditions and provisions of this Agreement shall nevertheless remain in full force and effect so long as the economic or legal substance of the transactions contemplated herein are not affected in any manner materially adverse to any Party.

8.5 Expenses.

Bloom and DSGH, on one hand, and Southern, on the other hand, will be responsible for paying all of their own respective reasonable legal and consultants' costs, fees and expenses incurred by itself and its Affiliates in connection with the transactions contemplated by this Agreement and the other Transaction Documents in connection with the execution thereof and any Funding.

8.6 Parties in Interest.

This Agreement shall be binding upon and, except as provided below, inure solely to the benefit of each Party and their successors and assigns, and nothing in this Agreement, express or implied, is intended to confer upon any other Person (other than the Indemnified Parties as provided in Article 6) any rights or remedies of any nature whatsoever under or by reason of this Agreement.

8.7 Notices.

All notices and other communications hereunder shall be in writing and shall be deemed given if delivered personally, by a nationally recognized overnight courier, by facsimile, or mailed by registered or certified mail (return receipt requested) to the Parties at the following addresses (or at such other address for a Party as shall be specified by like notice):

(a) If to DSGH, to:

Diamond State Generation Holdings, LLC
c/o Bloom Energy Corporation
4353 N. 1st Street
San Jose, CA 95134
Attention: [*]
Telephone: [*]

(b) If to the Company, to:

Diamond State Generation Partners, LLC

c/o Bloom Energy Corporation
4353 N. 1st Street
San Jose, CA 95134
Attention: [*]
Telephone: [*]

(c) If to Southern, to:

Southern Power Company
30 Ivan Allen Jr. Blvd., NW
Bin SC 1108
Atlanta, GA 30308
Attention: [*]J
Attention: [*]
E-mail: [*][*]
Telephone: [*]

and:

Smith, Anderson, Blount, Dorsett,
Mitchell & Jernigan, L.L.P.
150 Fayetteville Street, Suite 2300
Raleigh, NC 27601
Attention: [*]
Telephone: [*]
Email: [*]

Unless otherwise provided herein, any offer, acceptance, election, approval, consent, certification, request, waiver, notice or other communication required or permitted to be given hereunder (collectively referred to as a "Notice"), shall be in writing and delivered (i) in person, (ii) by registered or certified mail with postage prepaid and return receipt requested, (iii) by recognized overnight courier service with charges prepaid or (iv) by facsimile transmission, directed to the intended recipient at the address of such Member listed in this Section 8.7 or at such other address as any Member hereafter may designate to the others in accordance with a Notice under this Section 8.7. A Notice or other communication will be deemed delivered on the earliest to occur of (a) its actual receipt when delivered in person, (b) the fifth (5th) Business Day following its deposit in registered or certified mail, with postage prepaid, and return receipt requested, (c) the second (2nd) Business Day following its deposit with a recognized overnight courier service, or (d) the date of receipt of a facsimile or, if such date of receipt is not a Business Day, the next Business Day following such date of receipt, provided the sender can and does provide evidence of successful transmission. Any Notice or other communication received on a day that is not a Business Day or later than 5:00 p.m. on a Business Day shall be deemed to be received on the next Business Day.

8.8 Counterparts.

This Agreement may be executed and delivered (including by facsimile transmission or "portable document format") in one or more counterparts, all of which shall be considered one and the same agreement and shall become effective when one or more counterparts have been signed by each of the Parties and delivered to the other Party, it being understood that all Parties need not sign the same counterpart. Signatures of the Parties transmitted by facsimile or electronic mail shall be deemed to be their original signatures for all purposes.

8.9 Entire Agreement.

This Agreement (together with the other Transaction Documents) constitutes the entire agreement of the Parties and supersedes all prior agreements, letters of intent and understandings, both written and oral, among the Parties with respect to the subject matter hereof.

8.10 Governing Law; Choice of Forum; Waiver of Jury Trial.

THIS AGREEMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK, AS THEY APPLY TO CONTRACTS PERFORMED IN THAT STATE, WITHOUT REGARD TO PRINCIPLES OF CONFLICTS OF LAW (OTHER THAN SECTION 5-1401 OF THE NEW YORK GENERAL OBLIGATIONS LAW, WHICH SHALL APPLY TO THIS AGREEMENT). THE PARTIES HEREBY IRREVOCABLY SUBMIT TO THE EXCLUSIVE JURISDICTION OF ANY STATE OR FEDERAL COURT IN NEW YORK COUNTY, NEW YORK WITH RESPECT TO ANY ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO THIS AGREEMENT. EACH PARTY IRREVOCABLY AND UNCONDITIONALLY WAIVES TRIAL BY JURY IN ANY ACTION, SUIT OR PROCEEDING RELATING TO A DISPUTE AND FOR ANY COUNTERCLAIM WITH RESPECT THERETO.

8.11 Public Announcements.

Except for statements made or press releases issued (i) pursuant to the Securities Act or the Securities Exchange Act of 1934, (ii) pursuant to any listing agreement with any national securities exchange or the Financial Industry Regulatory Authority, Inc., or other regulatory authority or self-regulatory authority, or (iii) as otherwise required by Applicable Law, neither DSGH nor Southern shall issue, or permit any of their respective Affiliates to issue, any press release or otherwise make any public statements with respect to this Agreement or the transactions contemplated hereby without the prior written consent of the other Parties. Subject to any requirements of Applicable Law, DSGH and Southern will be given the opportunity to review in advance, upon the request of DSGH or Southern, as the case may be, all information relating to the transactions contemplated by the Transaction Documents that appear in any filing made in connection with the transactions contemplated hereby or thereby, other than any filing to be made by Southern to a regulator thereof.

8.12 Assignment.

This Agreement and all of the provisions hereof will be binding upon and inure to the benefit of the Parties and their respective successors and permitted assigns. This Agreement may only be assigned to the same extent (and only by and to the same Persons) that membership interests in the Company are assignable pursuant to the terms of the LLC Agreement. Any attempted assignment of this Agreement other than in strict accordance with this section and the terms of the LLC Agreement shall be null and void ab initio and of no force or effect.

8.13 Relationship of Parties.

This Agreement does not constitute a joint venture, association or partnership among the Parties. No express or implied term, provision or condition of this Agreement shall create, or shall be deemed to create, an agency, joint venture, partnership or any fiduciary relationship among the Parties.

[Remainder of page intentionally left blank. Signature pages to follow.]

IN WITNESS WHEREOF, each Party has caused this Equity Capital Contribution Agreement to be signed on its behalf as of the date first written above.

DIAMOND STATE GENERATION HOLDINGS, LLC

By: /s/ Tim Gray
Name: Tim Gray
Title: Vice President

DIAMOND STATE GENERATION PARTNERS, LLC

By: Diamond State Generation Holdings, LLC

Its: Manager

By: /s/ Tim Gray
Name: Tim Gray
Title: Vice President

[Signature Page to the Equity Capital Contribution Agreement - Diamond State Generation Partners, LLC]

SP DIAMOND STATE CLASS B HOLDINGS, LLC

By: _____
Name:
Title:

[Signature Page to the Equity Capital Contribution Agreement - Diamond State Generation Partners, LLC]

Solely with respect to Section 3.1 and Article 7 and Article 8
BLOOM ENERGY CORPORATION

By: /s/ Dean Boles
Name: Dean Boles
Title: Corporate Controller

[Signature Page to the Equity Capital Contribution Agreement - Diamond State Generation Partners, LLC]

EXHIBIT A

INITIAL FLOW OF FUNDS MEMORANDUM

EXHIBIT B

FORM OF FUNDING NOTICE

To: **SP DIAMOND STATE CLASS B HOLDINGS, LLC ("SOUTHERN")**

This Funding Notice, dated _____, 20_, is given pursuant to Section 2.2(b) of the Equity Capital Contribution Agreement ("ECCA") between DIAMOND STATE GENERATION HOLDINGS, LLC ("DSGH"), DIAMOND STATE GENERATION PARTNERS, LLC (the "Company"), BLOOM ENERGY CORPORATION, and SP DIAMOND STATE CLASS B HOLDINGS, LLC ("Southern") dated June 14, 2019. Terms defined in the ECCA have the same meaning where used in this Funding Notice.

The Company hereby notifies Southern that, in connection with the Funding Date occurring on _____, 20__, Southern shall be obligated to make the Monthly Contribution payments to the Company for all amounts set forth in the Monthly Payment Notice issued pursuant to Section 2.5(c) of the CapEx Agreement in the aggregate amount of $_____.

Included with this Funding Notice is the applicable Monthly Payment Notice referenced above.

The Company hereby certifies that each of the applicable conditions set forth in Section 2.5(a) of the ECCA have been, and remain, satisfied as of the date of this Funding Notice.

This Funding Notice may be relied upon by Southern.

Signed for and on behalf of DIAMOND STATE GENERATION PARTNERS, LLC

By: _____

Name:

Title:

Attachment A Funding Notice

Monthly Payment Notice

REDACTED EXHIBIT: This Exhibit contains certain identified information that has been excluded because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed. Redacted information is identified by [*].

THIRD AMENDED AND RESTATED

LIMITED LIABILITY COMPANY AGREEMENT

OF

DIAMOND STATE GENERATION HOLDINGS, LLC

dated as of June 14, 2019

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THIRD AMENDED AND RESTATED
LIMITED LIABILITY COMPANY AGREEMENT
OF
DIAMOND STATE GENERATION HOLDINGS, LLC

Third Amended and Restated Limited Liability Company Agreement of Diamond State Generation Holdings, LLC, a Delaware limited liability company (the "Company"), dated as of June 14, 2019 by and among Clean Technologies II, LLC, a Delaware limited liability company ("Clean Technologies") and Mehetia Inc., a Delaware corporation ("Mehetia").

Preliminary Statements

WHEREAS, the Company was formed by virtue of its certificate of formation filed with the Secretary of State of the State of Delaware on July 20, 2011 (the "Certificate of Formation"), and, prior to March 20, 2013, had been governed by the Amended and Restated Limited Liability Company Agreement of the Company, dated as of April 13, 2012 (the "Original Date"), executed by Clean Technologies and Mehetia as the members of the Company (the "2012 Operating Agreement");

WHEREAS, pursuant to the Equity Capital Contribution Agreement among the Company, the Project Company, Clean Technologies and Mehetia, dated as of March 16, 2012 (as amended, amended and restated, supplemented or modified, the "ECCA"), Clean Technologies made a capital contribution to the Company on or before the Initial Funding Date, and Mehetia made a capital contribution to the Company in return for the issuance of Class B Membership Interests in the Company on the Initial Funding Date, subject to the terms and conditions as provided therein;

WHEREAS, Clean Technologies and Mehetia entered into that certain Second Amended and Restated Limited Liability Company Agreement of the Company dated as of March 20, 2013, which was amended by Clean Technologies and Mehetia as of September 25, 2013 (as amended, the "2013 Operating Agreement");

WHEREAS, immediately prior to the Effective Date, the Company owned 100% of the issued and outstanding membership interests in Diamond State Generation Partners, LLC (the "Project Company"), which owns a portfolio of Existing Systems at the Brookside Site and the Red Lion Site having an aggregate nameplate capacity of 30 MW operated in accordance with the Tariffs and the REPS Act (collectively, the "Portfolio" or the "Project");

WHEREAS, Bloom desires to purchase from the Project Company up to all of the 30MW of Existing Systems pursuant to the terms and conditions of, *inter alia*, a Repurchase Agreement by and between the Project Company and Bloom (the "Repurchase Agreement"), and replace such Existing Systems with New Systems; and

WHEREAS, Clean Technologies and Mehetia desire for the 2013 Operating Agreement to be amended and restated in its entirety as stated herein.

NOW, THEREFORE, in consideration of the mutual covenants and agreements contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree, notwithstanding any contrary provision of the 2013 Operating Agreement, effective as of the date hereof, that the 2013 Operating Agreement is amended and restated in its entirety as described herein.

Article I
DEFINITIONS

Section 1.1 DefinitionsCapitalized terms used but not otherwise defined in this Agreement have the meanings given to such terms in Annex I.

ARTICLE II
CONTINUATION; OFFICES; TERM

Section 2.1 Continuation of the CompanyThe Members hereby acknowledge the continuation of the Company as a limited liability company pursuant to the Act, the Certificate of Formation and this Agreement.

Section 2.2 Name, Office and Registered Agent

(a) The name of the Company will be "Diamond State Generation Holdings, LLC" or such other name or names as complies with law and may be determined by the Managing Member from time to time and notified to the Members. The principal office of the Company shall be located at 4353 N. 1ST Street, San Jose, California 95134. The Managing Member may change the location of the principal office of the Company to another location, provided that the Managing Member gives prompt written notice of any such change to the registered agent of the Company and all Members.

(b) The registered office of the Company in the State of Delaware is located at c/o Corporation Service Company, 2711 Centerville Road, Suite 400, Wilmington, Delaware 19808. The registered agent of the Company for service of process at such address is Corporation Service Company. The registered office and registered agent may be changed by the Managing Member at any time in accordance with the Act, provided that the Managing Member gives prompt written notice of any such change to all Members. The registered agent's primary duty as such is to forward to the Company at its principal office and place of business any notice that is served on it as registered agent.

Section 2.3 PurposeThe nature of the business or purpose to be conducted or promoted by the Company is: (i) to acquire, own, hold or dispose of the membership interests in the Project Company; (ii) to engage in the transactions contemplated by the Transaction Documents; (iii) to engage, through the Project Company, in the operation of the Systems, and the repurchase, removal and Shutdown of the Existing Systems, in each case in accordance with the Transaction Documents; (iv) to engage, through the Project Company, in the business of generating and delivering to the PJM Grid, electricity, capacity, ancillary services and environmental attributes from the Systems in accordance with the Transaction Documents; and (v) to engage in any lawful act or activity, enter into any agreement and to exercise any powers permitted to limited liability companies organized under the Act in each case that are incidental to or necessary, suitable or convenient for the accomplishment of the purposes specified above.

Section 2.4 Term The term of the Company commenced on July 20, 2011 and shall continue until the Company is dissolved in accordance with the terms hereof or as otherwise provided by law (the "LLC Agreement Termination Date").

Section 2.5 Organizational and Fictitious Name Filings; Preservation of Limited Liability The Managing Member shall cause the Company to register as a foreign limited liability company and file such fictitious or trade names, statements or certificates in such jurisdictions and offices as are necessary or appropriate for the conduct of the Company's operation of its business. The Managing Member may take any and all other actions as may be reasonably necessary or appropriate to perfect and maintain the status of the Company as a limited liability company or similar type of entity under the laws of Delaware and any other state or jurisdiction other than Delaware in which the Company engages in business and continue the Company as a limited liability company and to protect the limited liability of the Members as contemplated by the Act.

Section 2.6 No Partnership Intended The Members intend that the Company not be a partnership, limited partnership, joint venture or other arrangement other than for tax purposes under the Code, the applicable Treasury Regulations and any state, municipal or other income tax law or regulation, and this Agreement shall not be construed to suggest otherwise.

ARTICLE III
RIGHTS AND OBLIGATIONS OF THE MEMBERS

Section 3.1 Membership Interests

(a) The Membership Interests comprise 9,505 Class A Membership Interests, all of which are issued and held by Clean Technologies, and 495 Class B Membership Interests, all of which are issued and held by Mehetia.

(b) The Class A Membership Interests and the Class B Membership Interests shall (i) have the rights and obligations ascribed to such Membership Interests in this Agreement and the Act; (ii) be evidenced solely by certificates in the forms annexed hereto as Exhibit A and Exhibit B, respectively, or such other form as may be prescribed from time to time by any Legal Requirements; provided, that certificates evidencing the Class A Membership Interests and the Class B Membership Interests which were issued in the forms annexed to the 2012 Operating Agreement or the 2013 Operating Agreement prior to the date hereof shall continue to be valid; (iii) be recorded in a register of Membership Interests, which register the Managing Member shall maintain; (iv) be transferable only on recordation of such Transfer in the register of Membership Interest, which recordation the Managing Member shall make, upon compliance with the provisions of Article IX hereof and upon presentation of the certificates duly endorsed for Transfer, or accompanied by assignment documentation in accordance with Article IX; (v) be "securities" governed by Article 8 of the UCC in any jurisdiction (x) that has adopted revisions to Article 8 of the UCC substantially consistent with the 1994 revisions to Article 8 adopted by

the American Law Institute and the National Conference of Commissioners on Uniform State Laws and (y) whose laws may be applicable, from time to time, to the issues of perfection, the effect of perfection or non-perfection, and the priority of a security interest in Membership Interests in the Company; and (vi) be personal property.

(c) The Company shall be entitled to treat the registered holder of a Membership Interest, as shown in the register of Membership Interests referred to in Section 3.1(b), as the Member for all purposes of this Agreement, except that the Managing Member may record in the register of Membership Interest any security interest of a secured party pursuant to any security interest permitted by this Agreement.

(d) If a Member transfers all of its Membership Interest to another Person pursuant to and in accordance with the terms in Article IX, the transferor shall automatically cease to be a Member.

Section 3.2 Actions by the Members

(a) Except as otherwise permitted by this Agreement (including Section 3.2(e) below), all actions of the Members shall be taken at meetings of the Members which may be called by any Member for any reason and shall be called by the Managing Member within 10 days following the written request of a Member. The Members may conduct any Company business at any such meeting that is permitted under the Act or this Agreement. Meetings shall be at a reasonable time and place. Accurate minutes of any meeting shall be taken and filed with the minute books of the Company. Following each meeting, the minutes of the meeting shall be sent promptly to each Member.

(b) Members may participate in any meeting of the Members by means of conference telephone or other communications equipment so that all persons participating in the meeting can hear each other or by any other means permitted by law. Such participation shall constitute presence in person at such meeting.

(c) The presence in person or by proxy of Members owning more than 50% of the aggregate Class A Membership Interests and more than 50% of the aggregate Class B Membership Interests shall constitute a quorum for purposes of transacting business at any meeting of the Members; provided that, in the event that a quorum is not present or otherwise represented at a meeting of the Members duly called in accordance with this Section 3.2, the Members present at such meeting shall have the power to adjourn such meeting and to call another meeting no fewer than 10 days nor more than 15 days from such meeting (and notice thereof shall be promptly provided to all Members by the Managing Member) and the Members present at such second meeting shall constitute a quorum. For the avoidance of doubt, no Major Decision shall be agreed at any meeting, or otherwise taken, without a Class Majority Vote and no Investor Decision may be taken without the prior written consent of Mehetia or implemented without the direction of Mehetia, in each case pursuant to Section 8.4.

(d) Written notice stating the place, day and hour of the meeting of the Members, and the purpose or purposes for which the meeting is called, shall be delivered by or at the direction of the Managing Member or of the Member calling such meeting, to each Member of record entitled to vote at such meeting not less than five Business Days nor more than 30 days prior to the meeting. Notwithstanding the foregoing, meetings of the Members may be held without notice so long as all the Members are present in person or by proxy.

(e) Any action may be taken by the Members without a meeting if such action is authorized or approved by the written consent of Members representing sufficient Membership Interests to authorize or approve such action pursuant to this Agreement. The Members may conduct any Company business or take any action required of Members under this Agreement through written consent. Where action is authorized by written consent, including any Investor Decision, no prior notice is required and no meeting of Members needs to be called or noticed. A copy of any action taken by written consent must be sent promptly to all Members and all actions by written consent shall be filed with the minute books of the Company.

(f) Each Class A Membership Interest and each Class B Membership Interest shall be entitled to one vote for purposes of any vote, consent or approval of Members required under this Company LLC Agreement or the Act. With respect to those matters required or permitted to be voted upon by the Members, or for which a consent or approval of Members is required or permitted, the affirmative vote, consent or approval of Members owning more than 50% of the outstanding Membership Interests (the "Majority Vote") shall be required to authorize or approve any such matter; provided that (i) for Major Decisions (such term being used as defined prior to, or following, the Flip Date, as the case may be) the affirmative vote, consent or approval of more than 50% of the outstanding Class A Membership Interests and of more than 50% of the outstanding Class B Membership Interests shall be required to authorize or approve such Major Decision in addition to any other approval required by this Agreement or the Act (a "Class Majority Vote"), and (ii) for Investor Decisions the affirmative vote, consent or approval of Mehetia shall be required to authorize or approve such Investor Decision. Except as otherwise expressly provided in this Agreement, no separate vote, consent or approval of either Class A Members acting as a class, or Class B Members acting as a class, shall be required to authorize or approve any matter for which a vote, consent or approval of Members is required under this Agreement.

Section 3.3 Management Rights(a) Except with respect to Investor Decisions, no Member other than the Managing Member shall have any right, power or authority to take part in the management or control of the business of, or transact any business for, the Company, to sign for or on behalf of the Company or to bind the Company in any manner whatsoever; provided, however, the Managing Member hereby agrees and acknowledges that, with respect to any Investor Decision, subject to the requirements imposed upon the Company pursuant to or under the Project Company LLC Agreement, the Managing Member shall perform all acts with respect to such Investor Decision in order to cause the Company, the Project Company, Bloom or any of their respective Affiliates to effectuate the Investor Decision.

Except as otherwise provided herein, the Managing Member shall not hold out or represent to any third party that any other Member has any such power or right or that any Member is anything other than a member in the Company. A Member, other than a Member who is the Managing Member, shall not be deemed to be participating in the control of the business of the Company by virtue of its possessing or exercising any rights set forth in this Agreement (including Mehetia exercising its rights with respect to Major Decisions or Investor Decisions) or the Act or any other agreement relating to the Company, including any Transaction Document.

(b) The Managing Member shall, without any further action or approval by any other Member, (i) accept distributions from the Project Company consisting of two distributions of up to $[*] each (each a "Tariff Indemnity Distribution" and collectively the "Tariff Indemnity Distributions") and one distribution of up to $[*] (the "ITC Indemnity Distribution") relating to the payment by Bloom under the Repurchase Agreement of the "First Subsequent Deposit", "Second Subsequent Deposit" and "Third Subsequent Deposit" (as such terms are defined in the Repurchase Agreement), (ii) cause a banking institution of its selection to post letters of credit in favor of Southern pursuant to the terms of the Project Company LLC Agreement, with the Company as the account party, in the amount of the Tariff Indemnity Distributions (once received) (each a "Tariff Indemnity Letter of Credit" or, if more than one, the "Tariff Indemnity Letters of Credit") to provide security for Bloom's indemnification obligations for "Tariff Damages" as set forth in Section 7.1(c) of the New ECCA, and in the amount of the ITC Indemnity Distribution (the "ITC Indemnity Letter of Credit") to provide security for Bloom's indemnification of as set forth in Section 7.1(d) of the New ECCA, and to renew such letters of credit on an annual basis as long the indemnity obligations of Bloom exist under Section 7.1(c) and Section 7.1(d) of the New ECCA, and (iii) place the Tariff Indemnity Distributions and the ITC Indemnity Distributions into a bank account or accounts and to pledge such account or accounts to the issuer of letters of credit described in the preceding subsection (ii), with such amounts, if not used to satisfy draws under such letters of credit, to be distributed to Clean Technologies in accordance with Section 6.13 as and when, and to the extent, such amounts are no longer required as security for such letters of credit. Any other provision of the Agreement notwithstanding, the Members hereby approve the use of the Tariff Indemnity Distributions and the ITC Indemnity Distribution as collateral for the indemnity obligations of Bloom under Section 7.1(c) and Section 7.1(d) of the New ECCA. The Members further agree that all fees and other costs associated with the posting and renewal of the Tariff Indemnity Letter(s) of Credit and the ITC Letter of Credit shall be borne by the Class A Member alone.

Section 3.4 Other ActivitiesNotwithstanding any duty otherwise existing at law or in equity, any Member or the Administrator may engage in or possess an interest in other business ventures of every nature and description, independently or with others, even if such activities compete directly with the business of the Company, and neither the Company nor any of the Members shall have any rights by virtue of this Agreement in and to such independent ventures or any income, profits or property derived from them.

Section 3.5 No Right to WithdrawExcept in the case of Transfers in accordance with Article IX, no Member shall have any right to resign voluntarily or otherwise withdraw from the Company without the prior written consent of each of the remaining Members of the Company in their sole and absolute discretion.

Section 3.6 Limitation of Liability of MembersEach Member and its officers, directors, shareholders, Affiliates, employees and agents (each a "Member Party") shall (i) have liability limited as described in the Act and other applicable Legal Requirements and (ii) be exculpated from liability for and defended, indemnified and held harmless by the Company from any and all judgments, awards, causes of action, lawsuits, suits, proceedings, governmental investigations or audits, losses (including amounts paid in settlement of claims), assessments, fines, penalties, administrative orders or injunctions (including any loss of profits, consequential, punitive, incidental or special damages recovered in connection with a Third Party Claim), including interest, penalties, reasonable attorney's fees, disbursements and costs of investigations, deficiencies, levies, duties and imposts ("Claims") arising out of the performance by such Member Party of its obligations under this Agreement so long as (A) the Member Party acted in good faith and in a manner reasonably believed by it to be in the best interest of or not opposed to the interest of the Company or the Project Company, as applicable, and (B) the Member Party's actions did not constitute willful misconduct, fraud or gross negligence or willful breach of any of its covenants under the Transaction Documents. Notwithstanding the foregoing, if the applicable Member Party to be indemnified and exculpated is Clean Technologies, it shall not be entitled to such indemnification and exculpation if the losses arise from a CT Indemnifiable Claim. Except as otherwise required by the Act, the debts, obligations and liabilities of the Company, whether arising in contract, tort or otherwise, shall be the debts, obligations and liabilities solely of the Company, and the Members of the Company shall not be obligated personally for any of such debts, obligations or liabilities solely by reason of being a Member of the Company.

(a) Each of the Members shall be fully protected in relying in good faith upon the records of the Company and upon such information, opinions, reports or statements presented to the Company by any other Person who is a Member, the Administrator or any officer or employee of the Company, or by any other individual as to matters that such Member reasonably believes are within such other Person's professional or expert competence, including information, opinions, reports or statements as to the value and amount of the assets, liabilities, profits or losses of the Company or any other facts pertinent to the existence and amount of assets from which distributions to the Members might properly be paid.

(b) To the extent that, at law or in equity, a Member, in its capacity as a member or manager of the Company or otherwise, has duties (including fiduciary duties) and liabilities relating thereto to the Company or to any Member or other Person bound by this Agreement, such Member, acting under this Agreement shall not be liable to the Company or to any Member or other Person bound by this Agreement for its good faith reliance on the provisions of this Agreement; provided that this Section 3.6(c) shall not be construed to limit

obligations or liabilities therefor, in each case as expressly stated in this Agreement or any other Transaction Document. The provisions of this Agreement, to the extent that they restrict the duties and liabilities of a Member, in its capacity as a member or manager of the Company, otherwise existing at law or in equity, are agreed by the Members to replace such other duties and liabilities of such Member.

(c) Clean Technologies, in its capacity as Managing Member, shall not have any liability for breach of contract (except as provided in (i) and (ii) below) or breach of duties (including fiduciary duties) of a member or manager to the Company or to any Member or other Person that is a party to or is otherwise bound by this Agreement, in each case, to the fullest extent permitted by the Act; provided that (i) this Agreement shall not limit or eliminate liability for any (x) obligations expressly imposed on Clean Technologies, as Managing Member, pursuant to this Agreement or any other Transaction Document, including to indemnify Mehetia (y) act or omission that constitutes a bad faith violation of the implied contractual covenant of good faith and fair dealing or (z) act or omission arising from the gross negligence, willful misconduct or fraud of Clean Technologies and (ii) this Section 3.6(d) shall not limit or eliminate liabilities expressly stated in this Agreement or any other Transaction Document.

(d) Except as otherwise provided in Section 6.1 of the ECCA or Section 9.12 hereof with respect to liability resulting from fraud or willful misconduct, or with respect to its failure to pay any amount due to Investor Indemnified Parties under the Transaction Documents, or with respect to a Third Party Claim for breach of any Transaction Document or for damages resulting from a CT Indemnifiable Claim, Clean Technologies, in its capacity as Managing Member, shall have no liability of any kind to the Members under this Agreement for monetary damages in an amount that would exceed its aggregate obligation to indemnify the Investor Indemnified Parties pursuant to Section 9.12.

(e) Except as otherwise provided herein with respect to a CT Indemnifiable Claim, Clean Technologies, in its capacity as a Member or Managing Member, shall not have any liability to the Company, any Class B Member or any other Person bound by this Agreement for damages resulting from a breach or breaches by (i) the Administrator resulting from or arising out of the Administrator's performance of its obligations under the Administrative Services Agreement (including any predecessor administrative services agreement the Company was party to prior to the date hereof), (ii) the Operator of any of its obligations, covenants or agreements under the MOMA, except to the extent that Clean Technologies is the Managing Member and it is finally determined by a court of competent jurisdiction (not subject to appeal, or not appealed) that Clean Technologies, as Managing Member, has failed to perform its supervisory obligations hereunder with respect to the Administrative Services Agreement (including any predecessor administrative services agreement the Company was party to prior to the date hereof) or the MOMA in a manner consistent with the definition of "Prudent Operator Standard".

Section 3.7 Liability for DeficitsNone of the Members shall be liable to the Company for any deficit in its Capital Account, nor shall such deficits be deemed assets of the Company, except to the extent otherwise provided by law with respect to third-party creditors of the Company.

Section 3.8 Company PropertyAll property owned by the Company, whether real or personal, tangible or intangible and wherever located, shall be deemed to be owned by the Company, and no Member, individually, shall have any ownership of such property.

Section 3.9 Retirement, Resignation, Expulsion, Incompetency, Bankruptcy or Dissolution of a MemberThe retirement, resignation, expulsion, Bankruptcy or dissolution of a Member shall not, in and of itself, dissolve the Company. The successors in interest to the bankrupt Member shall, for the purpose of settling the estate, have all of the rights of such Member, including the same rights and subject to the same limitations that such Member would have had under the provisions of this Agreement to Transfer its Membership Interest. A successor in interest to a Member shall not become a substituted Member except as provided in this Agreement.

Section 3.10 Withdrawal of CapitalNo Member shall have the right to withdraw capital from the Company or to receive or demand distributions (except distributions described in Article VI) or return of its Capital Contributions until the Company is dissolved in accordance with this Agreement and applicable provisions of the Act; provided, however, that in the event that a Capital Contribution has been made by a Class B Member, such Class B Member shall be entitled to a return of its Capital Contribution if such Capital Contribution has not been drawn upon in full by the Project Company in accordance with Sections 4.3 and 4.4 hereof within six months following the date of such Capital Contribution, unless otherwise agreed to in writing by such Class B Member. No Member shall be entitled to demand or receive any interest on its Capital Contributions. Notwithstanding the foregoing and for the avoidance of doubt, this Section 3.10 shall not apply to any Repurchase Distributions, the Purchase Option or the Sale Option.

Section 3.11 Representations and Warranties

(a) Each Member hereby represents and warrants to the Company and each other Member that the following statements are true and correct as of the date it becomes a Member (both immediately before and after it becomes a Member):

(i) That the Member is duly incorporated, organized or formed (as applicable), validly existing, and (if applicable) in good standing under the law of the jurisdiction of its incorporation, organization of formation; if required by applicable law, that Member is duly qualified and in good standing in the jurisdiction of its principal place of business, if different from its jurisdiction of incorporation, organization or formation; and that the Member has full power and authority to execute and deliver this

Agreement and to perform its obligations hereunder, and all necessary actions by the board of directors, shareholders, managers, members, partners, trustees, beneficiaries, or other applicable Persons necessary for the due authorization, execution, delivery, and performance of this Agreement by that Member have been duly taken.

(ii) That the Member has duly executed and delivered this Agreement and the other documents contemplated herein, and they constitute the legal, valid and binding obligation of that the Member enforceable against it in accordance with their terms (except as may be limited by Bankruptcy, insolvency or similar Applicable Laws of general application and by the effect of general principles of equity, regardless of whether considered at law or in equity).

(iii) That the Member's authorization, execution, delivery, and performance of this Agreement does not and will not (A) conflict with, or result in a breach, default or violation of, (I) the organizational documents of such Member, (II) any contract or agreement to which the Member is a party or is otherwise subject, or (III) any law, rule, regulation, order, judgment, decree, writ, injunction or arbitral award to which the Member is subject; or (B) require any consent, approval or authorization from, filing or registration with, or notice to, any Governmental Authority or other Person, except (w) for such consents, approvals, authorizations, registrations or notices that have already been received, delivered or filed, (x) for notices required to be delivered that (1) are regulatory or reporting in nature, (2) are not required to be delivered or filed until after the Initial Funding Date and (3) would not reasonably be expected to have a material adverse effect on the ability of such Member to perform its obligations under this Agreement, (y) that Credit Suisse AG, Cayman Islands Branch, of which Mehetia is a wholly owned indirect subsidiary as of the Initial Funding Date, may be required to file a report pursuant to 12 CFR 225.175(c)(2) with the Board of Governors of the Federal Reserve System, and (z) for such notices as any Member or its affiliates may be required to file with FERC pursuant to Section 205 of the Federal Power Act and notice filings required after acquiring an interest in the Company.

(iv) That the Member is a "United States person," as defined in Section 7701(a)(30) of the Code.

(b) Each Member represents and warrants to the Company and each other Member that (i) the Member is an "Accredited Investor" as such term is defined in Regulation D under the Securities Act of 1933, (ii) the Member has had a reasonable opportunity to ask questions of and receive answers from the Company concerning, the Membership Interests and the Company and all such questions have been answered to the full satisfaction of that Member, (iii) the Member understands that the Membership Interests have not been registered under the Securities Act in reliance on an exemption therefrom, and that the Company is under no obligation to register the Membership Interests, (iv) the Member will not transfer the Membership Interests in violation of the Securities Act or any other applicable securities laws,

and (v) the Member is purchasing the Membership Interests for its own account and not for the account of any other Person and not with a view to distribution or resale to others.

(c) Each Member represents and warrants to the Company and each other Member that the Member is not a Disqualified Person.

(d) Each Member represents and warrants to the Company and each other Member that the Member is not a tax-exempt entity within the meaning of Section 168(h) of the Code.

(e) Each Member represents and warrants to the Company and each other Member that it has not taken any action that would cause the assets of the Company or the Project Company to become subject to the alternative depreciation system within the meaning of Section 168(g) of the Code.

Section 3.12 Covenants

(a) Each Member covenants to the Company and each other Member that it will be a "United States person," as defined in Section 7701(a)(30) of the Code.

(b) The Managing Member covenants to the Company and each other Member that (i) all electricity produced by the Systems will be through the use of qualified fuel cell property and (ii) no part of the assets of the Company or the Project Company is or will be used predominantly outside of the United States.

(c) The Managing Member covenants to cause the Company to cause the Project Company to elect a Grant (to the extent such election is available) with respect to the Existing Systems. If the Grant is not available with respect to certain Existing Systems as determined in Section 7.5(b)(i), the Managing Member covenants to cause the Company to cause the Project Company to elect or claim under an Alternative Tax Program as described in Section 7.5(b)(i).

(d) The Managing Member covenants to use commercially reasonable efforts, in Consultation with Class B Member, to structure the contracts and business affairs of the Project Company in a way that is intended to maximize the number of Existing Systems that qualify for the Grant or, if any Alternative Tax Program is elected pursuant to Section 7.5(b)(i), any Alternative Tax Program.

(e) Each Member covenants to the Company and each other Member that it will not take any action that would cause the assets of the Company or the Project Company to become subject to the alternative depreciation system within the meaning of Section 168(g) of the Code.

(f) Each Member covenants to the Company and each other Member that the Member will not become a Disqualified Person. Each Member further covenants that it will take no action or change its legal status in a manner that would give rise to a Class A Recapture Event or a Class B Recapture Event, as applicable.

(g) The Managing Member shall be required to perform its duties and obligations hereunder in good faith and in a manner reasonably believed to be in the best interest of the Company.

(h) The Managing Member covenants that it will not cause the Company or Project Company to claim an ITC with respect to Existing Systems for which an application for a Grant has been submitted or for which a Grant has been received.

(i) The Managing Member will elect an Alternative Tax Program with respect to any System only in accordance with Section 7.5(b)(i).

(j) The Managing Member covenants that, if there is any Project Company Distributable Cash, it will cause the Company, as managing member of the Project Company, to, not less than on a quarterly basis, cause the Project Company to distribute such Project Company Distributable Cash to the Company.

(k) The Managing Member covenants that it shall cause the Company and cause the Company to cause the Project Company to comply with the terms and conditions of the REPS Act and the Tariffs.

(l) The Managing Member covenants that all of the Existing Systems will be Placed In Service prior to January 1, 2017 and that each System will be owned by the Project Company prior to each such System being Placed In Service.

(m) The Class B Member covenants that it will not claim an ITC with respect to Existing Systems for which an application for a Grant has been submitted or for which a Grant has been received.

(n) The Managing Member covenants that it shall cause the Project Company to enter into the Repurchase Agreement in a form approved by the Class B Member.

(o) Upon the date in which the aggregate amount of all Repurchase Distributions and other Cash Distributions made by the Company to the Class B Member in accordance with the terms of this Agreement (including, for the avoidance of doubt, (i) the payment and distribution of the Supplemental Buyout Capital Contribution pursuant to Section 4.5, if applicable, and (ii) all disputed amounts being finally determined under Section 11.11(c)) reduces the Current Buyout Amount to zero, the Managing Member shall cause the Company to redeem 100% of the Class B Member's Membership Interests at no additional cost pursuant to the execution and delivery of a redemption agreement in substantially the form attached hereto as

Exhibit F. For the avoidance of doubt, if the Supplemental Buyout Capital Contribution is required, and such amount is disputed under Section 11.11(c), the redemption of the Class B Member's Membership Interests shall not occur until such amount is finally determined and paid in accordance with Section 11.11(c). Furthermore, notwithstanding anything in this Agreement to the contrary, if the amount of the Supplemental Buyout Capital Contribution is disputed under Section 11.11(c), and is subsequently paid by the Class A Member (and distributed 100% to the Class B Member) after March 31, 2020 but within thirty (30) days following the determination of the amount required pursuant to Section 11.11(c), then the Supplemental Buyout Capital Contribution shall be deemed, for all purposes hereunder (including Sections 4.5 and 6.12), to have been paid on March 31, 2020, shall be applied to the Current Buyout Amount and shall, upon payment by the Class A Member and distribution to the Class B Member, cause the full redemption of the Class B Member's Membership Interest.

Section 3.13 Deferred ObligationsThe obligations of Mehetia and Clean Technologies to pay their respective Funding Payments or CT Funding Amounts, respectively, are unconditional, except as provided herein and in the ECCA, and subject to full recourse.

Section 3.14 Events of DefaultAn event of default shall occur upon the occurrence of any of the following by a Member: (i) failure of a Class B Member to make any Funding Payment or failure of a Class A Member to make any payment of a CT Funding Amount, in each case, when due or perform any other obligation with respect to such payment and the same is not cured within five (5) Business Days after notice that the same is due, (ii) making an untrue material representation or warranty, or (iii) a material breach by such Member of any provision in this Agreement. Without in any way limiting any other remedies available to the Class B Member or Clean Technologies hereunder, upon an event of default by the Class B Member or Clean Technologies, the other Member shall have the right to suspend performance of its obligations that are prevented by such default.

Section 3.15 Matters Pertaining to the Grant

(a) As soon as practicable but no later than 105 days after the Initial Funding Date and each Subsequent Funding Date, as applicable, the Managing Member shall: (x) provide the Accounting Firm the information it requires to issue the Accountant's Certificate with respect to the Existing Systems that have been Placed in Service during the quarterly period following such Funding Date or other period, as applicable, and will be included in a Grant Application and (y) use commercially reasonable efforts to cause the Company to cause the Project Company to complete and file a Grant Application with respect to such Existing Systems. To the extent permitted by applicable law (and provided that it would not likely cause the Grant Application to be rejected or materially delayed), the Grant Application will request that the Grant be wired or otherwise sent directly to a control account. The Members will cooperate to seek confirmation from the appropriate Governmental Authorities with respect to the ability to have such control account established in the name of the Company. To provide for the possibility that the Grant will have to be funded to an account of the Project Company, promptly following the Execution

Date, the Managing Member shall use reasonable best efforts to cause the Company to cause the Project Company, at its cost, to cause the Project Company's lenders to allow the Project Company to establish a control account in the name of the Project Company which would not be subject to any lien or security interest or restriction on distribution other than the hereinafter described Control Agreement. Whether or not the control account is at the Project Company or Company level, the control account shall be subject to the Control Agreement in form and substance reasonably acceptable to the Class B Member, the control account agent and either the Project Company or the Company, as applicable, which shall provide that upon receipt of any funds in the control account, the control account agent will immediately distribute such funds to the Class B Member and the Class A Member, pro rata as provided in Section 6.1(a). Any distribution made from the control account to the Members will be deemed to be a Company distribution for all purposes of this Agreement, including, without limitation, for purposes of maintaining Capital Accounts.

(b) At least 10 days prior to filing a Grant Application, the Managing Member shall deliver to Class B Member a copy of the proposed Grant Application, which shall include the proposed filing date for the Grant Application. Class B Member shall have the right to raise reasonable objections to the proposed Grant Application within five days after Class B Member's receipt thereof. If Class B Member raises any objection to the proposed Grant Application within such five-day period, the Managing Member and Class B Member shall use commercially reasonable efforts to resolve such objections. In the event the Managing Member and Class B Member are unable to resolve any such objections within a reasonable period of time, either Member may invoke the dispute resolution provisions of Section 11.11(a).

(c) To the Knowledge of the Managing Member, after due inquiry, all factual information and factual statements contained in the Grant Applications including amounts relating to the purchase price of the Existing Systems shall be true, correct and complete in all material respects. For the avoidance of doubt, this Section 3.15(c) shall not be construed as a representation or warranty to any Member as to any legal matters or legal conclusions in the Grant Applications, although the Parties acknowledge that Clean Technologies has made representations and warranties in this Agreement and the ECCA, including representations and warranties relating to the eligibility of the Existing Systems for the Grant.

(d) The Managing Member shall cause the Company to cause the Project Company to respond to all written requests from any Governmental Authority for additional or supplemental information relating to the Grant Application and shall make all required filings and responses in Consultation with Class B Member.

(e) Upon receipt by the Project Company of Grant proceeds, the Managing Member shall, within two Business Days following the date on which Grant proceeds are received by the Project Company, provide Class B Member or cause Class B Member to be provided with a notice that sets forth the amount of the Grant received by the Project Company and a calculation of the appropriate amounts to be distributed to each of the Members.

(f) In the event that an Alternative Tax Program is elected pursuant to Section 7.5(b)(i), the above provisions shall be deemed to apply to any Alternative Tax Program (with modifications as necessary to account for the differences in such programs as compared to the Grant), and the Managing Member shall be required to comply with all such provisions of this Section 3.15 as if they applied to any Alternative Tax Program, as applicable.

Section 3.16 SeparatenessThe Members agree that the Company and the Project Company are separate and distinct entities and that the Company shall conduct, and cause the Project Company to conduct, their respective affairs in a manner intended to maintain such status, including without limitation adhering the following:

(a) The Company has not formed, acquired or held and shall not form, acquire or hold any subsidiary, except for the Project Company;

(b) The Company does not have, shall not have and at no time had any assets other than its membership interests in the Project Company and personal property necessary or incidental to its ownership of such membership interests;

(c) The Company has not engaged in, sought, consented or permitted to and shall not engage in, seek, consent to or permit any dissolution, winding up, liquidation, consolidation or merger or any sale or other transfer of all or substantially all of its assets or any sale of assets outside the ordinary course of its business, except in each case as permitted by (i) this Company LLC Agreement and, (ii) any transfer of the Company's membership interests in connection with the transactions described in the ECCA;

(d) The Company shall not incur any additional debt or contingent liabilities except as permitted by this Company LLC Agreement;

(e) The Company shall not commingle assets with those of any other entity and shall hold its assets in its own name;

(f) The Company shall conduct its own business in its own name;

(g) The Company shall maintain bank accounts (if any), books, records and financial statements separate from any other person or entity;

(h) The Company shall observe all formalities of the Company LLC Agreement;

(i) The Company shall pay its own liabilities out of its own funds;

(j) The Company shall maintain adequate capital in light of its contemplated business operations;

(k) The Company shall use separate stationery, invoices and checks;

(l) The Company shall pay the salaries of its own employees, if any;

(m) The Company shall not guarantee or become obligated for the debts of any other entity or hold out its credit as being available to satisfy the obligations of others, in each case, other than the Project Company;

(n) The Company shall not make any loans to any other person or entity other than in accordance with this Company LLC Agreement;

(o) The Company shall allocate fairly and reasonably any overhead for shared office space;

(p) The Company shall not pledge its assets for the benefit of any other entity, other than the Project Company or the Project; and

(q) The Company shall hold itself out as a separate entity, with the exception that the Company shall not be considered a separate entity from the Project Company for federal, state, and local income tax purposes, and shall use commercially reasonable efforts to correct any known misunderstanding regarding its separate identity.

ARTICLE IV
CAPITAL CONTRIBUTIONS; CAPITAL ACCOUNTS

Section 4.1 Capital Contributions

(a) Subject to the terms of the ECCA, the Members will make Capital Contributions to the Company at the times and in the amounts required under the ECCA and if required under Section 4.5 hereof, at the time and in the amounts specified in Section 4.5. The Members acknowledge that on or prior to the effective date of the 2012 Operating Agreement, the Class A Member made a Capital Contribution to the Company of all of its right, title and interest in and to the Project Company and the sum of $16,619,399.60 (in cash), and has agreed to make further Capital Contributions at the times and in the amounts required under the ECCA. Except as provided in this Article IV of this Agreement, no Member will be required to make any Capital Contributions to the Company after the Subsequent Funding Termination Date.

(b) The Company shall be entitled to enforce the obligations of each Member with respect to each Funding, and the Company shall have all remedies available at law or in equity in the event any such obligation is not met.

(i) Each Member hereby (A) agrees that the remedy at law for damages resulting from any failure by it to make a Funding when required under the terms of the ECCA is inadequate because the funding of the Existing Systems requires

the timely availability of required capital contributions and (B) consents to the institution of an action for specific performance of its obligations in the event of such a default.

(ii) The Managing Member (or any other Member in the event that the Managing Member is the defaulting Member) may cause the Company to commence legal proceedings against the defaulting Member to collect the due and unpaid capital contribution plus interest (calculated from the date of the missed Funding) at a rate equal to the lesser of (x) 18% per annum, compounded daily and (y) the maximum rate allowable by law, as well as the expenses of collection including, without limitation, attorneys' fees. Amounts collected in excess of the defaulting Member's due and unpaid capital contribution or loan advance shall be deemed for purposes of this Agreement to be income of, or a reimbursement to, the Company, as appropriate, and shall not be treated as a capital contribution by the defaulting Member.

(iii) Such defaulting Member's share of the future distributions and profits (but not losses) of the Company shall be reduced by up to 100% of that to which such defaulting Member would have been entitled based upon its Percentage Interest as measured immediately prior to the date of the missed Funding, based on a proportionate calculation of the shortfall of funds resulting from such defaulting Member's failure to comply with its Funding obligation. The share of future distributions and profits that are not allocated to the defaulting Member shall be apportioned among the other non-defaulting Members in proportion to their respective Percentage Interests until such time as the defaulting Member cures such default by paying such unpaid capital contribution plus interest (calculated from the date of the missed Funding) at a rate equal to the lesser of (x) 18% per annum, compounded daily and (y) the maximum rate allowable by law, as well as the expenses of collection including, without limitation, attorneys' fees.

(c) The Members acknowledge that an Affiliate of the Class A Member, Bloom, is entering into the Repurchase Agreement on the Effective Date and, pursuant to the Repurchase Agreement, Bloom is making a deposit in the aggregate amount of $72,321,380.05 (the "Deposit") against the aggregate Purchase Price (as defined in the Repurchase Agreement) which will be used to repay the outstanding balance (together with accrued but unpaid interest, prepayment charges, make-whole amounts and related costs) owed to the Note Holders under the Credit Documents (such amount, the "Project Company Debt"). The Deposit shall be paid and the Managing Member shall cause the Company to cause the Project Company to immediately use the Deposit to repay the Project Company Debt and cause the release of all collateral securing such Project Company Debt and for the Project Company's obligations to the Note Holders and all other parties to the Credit Documents to be satisfied in full. The Members further acknowledge that had Bloom not made such Deposit under the Repurchase Agreement, the Class A Member would likely have needed to make an additional capital contribution hereunder in order to provide the Project Company funds to repay the Project Company Debt. Therefore, the Members agree that, should Bloom fail to repurchase all of the Existing Systems pursuant to the terms and conditions of the Repurchase Agreement on or before March 31, 2020

(other than as a result of a breach by Bloom of the Repurchase Agreement), then a pro rata amount of the Deposit (based on the Existing Systems not repurchased under the Repurchase Agreement as of March 31, 2020) shall be credited to the Class A Member as an additional Capital Contribution hereunder; provided, however, the foregoing shall not relieve the Class A Member or Bloom from any obligation to make a Supplemental Buyout Capital Contribution pursuant to Section 4.5 hereof nor result in any offset or reduction of such obligation to make a Supplemental Buyout Capital Contribution pursuant to Section 4.5 hereof.

Section 4.2 Capital Accounts

(a) A Capital Account will be established and maintained for each Member in the manner required by the Treasury Regulations under Section 704(b) of the Code. If there is more than one Member in a class, then each of the Members in that class will have a separate Capital Account.

(b) A Member's Capital Account will be increased by (i) the amount of money the Member contributes to the Company, (ii) the Gross Asset Value of any property the Member contributes to the Company (net of liabilities secured by the property that the Company is considered to assume or take subject to under Section 752 of the Code; the Gross Asset Value of any property contributed by a Member will be set forth in Schedule 4.2(b)), (iii) the income and gain (or items thereof) that the Member is allocated by the Company, including any income and gain exempted from tax (e.g., income allocated in respect of the Grant) and gain described in Section 4.2(c) and (iv) an amount equal to an allocation of upward basis adjustment to such Member in the event of a recapture of the Grant or ITC as described in Treasury Regulation Section 1.704-1(b)(2)(iv)(j). A Member's Capital Account will be decreased by (v) the amount of money distributed to the Member by the Company (including any proceeds from the Grant distributed to such Member), (vi) the Gross Asset Value of any property distributed to the Member by the Company (net of liabilities secured by the property that the Member is considered to assume or take subject to under Section 752 of the Code), (vii) any expenditures of the Company described in Section 705(a)(2)(B) of the Code (i.e., expenditures that cannot be capitalized or deducted in computing taxable income) that are allocated to the Member; and (viii) losses and deductions (or items thereof) that are allocated by the Company to the Member, including losses described in Section 4.2(c), but the Capital Account will not be reduced again under this clause (viii) for expenditures that already reduced it under clause (vii) and (ix) an amount equal to an allocation of downward basis adjustment to such Member to take into account the Grant or ITC as described in Treasury Regulation Section 1.704-1(b)(2)(iv)(j).

(c) The Gross Asset Values of all the Company assets will be adjusted to equal their respective Gross Fair Market Values upon the occurrence of any of the following events: (i) if any new or existing Member contributes more than a de minimis amount of money or property, provided that, for the avoidance of doubt, no adjustment will be made to Gross Asset Values in connection with any Capital Contributions described in Section 4.2(b) or (c), (ii) if more than a de minimis amount of money or other property is distributed by the Company to a

Member to redeem its Membership Interest, or (iii) if the Company is liquidated within the meaning of Treasury Regulations Section 1.704-1(b)(2)(ii)(g). Following the occurrence of an event in clauses (i) and (ii) the Managing Member will make an adjustment to Gross Asset Value only if it reasonably determines, after Consultation with the other Members, that the adjustments are necessary or appropriate to reflect the relative economic interests of the Members in the Company. In addition, the Gross Asset Value of any Company asset that is distributed to a Member will be adjusted to equal the Gross Fair Market Value of the asset on the Distribution Date. In the event the Gross Asset Value of any item of the Company's property is adjusted as described in this Section 4.2(c), then the amount of the adjustment will be treated as an item of gain (if the adjustment increases the Gross Asset Value) or an item of loss (if the adjustment decreases the Gross Asset Value) from the disposition of such property.

(d) As of the Original Date, the initial Capital Account balance and Percentage Interest of each Member is shown in Schedule 4.2(d). Contributions made by the Members on Subsequent Fundings will be considered contributions of such amounts to the Company. The Managing Member will update Schedule 4.2(d) after each Subsequent Funding and from time to time as necessary to reflect accurately the information therein; provided, however, that, notwithstanding anything in this Company LLC Agreement or the ECCA to the contrary, failure to update Schedule 4.2(d) in accordance with this Section 4.2(d) shall not impact the actual amounts considered Capital Contributions hereunder, all of which shall be deemed made on the date actually contributed. Any such updating will be consistent with how this Article IV requires that the Capital Accounts be maintained. Any reference in this Agreement to Schedule 4.2(d) will be treated as a reference to Schedule 4.2(d) as amended and in effect from time to time.

(e) If all or a portion of a Membership Interest in the Company is Transferred in accordance with the terms of this Agreement, then the transferee will succeed to the Capital Account of the transferor to the extent it relates to the Membership Interest so Transferred.

(f) The provisions of this Agreement relating to maintenance of Capital Accounts are intended to comply with Treasury Regulation Sections 1.704-1(b) and 1.704-2, and will be interpreted and applied in a manner consistent with such Treasury Regulations or any successor provisions.

Section 4.3 Equity Contributions to Project Company

(a) Subject to the terms and conditions of this Agreement and the satisfaction of the conditions precedent in Section 4.4 hereof, the Company shall contribute funds to the Project Company (each such contribution, an "Equity Contribution") for further application by the Project Company towards payment of the purchase price for the Existing Systems and other related costs. Within five (5) Business Days of receipt of a notice in the form of Exhibit E (the "Equity Contribution Notice") and the satisfaction or waiver of the conditions precedent in Section 4.4 (such date, the "Equity Contribution Date"), the Company shall transfer the

appropriate amount of funds from the Company's account to a Project Company account as specified by the Project Company in such notice.

(b) Each of the Initial Funding Payment of Class B Member and the CT Funding Amount of Class A Member made on the Initial Funding Date has been or shall be applied for further contribution to the Project Company to pay the 25% Progress Payments for Existing Systems to be deployed in the two quarters immediately following the Initial Funding Date.

(c) All CT Funding Amounts made by Class A Member and all Subsequent Funding Payments made by Class B Member (subject to the satisfaction or waiver by the Class B Member of the conditions precedent in Section 4.4) will be contributed to the Project Company and used for the purchase and installation of the Existing Systems and related costs. All CT Funding Amounts and all Subsequent Funding Payments will be deposited into an account established in the Project Company's name with a financial institution reasonably acceptable to Class B Member (the "Capital Contributions Account") and will be maintained in the Capital Contributions Account until such time as such amounts are used by the Project Company to pay for the costs or expenses for which such funds were requested, to distribute such funds to the Members as expressly permitted hereunder or for such other uses as are agreed to by the Members. Upon establishment of the Capital Contributions Account any portion of the Capital Contributions made by the Members on the Initial Funding Date that was projected to pay for the purchase price of Existing Systems that has not yet been used for such purpose shall be deposited into the Capital Contributions Account and maintained there until used in accordance with the preceding sentence.

Section 4.4 Conditions Precedent to Equity Contributions by CompanyThe obligation of the Company to make an Equity Contribution to the Project Company (except in the case of the portion of any Equity Contribution used to pay any 25% Progress Payments for Existing Systems to be deployed in the subsequent quarter which shall be subject to the conditions precedent hereinafter expressly provided) will be subject to the fulfillment by the Project Company, on or before the applicable Equity Contribution Date, of each of the following conditions (and upon satisfaction of such conditions, as applicable, the Managing Member shall so notify in writing the Administrator and the Members):

(a) the Project Company shall have delivered to the Company and each of the Company's members an Equity Contribution Notice, in the form attached to this Agreement as Exhibit E;

(b) Managing Member's Capital Contribution to the Company of $16,619,399.60 shall have been further contributed by the Company to the Project Company and used by Project Company to incur Project costs in an amount equal to at least 5% of the cost of all Existing Systems;

(c) the Project Company shall deliver to the Company and each of the Company's members all necessary Governmental Approvals from the applicable Governmental Authority to the extent not previously delivered;

(d) each of the representations and warranties of Clean Technologies in Section 3.2 of the ECCA relating to the Existing Systems funded by such Equity Contribution is (i) true and correct in all material respects as of such Equity Contribution Date except to the extent that any such representation or warranty shall have been expressly made only as of an earlier date in which case such representation and warranty was true and correct in all material respects as of such earlier date and (ii) if and to the extent such representations and warranties are qualified by the words "material," "Material Adverse Effect" or similar qualification, true and correct, as qualified, as of the such Equity Contribution Date (or such earlier date, as applicable);

(e) No material ongoing breach exists by Bloom, Clean Technologies, the Company, the Project Company, the Managing Member, DPL or PJM under the ECCA, the Project Company LLC Agreement, the MESPA, the MOMA, the Administrative Services Agreement, the Credit Documents, the DPL Agreements, the PJM Agreements, this Agreement or any other Transaction Document or Material Contract, as applicable;

(f) the Project Company is solvent and no event of Bankruptcy has occurred with respect to the Project Company;

(g) confirmation that (i) all conditions precedent in Section 2.5 and Section 2.7 of the ECCA (other than Section 2.5(aa)) remain satisfied; provided that Clean Technologies and Company shall not be required to update any due diligence reports, legal opinions, appraisals or other third party documents previously delivered to Class B Member unless any of such previously delivered documents has been withdrawn or specific circumstances have materially changed in connection with the Existing Systems to be funded from this Equity Contribution by Company to Project Company such that the previously delivered document is inapplicable or is materially incorrect with respect to such Existing Systems; and (ii) there have been no material adverse changes from the circumstances addressed in the due diligence reports delivered under Sections 2.5(a) and (b) of the ECCA;

(h) the information on each invoice from Bloom to Project Company for payments under the MESPA regarding the Existing Systems to be paid for with proceeds of the applicable Equity Contribution will include the following: (i) the location of the installation of each such System, (ii) the serial number for each such System, (iii) the price for each such System as determined pursuant to the MESPA, (iv) all amounts previously paid as a deposit on each such System and (v) all amounts remaining due and payable on each such System;

(i) the Initial Funding Payment, any prior Subsequent Funding Payments and any prior CT Funding Amounts, as applicable, shall have been contributed in full to the Project Company in accordance with Section 4.3 and Section 4.4 hereof, with respect to any Subsequent

Funding Payment and any CT Funding Amount, the Capital Contributions Account shall have been established and maintained in accordance with the provisions of Section 4.3(c), the Project Company does not retain at such time in the Capital Contributions Account more than an amount equal to (i) $20,000,000 minus (ii) the amount of cash held by the Company at such time, and the Project Company shall have used such payments to make payments under the MESPA;

(j) there are no material defaults under the MOMA relating to Systems previously installed, purchased and paid for by Project Company;

(k) in the case of the portion of any Subsequent Funding Payment used to pay any 75% Progress Payments, Commencement of Operations (as defined under the MESPA) has occurred for the Systems for which there is a request for a Capital Contribution of the amounts of the 75% Progress Payment for such System;

(l) in the case of the portion of any Subsequent Funding Payment or any CT Funding Amount used to pay any 75% Progress Payments, the Members have received confirmation that the Note Proceeds have either been disbursed from the Construction Escrow Account or will be available for disbursement from the Construction Escrow Account contemporaneous with Project Company's drawdown of such Progress Contribution from the Company (as may be evidenced by, among other things, delivery to the Members of a copy of the Account Withdrawal Instruction applicable to such proceeds which has been countersigned by the Collateral Agent and delivered to the Depositary) or the Required Holders have in writing confirmed to the Members that all conditions precedent to such disbursement from the Construction Escrow Account have been satisfied or waived and the Required Holders are prepared to permit such disbursement contemporaneous with Project Company's drawdown of such Progress Contribution from the Company; and

(m) in the case of the portion of any Subsequent Funding Payment or any CT Funding Amount used to pay any 75% Progress Payments, the Members have received written certification from the Independent Engineer (as defined in the MESPA) addressed to Project Company certifying, without any qualification, that such System's commissioning has been successfully completed, that such System is available for full commercial operation, and that Bloom has installed all BOF Work (as defined in the MESPA) necessary for the operation of that System.

Notwithstanding the foregoing, with respect to the portion of any Equity Contribution used to pay any of the 25% Progress Payments for Systems to be deployed in the subsequent quarter, the fulfillment by the Project Company, on or before the applicable Equity Contribution Date, of each of the conditions set forth in Sections 4.4(a), (e), (f), (h)(i) and (h)(iii) must be satisfied.

To the extent that an Equity Contribution Notice has been delivered to the Company for which all of the applicable conditions precedent set forth above have been satisfied, the Company may make a capital contribution to Project Company related to all of the Systems for which all of the

applicable conditions precedent have been satisfied. With respect to those Systems for which all conditions precedent had not been previously satisfied, but which are later satisfied, the Company may make a subsequent capital contribution to Project Company for the amounts requested in connection with that later qualifying System.

Section 4.5 Supplemental Buyout Capital ContributionIn the event that prior to March 31, 2020, the Current Buyout Amount has not been reduced to zero, then on or before March 31, 2020, the Class A Member shall make a capital contribution to the Company equal to the Current Buyout Amount at the time of such capital contribution (such capital contribution, the "Supplemental Buyout Capital Contribution"), whereupon the Company shall make (no later than March 31, 2020) a special distribution of the amount of the Supplemental Buyout Capital Contribution to the Class B Member in accordance with Section 6.12 below, which distribution shall be deemed to be a Repurchase Distribution for purposes of Section 6.12 and this Agreement.Member Loans

(a) The Class B Members are entitled to effect cures of defaults under the Credit Documents to the extent set forth in the Interparty Agreement. Amounts expended in effecting such cures shall be deemed Member Loans, with each Class B Member contributing ratably in proportion to its holding of all then outstanding Class B Membership Interests; provided that, if any Class B Member does not wish to advance or loan its proportionate share of any such advance or loan, an amount equal to such proportionate share may instead be advanced by the remaining Class B Members (each such remaining Class B Member contributing ratably (or as otherwise agreed amongst such remaining Class B Members) in proportion to its holding of all then outstanding Class B Membership Interests (excluding in such determination of outstanding Class B Membership Interests all then outstanding Class B Membership Interests of any Class B Member that does not wish to advance or loan such proportionate share).

(b) Any loan or advance made by any Class B Member pursuant to this Section 4.6 shall bear interest, unless otherwise agreed by such Class B Member in its sole discretion, at the Prime Rate.

(c) Notwithstanding anything to the contrary in this Agreement, the Company shall borrow and accept, and the Managing Member shall cause the Company to borrow and accept, such loans or advances from the lending Members. The Company shall immediately advance, and the Managing Member shall cause the Company to immediately advance, such loans or advances from the lending Members to the Project Company. The incurrence of indebtedness by the Company pursuant to any loan or advance made by any Member pursuant to this Section 4.6 shall not require the consent of the Managing Member or the Class A Member. The Company shall apply all Company Distributable Cash to the payment of the principal of all outstanding advances or loans (together with accrued interest thereon) made under this Section 4.6 and, unless and until the outstanding principal amount of all such advances and loans is repaid in full together with all interest thereon and all other amounts due in respect thereof, there

shall be no distributions to the Class A Members under this Agreement pursuant to Article VI or otherwise.

(d) An advance or loan by any Member described in this Section 4.6 constitutes a loan from such Member to the Company and is not a Capital Contribution.

ARTICLE V
ALLOCATIONS

Section 5.1 Allocations

(a) Prior to the Effective Date, after giving effect to the allocations in Section 5.2 and except as provided in Section 10.2(c) and Section 10.2(d) for purposes of maintaining Capital Accounts, all items of Company income, loss, gain, deduction and credit for any Fiscal Year will be allocated among the Members as follows:

(i) Except for items relating to any Grant, for the period beginning on April 13, 2012 and running through the Flip Date, 99% in the aggregate to the Class B Members, allocated among them in proportion to their Pro Rata Shares, and 1% in the aggregate to the Class A Members, allocated among them in proportion to their Pro Rata Shares; and (ii) for the period beginning after the Flip Date, 5% in the aggregate to the Class B Members, allocated among them in proportion to their Pro Rata Shares, and 95% in the aggregate to the Class A Members, allocated among them in proportion to their Pro Rata Shares.

(ii) With respect to any items relating to any Grant, 99% in the aggregate to the Class B Members, allocated among them in proportion to their Pro Rata Shares, and 1% in the aggregate to the Class A Members, allocated among them in proportion to their Pro Rata Shares.

(b) From and after the Effective Date, after giving effect to the allocations in Section 5.2 and except as provided in Section 10.2(c) and Section 10.2(d) for purposes of maintaining Capital Accounts, all items of Company income, loss, gain, deduction and credit for any Fiscal Year will be allocated among the Members (i) if all of the Existing Systems have been repurchased from the Project Company pursuant to the terms and conditions of the Repurchase Agreement by March 15, 2020, 0% in the aggregate to the Class B Members, allocated among them in proportion to their Pro Rata Shares, and 100% in the aggregate to the Class A Members, allocated among them in proportion to their Pro Rata Shares, and (ii) if not all of the Existing Systems have been repurchased from the Project Company pursuant to the terms and conditions of the Repurchase Agreement by March 15, 2020, 5% in the aggregate to the Class B Members, allocated among them in proportion to their Pro Rata Shares, and 95% in the aggregate to the Class A Members, allocated among them in proportion to their Pro Rata Shares.

(c) No losses or deductions may be allocated to a Member pursuant to this Section 5.1 to the extent the allocation would lead to a deficit in such Member's Adjusted Capital Account. Losses or deductions that a Member cannot be allocated by reason of this Section 5.1(b) will be allocated to the other Members.

Section 5.2 AdjustmentsThe following adjustments will be made in the allocations in Section 5.1 to comply with Treasury Regulation Section 1.704-1(b):

(a) In any Fiscal Year in which there is a net decrease in Company Minimum Gain, income and gain in the amount of the net decrease will be allocated to Members in the ratio required by Treasury Regulation Section 1.704-2. This provision is intended to comply with the minimum gain chargeback requirement in Treasury Regulation Section 1.704-2(f) and will be interpreted consistently therewith.

(b) In any Fiscal Year in which there is a net decrease in Minimum Gain Attributable to Member Nonrecourse Debt, then income and gain in the amount of the net decrease will be allocated to each Member who was considered to have had a share of such minimum gain at the beginning of the Fiscal Year in the ratio required by Treasury Regulation Sections 1.704-2(i)(4) and 1.704-2(j)(2)(ii). This provision is intended to comply with the partner nonrecourse debt minimum gain chargeback requirement in Treasury Regulation Section 1.704-2(i)(4) and will be interpreted consistently therewith.

(c) In the event any Member unexpectedly receives any adjustments, allocations or distributions described in Treasury Regulation Sections 1.704-1(b)(2)(ii)(d)(4), (5) or (6), gross income will be specially allocated to each such Member in an amount and manner sufficient to eliminate, to the extent required by the Treasury Regulations, any deficit in the Member's Adjusted Capital Account as quickly as possible. However, an allocation will be made under this Section 5.2(c) only if and to the extent that the Member would have a deficit in its Adjusted Capital Account after all other allocations provided for in Sections 5.1 and 5.2 have been tentatively made as if this Section 5.2(c) were not in this Agreement.

(d) In the event that any Member has a deficit in its Adjusted Capital Account at the end of any Fiscal Year after all the other allocations in Section 5.1 and 5.2 have been taken into account, then the Member will be specially allocated items of Company income and gain as quickly as possible to eliminate the deficit.

(e) Nonrecourse Deductions for any Fiscal Year will be allocated to the Members in the same ratio as other income and loss under Section 5.1 or Sections 10.2(c) and (d), as applicable.

(f) Any Member Nonrecourse Deductions for any Fiscal Year will be allocated to the Member who bears the economic risk of loss with respect to the Member

Nonrecourse Debt to which the Member Nonrecourse Deductions are attributable in accordance with Treasury Regulation Section 1.704-2(i)(1).

(g) If the Company distributes property to a Member in liquidation of the Membership Interest of the Member and there is an adjustment in the adjusted tax basis of Company property under Section 734(b) of the Code, there will be a corresponding adjustment to the Capital Account of the Member receiving the distribution. If the Company distributes cash to a Member in excess of its outside basis in its Membership Interest, leading to an adjustment in the inside basis of the Company property under Section 734(b) of the Code, solely for purposes of adjusting Capital Accounts of the Members, the adjustment in the inside basis will be treated as gain or loss and be allocated among the Members in the same ratio as other gain or loss for the Fiscal Year in which the adjustment occurs. This provision is intended to comply with Treasury Regulation Sections 1.704-1(b)(2)(iv)(m)(2) and (4) and will be interpreted consistently therewith.

(h) The allocations in this Section 5.2 are required to comply with the Treasury Regulations. To the extent the Company can do so consistently with the Treasury Regulations, the net amount of the allocations under this Article V and Section 10.2 to each Member will be the net amount that would have been allocated to each Member if this Agreement did not have this Section 5.2.

Section 5.3 Tax Allocations

(a) All allocations of tax items of Company income, gain, deductions and losses for each Fiscal Year will be allocated in the same proportions as the allocations of book items of Company income, gain, deductions and losses were made for such Fiscal Year pursuant to Sections 5.1 and 5.2.

(b) Notwithstanding Section 5.3(a), if, as a result of contributions of property by a Member to the Company or an adjustment to the Gross Asset Value of Company assets pursuant to this Company LLC Agreement, there exists a variation between the adjusted basis of an item of Company property for United States federal income tax purposes and as determined under the definition of Gross Asset Value, allocations of income, gain, loss, and deduction will be allocated among the Members so as to take into account any variation between the adjusted basis of such property to the Company for United States federal income tax purposes and its initial Gross Asset Value using the traditional method with curative allocations pursuant to Treasury Regulation Section 1.704-3(c). To the extent the "ceiling rule" in Treasury Regulation Section 1.704-3(b) prevents the noncontributing Members from receiving an amount of tax depreciation in any year equal to the Members' share of Depreciation for the year, then the shortfall will be made up in succeeding years as quickly as possible out of any tax depreciation that would otherwise have been allocated to the contributing Member.

(c) Allocations pursuant to this Section 5.3 are solely for purposes of federal, state and local taxes and will not affect, or in any way be taken into account in computing, any Member's Capital Account or share of income, gain, deductions or losses or distributions pursuant to any other provision of this Agreement.

(d) To the extent that an adjustment to the adjusted tax basis of any Company asset is made pursuant to Section 743(b) of the Code as the result of a purchase of a Membership Interest in the Company, any adjustment to the depreciation, amortization, gain or loss resulting from such adjustment will affect the transferee only and will not affect the Capital Account of the transferor or transferee. In such case, the transferee will be required to agree to provide to the Company (i) information about the allocation of any step-up or step-down in basis to the Company's assets and (ii) the depreciation or amortization method for any step-up in basis to the Company's assets.

(e) Solely for purposes of determining a Member's proportionate share of the "excess non-recourse liabilities" of the Company within the meaning of Treasury Regulation Section 1.752-3(a)(3), each Member's share of such liability shall be consistent with the profit sharing percentages then in effect pursuant to Section 5.1(a).

Section 5.4 Transfer or Change in Company InterestIf the respective Membership Interests or allocation ratios described in this Article V of the existing Members in the Company change or if a Membership Interest is Transferred in compliance with this Agreement to any other Person, then, for the Fiscal Year in which the change or Transfer occurs, all income, gains, losses, deductions, credits and other tax incidents resulting from the operations of the Company shall be allocated, as between the Members for the Fiscal Year in which the change occurs or between the transferor and transferee, by taking into account their varying interests using the interim closing method permitted by Treasury Regulation Section 1.706.

Section 5.5 Timing of AllocationsItems of income, gain, loss, deduction and credit will be allocated to the Members pursuant to this Article V as of the last day of each Fiscal Year; provided that such items shall also be allocated at such times as the Gross Asset Values of the Company's assets are adjusted pursuant to Section 4.2(c).

ARTICLE VI
DISTRIBUTIONS

Section 6.1 DistributionsExcept as provided otherwise in Sections 6.6, 6.7, 6.9, 6.11, 6.12 or 10.2, Company Distributable Cash will be distributed to the Members on each Distribution Date in the manner described in this Section 6.1.

(a) First, the proceeds of any Grant (or, if any Alternative Tax Program is elected pursuant to Section 7.5(b)(i), any Alternative Tax Program other than the ITC) received by the Project Company in connection with the Existing Systems included in the Portfolio (as

opposed to future capital expenditures) will be distributed, promptly upon receipt, in full to the Company by the Project Company and then distributed 99% to the Class B Members, distributed among them in proportion to their Pro Rata Shares, and 1% to the Class A Members, distributed among them in proportion to their Pro Rata Shares; provided, that any Grant proceeds received by the Project Company in connection with the Existing Systems included in the Portfolio (as opposed to future capital expenditures) in excess of an aggregate amount for all such Grant proceeds of $76,731,525 will be distributed, promptly upon receipt, in full to the Company and then distributed by the Company 100% to the Class A Members, distributed among them in proportion to their Pro Rata Shares;

(b) Second, any remaining Company Distributable Cash, other than cash from any Repurchase Distributions (which will be specially distributed pursuant to the provisions of Section 6.12 below), will be distributed (i) from April 13, 2012 to and through the Flip Date, 99% to the Class B Members, distributed pro rata in proportion to the Percentage Interest held by each Class B Member, and 1% to the Class A Members, distributed pro rata in proportion to the Percentage Interest held by each Class A Member, and (ii) after the Flip Date, 5% to the Class B Members, distributed pro rata in proportion to the Percentage Interest held by each Class B Member, and 95% to the Class A Members, distributed pro rata in proportion to the Percentage Interest held by each Class A Member; and

(c) Notwithstanding anything to the contrary in this Article VI or in any other Transaction Document, in the event that any 25% Progress Payments or 75% Progress Payments are refunded from Bloom to Project Company under the MESPA, whether or not such refunded 25% Progress Payments or 75% Progress Payments are deposited into a separate control account with the Company as the secured party, following the receipt by the Company of such refunded 25% Progress Payments or 75% Progress Payments, such refunded 25% Progress Payments or 75% Progress Payments will be distributed 100% to the Class B Members and among them in proportion to their Pro Rata Shares.

Section 6.2 Withholding Taxes. If the Company is required to withhold taxes with respect to any allocation or distribution to any Member pursuant to any applicable federal, state or local tax laws, the Company may, after first notifying the Member and permitting the Member, if legally permitted, to contest the applicability of such taxes, withhold such amounts and make such payments to taxing authorities as are necessary to ensure compliance with such tax laws. Any funds withheld by reason of this Section 6.2 shall nonetheless be deemed distributed to the Member in question for all purposes under this Agreement. If the Company fails to withhold from actual distributions any amounts it was required to withhold, the Company may, at its option, (a) require the Member to which the withholding was credited to reimburse the Company for such withholding, or (b) reduce any subsequent distributions by the amount of such withholding. This obligation of a Member to reimburse the Company for taxes that were required to be withheld shall continue after such Member Transfers its Membership Interests in the Company. Each Member agrees to furnish the Company with any representations and forms

as shall reasonably be requested by the Company to assist it in determining the extent of, and in fulfilling, any withholding obligations it may have.

Section 6.3 Limitation upon Distributions. No distribution of Company Distributable Cash will be made if the distribution would violate any contract or agreement to which the Company is then a party or any Legal Requirement then applicable to the Company.

Section 6.4 No Return of Distributions. Any distribution of Company Distributable Cash or property pursuant to this Agreement shall be treated as a compromise within the meaning of Section 18-502(b) of the Act and, to the full extent permitted by law, any Member receiving the payment of any such money or distribution of any such property shall not be required to return any such money or property to any Person, the Company or any creditor of the Company. However, if any court of competent jurisdiction holds that, notwithstanding the provisions of this Agreement, any Member is obligated to return such money or property, such obligation shall be the obligation of such Member and not of the other Members. Without limiting the generality of the foregoing, a deficit Capital Account of a Member shall not be deemed to be a liability of such Member nor an asset or property of the Company.

Section 6.5 Calculation of Internal Rate of Return.

(a) Tracking Progress. The Managing Member will calculate at least annually whether the Class B Member has reached the Target IRR and will send the Class B Member, within 120 days after the end of each Fiscal Year in which the Target IRR was not achieved, a report in the form of the Tracking Model showing where it believes the Class B Member is in relation to the Target IRR. If the report suggests that the Target IRR will be reached during the next two Fiscal Years, then the Managing Member will calculate and report whether the Class B Member has reached the Target IRR at least quarterly thereafter. The Managing Member will make its advisers available to answer any questions about its calculations. The Class B Member may invoke the dispute resolution procedures in Section 11.11(b) to resolve any item or procedure that is in dispute, and the conclusion of such dispute resolution procedures will apply in all subsequent periods to any identical item or procedure.

(b) Notice of Date. The Managing Member will notify the Class B Member in writing at least 10 Business Days before the Distribution Date following the month in which it believes the Class B Member achieved the Target IRR or at least 30 days before making any liquidating distributions, in connection with a liquidation of the Company pursuant to Section 10.1, if it believes the Class B Member will achieve the Target IRR as a consequence of the liquidating distributions. The notice will include the Tracking Model showing the Managing Member's calculations and, in the case of a notice delivered in connection with a liquidation, the allocations and distributions that the Managing Member proposes to make to the Class B Member under Section 10.2 in light of the calculations. The Managing Member will make its advisers available to answer any questions about its calculations. If the Class B Member wishes to invoke the dispute resolution procedures in Section 11.11(b) to resolve any disagreements,

then they must give notice to that effect to the Managing Member before the Distribution Date, in a case not involving liquidation of the Company, and within 30 days after receipt of notice from the Managing Member in a case involving liquidation.

(c) Notwithstanding the foregoing, if there is a Class A Recapture Event after a final determination has been made that Class B Member has achieved the Target IRR, the Internal Rate of Return shall be recalculated at the time of such Class A Recapture Event in accordance with the terms of Section 6.5, taking into account the consequences of any recapture. If, as a result of the Class A Recapture Event, the Class B Member's Internal Rate of Return is below the Target IRR, the sharing percentages set forth in Section 5.1 and Section 6.1 shall be adjusted to the maximum extent necessary so as to correct, on a present value basis calculated at the Target IRR, the difference between the Target IRR assumed to have been realized by a holder of Class B Membership Interests on the Distribution Date as of which the Target IRR was determined to have been achieved, and the Internal Rate of Return realized by such a holder after adjusting solely for the Class A Recapture Event. Such change in sharing percentages shall remain in effect until, and to the extent necessary so that, the difference between the Target IRR and actual Internal Rate of Return shall have been eliminated.

Section 6.6 Satisfaction of Recapture-Related Obligations of the Class A Members to the Class B Member.

(a) Notwithstanding the provisions of Section 6.1, if the Class B Member shall suffer any Recapture Damages, as a result of a Class A Recapture Event, then the Class B Member shall be entitled to collect Recapture Damages from the Class A Member in accordance with this Section 6.6.

(b) Within 60 days after they become aware that they have incurred Recapture Damages, the Class B Member shall notify the Company and the Class A Members in writing of their Recapture Claim for such Recapture Damages, specifying in reasonable detail the cause of such Recapture Damages and the Class B Member's calculation of the amount thereof if reasonably determinable by the Class B Member, or, if not reasonably determinable, an estimate of the range of such Recapture Damages. Within 30 days following receipt of notice of a Recapture Claim, the Class A Members shall notify each of the Class B Members and the Company in writing whether it agrees with or disputes all or a portion of the Recapture Claim, specifying the amount, if any, so agreed to. If the Class A Members shall not deliver such notice within the time specified, it shall be deemed to have delivered a notice on the 30th day disputing the entire amount of such Recapture Claim. The Class B Member shall have all rights and remedies available at law or in equity to the Class B Member to collect any Recapture Damages from the Class A Members.

Section 6.7 Satisfaction of Certain Recapture-Related Obligations of the Class B Member to the Class A Members.

(a) Notwithstanding the provisions of Section 6.1, if the Class A Member shall suffer Recapture Damages as a result of a Class B Recapture Event, the Class A Member shall be entitled to collect such Recapture Damages from the Class B Member in accordance with this Section 6.7.

(b) Within 60 days after they become aware that they have incurred Recapture Damages, the Class A Members shall deliver to the Company and the Class B Member a Recapture Claim notice for such Recapture Damages, specifying in reasonable detail the cause of such Recapture Damages and the Class A Member's calculation of the amount thereof if reasonably determinable by the Class A Member, or, if not reasonably determinable, an estimate of the range of such Recapture Damages. Within 30 days following receipt of notice of a Recapture Claim, the Class B Member shall notify each of the Class A Members and the Company in writing whether it agrees with or disputes all or a portion of the Recapture Claim, specifying the amount, if any, so agreed to. If the Class B Member shall not deliver such notice within the time specified, it shall be deemed to have delivered a notice on the 30th day disputing the entire amount of such Recapture Claim. The Class A Members shall have all rights and remedies available at law or in equity to the Class A Members to collect any Recapture Damages from the Class B Member.

Section 6.8 Satisfaction of Certain Recapture-Related Obligations of the Company or the Project Company.

(a) Notwithstanding the provisions of Section 6.1, if the Company or Project Company is required to make any payment to the United States of America (or any agency or instrumentality thereof), as applicable, resulting from a Recapture Event (i) as a result of a Class A Recapture Event, then the Class A Member will be required to pay the amount of such payment (x) to the United States of America (or any agency or instrumentality thereof) on behalf of the Company or Project Company, as applicable, or (y) in the event that the Company or the Project Company has already made such payment, to the Company or Project Company, as applicable, in accordance with this Section 6.8 or (ii) as a result of a Class B Recapture Event, then the Class B Member will be required to pay the amount of such payment (x) to the United States of America (or any agency or instrumentality thereof) on behalf of the Company or Project Company, as applicable, or (y) in the event that the Company or the Project Company has already made such payment, to the Company or Project Company, as applicable, in accordance with this Section 6.8.

(b) Within 60 days after the Company or Project Company becomes aware that a Recapture Event has occurred that requires the Company or Project Company to make a payment as a result of such Recapture Event, the Company or Project Company, as applicable, shall deliver to the Members a written notice, specifying in reasonable detail the cause of such Recapture Event, including whether caused by a Class A Recapture Event or Class B Recapture Event, and the Company or Project Company's calculation of the amount of any such payment as a result of such Recapture Event, if reasonably determinable by the Company or the Project

Company, or, if not reasonably determinable, an estimate of the range of such payment. Within 30 days following receipt of notice, each Member shall notify the Company or Project Company, as applicable, in writing whether it agrees with or disputes all or a portion of the amount specified in the notice, specifying the amount, if any, so agreed to. The Company and Project Company shall have all rights and remedies available at law or in equity to the Members to collect any payment required to be paid by the Company or the Project Company as a result of a Class A Recapture Event or Class B Recapture Event from the responsible Members.

Section 6.9 Class A Recapture Events Prior to Receipt of Grant.

(a) If, prior to a Grant being received by the Project Company, there is a Recapture Event resulting in a denial of all or a portion of such Grant with respect to the Company or Project Company as a result of a Class A Recapture Event, the Class A Member will be required to pay the Class B Member 99% of the amount that equals the difference between the Grant amount set forth in the Grant Application and the actual Grant amount received.

(b) Within 60 days after a Recapture Event resulting in a denial of all or a portion of the Grant as a result of a Class A Recapture Event, the Class A Member shall have the right to cause the Company or Project Company to appeal, contest or discuss such denial (i) in any formal or informal discussions with Treasury or any other Governmental Authority, (ii) in any formal or informal administrative proceeding before the relevant Governmental Authority and/or (iii) by commencing litigation in any forum appropriate for such appeal or contest. The Class A Member shall have the right to direct such appeal, contest, or discussions. The Class A Member shall keep, or cause the Company or Project Company to keep, the Class B Member reasonably apprised of all developments with respect to any such appeal, contest, or discussions and shall consult with the Class B Member with respect to its strategy for such appeal, contest or discussion prior to beginning any such appeal, contest or discussion.

Section 6.10 Repayment. If the amount of any Recapture Damages paid under Sections 6.6, 6.7, or 6.8 or any payments made under Section 6.9, are reduced or recovered by the Indemnified Party at any time after the making of such payments by the Indemnifying Party, the amount of such reduction or recovery, less any costs or expenses incurred in connection therewith, must promptly be repaid by the Indemnified Party to the Indemnifying Party net of any Taxes imposed upon the Indemnified Party in respect of such amounts, but taking into account any Tax benefit the Indemnified Party actually realizes as a result of such repayment.

Section 6.11 Permitted DistributionsOn or promptly following the execution date of the Note Purchase Agreement, the Project Company will distribute an amount equal to the Permitted Distribution from the proceeds received by the Project Company from the sale of the notes thereunder to the Company. On or promptly following the Final Completion Date, the Project Company will distribute an amount equal to the amounts remaining on deposit in the Construction Escrow Account, upon the occurrence of the Final Completion Date (such amount, the "Aggregate Final Completion Distribution") to the Company. The Members acknowledge

and agree that, notwithstanding anything to the contrary contained in this Agreement, (i) the proceeds of the Permitted Distribution shall be distributed to the Members on April 30, 2013 or such earlier date as may be agreed upon by the Members and (ii) the proceeds of the Aggregate Final Completion Distribution shall be distributed 100% to the Class B Members, distributed among them in proportion to their Pro Rata Shares, on the Distribution Date immediately succeeding the Final Completion Date.

Section 6.12 Repurchase DistributionsNotwithstanding anything to the contrary in this Agreement, from the Effective Date through the date the Current Buyout Amount is repaid in full, which shall be on or prior to March 31, 2020, the Managing Member shall cause the Company to cause the Project Company, promptly following the receipt of funds with respect to any Payment Date Amount under the Repurchase Agreement (on each Payment Date thereunder), to distribute to the Company an amount equal to 100% of such funds associated with all Payment Date Amounts received by the Project Company from the repurchase of the Existing Systems pursuant to the Repurchase Agreement ("Repurchase Distributions"), and promptly thereafter, the Managing Member shall cause the Company to distribute the Repurchase Distributions 100% to the Class B Member, which distribution (so long as made on or prior to March 31, 2020) shall reduce the Current Buyout Amount, including if a Supplemental Buyout Capital Contribution is required to be made by the Class A Member pursuant to Section 4.5 above, the amount of such Supplemental Buyout Capital Contribution, up to the then existing Current Buyout Amount, shall be distributed by the Company to the Class B Member. Further, in the event that (A) the Class A Member or an Affiliate otherwise elects, in its sole discretion, to contribute any funds to the Class B Member on or prior to March 31, 2020, (B) any Payment Date Amount is paid directly to Mehetia pursuant to the terms of the Repurchase Agreement, or (C) a Supplemental Buyout Capital Contribution from the Class A Member is required to be made pursuant to Section 4.5 above, each will be distributed to the Class B Member pursuant to the requirements of this Section 6.12, and, in each case, any such amounts shall be deemed to constitute "Repurchase Distributions" and shall reduce the Current Buyout Amount to the extent of such contribution/payment (so long as made on or prior to March 31, 2020). Notwithstanding the foregoing or anything to the contrary contained herein, in no event will any Repurchase Distributions distributed to the Class B Member after March 31, 2020 reduce the Current Buyout Amount or otherwise result in any redemption of the Class B Member's Membership Interests pursuant to Section 3.12(o) (unless otherwise agreed in writing by the Class B Member in its sole discretion), but any such Repurchase Distributions shall be considered in the calculation of the Target IRR. For the avoidance of doubt, with respect to any Payment Date that occurs after March 31, 2020 or any repurchase of an Existing System under the Repurchase Agreement that occurs after March 31, 2020: (i) the funds from the Payment Date Amount shall be distributed from the Project Company to the Company and, in turn, 100% of such funds distributed to Mehetia, but such amounts shall not decrease the Current Buyout Amount; and (ii) to the extent that such Repurchase Distributions result in the achievement of the Target IRR or result in the Flip Date occurring, Mehetia shall continue to remain a member of the Company entitled to all rights hereunder (including any rights to receive any distributions

hereunder) unless and until the Class A Member exercises its Purchase Option or Mehetia exercises its Sale Option (unless otherwise agreed in writing by the Class B Member in its sole discretion to permit such distributions to result in a redemption of the Class B Member's Membership Interests pursuant to Section 3.12(o)). Notwithstanding anything else in this Agreement or the Repurchase Agreement or any other Transaction Document to the contrary, the Members agree to treat the Repurchase Distributions as a distribution of money for purposes of Section 731 of the Code. In addition, any payment for indemnification, reimbursement of costs or expenses, payments for non revenue-related damages or other non revenue-related compensatory distribution (each a "Compensatory Distribution") made to the Company (or directly to Mehetia) hereunder or pursuant to or in connection with any Transaction Document (excluding any warranty or production guarantee payments actually received by Mehetia (including by way of distribution from the Company)) and allocated to Mehetia (whether such payment is distributed only to Mehetia or to both Mehetia and the Class A Member) pursuant hereto or pursuant to any such Transaction Document, other than payments that are intended to provide compensation for lost generation or lost Company or Project Company revenue shall not be considered a "Repurchase Distribution", and shall not be credited against the Current Buyout Amount or achievement of the Target IRR (it being understood and agreed that if any payment for a Compensatory Distribution is made to the Project Company or the Company pursuant to or in connection with any Transaction Document, then the Managing Member shall the cause the Company (and the Company shall cause the Project Company, as applicable) to promptly distribute such amounts of any Compensatory Distribution to the Company and then further promptly distribute such amounts 100% to Mehetia).

Section 6.13. Distribution of Funds Provided as Security for the Tariff Indemnity Letters of Credit and ITC Indemnity Letter of Credit.

Each of the Tariff Indemnity Distributions and the ITC Indemnity Distribution which are provided as security for the issuance of the Tariff Indemnity Letters of Credit or the ITC Indemnity Letter of Credit, and any funds contributed by the Class A Member for such purpose, and which are subsequently released from the lien of the issuer of the Tariff Indemnity Letters of Credit or the ITC Indemnity Letter of Credit, as applicable, upon release of such lien, shall be immediately removed from the accounts holding such funds by the Managing Member and distributed by the Managing Member to the Class A Member.

ARTICLE VII
ACCOUNTING AND RECORDS

Section 7.1 Reports.

(a) The Managing Member shall cause the Administrator to prepare and deliver to each Member as soon as practical but in no event later than the 20th day after the end of each month, a written report (each, an "Operations Report"), in the same form as previously delivered under the 2013 Operating Agreement, that will include a summary of the kilowatt

hours produced and sold by the Project Company during such month, information regarding the Systems' availability during such month, notice of material events, including but not limited to, defaults under Material Contracts, any Material Adverse Effect that has occurred at the Project Company, any FERC or Grant-related filings, periodic reports on the status of the System sales, periodic financial statements of the Company and the Project Company and such other relevant operational information as may from time to time be reasonably requested, prior to the Flip Date, by Class B Members owning more than 50% of the Class B Membership Interests by Percentage Interest.

(b) No later than 60 calendar days before the start of each Fiscal Year, the Managing Member shall cause the Administrator to prepare or cause to be prepared, and shall submit to each Member, an annual capital and operating budget for the Project Company before the end of the previous Fiscal Year (the "Annual Budget").

(c) The Managing Member shall cause the Administrator to prepare and deliver to each Member on or before the 20th day of each calendar month, a report showing the calculation of Repurchase Distributions, Cash Distributions, Compensatory Distributions and any other distributions for such prior calendar month determined in accordance with Article VI, for both distributions from the Project Company to the Company and the Company to the Members or any Member.

(d) The Managing Member shall cause the Administrator to (i) calculate at least annually whether the Class B Member has reached the Target IRR; provided, however, that if the calculation in a year suggests that the Target IRR will be reached during the next two Fiscal Years, then the Managing Member will calculate whether the Class B Member has reached the Target IRR at least quarterly thereafter; and (ii) send the Class B Member, within 120 days after the end of each Fiscal Year in which the Target IRR was not achieved, a report showing where it believes the Class B Member is in relation to the Target IRR and a similar report within 30 Business Days after the end of each Quarter during any period when quarterly reports are required.

(e) The Managing Member shall cause the Administrator to notify the Class B Member in writing at least 30 days before the Distribution Date following the month in which it believes the Class B Member achieved the Target IRR or at least 30 days before making any liquidating distributions, in connection with a liquidation of the Company pursuant to Section 10.1, if it believes the Class B Member will achieve the Internal Rate of Return as a consequence of the liquidating distributions (the "Target IRR Notice"). The Target IRR Notice will include the Managing Member's Internal Rate of Return calculations and, in the case of a notice delivered in connection with a liquidation, the allocations and distributions that the Managing Member proposes to make to the Class B Member under Section 10.2 in light of the calculations.

(f) With respect to any Repurchase Distribution, or any other distribution to Mehetia under Article VI except for Compensatory Distributions (each a "Cash Distribution"), at least five (5) Business Days prior to each Repurchase Distribution or Cash Distribution (including the Supplemental Buyout Capital Contribution, if applicable), the Managing Member or the Administrator will notify Mehetia in writing of (i) its intent to make such distribution, (ii) the amount of such Repurchase Distribution or Cash Distribution (as applicable), and (iii) the Current Buyout Amount (and calculation thereof) (including, for the avoidance of doubt the amount of the Supplemental Buyout Capital Contribution). In addition to the foregoing, the Managing Member shall prepare and deliver to the Class B Member on or before the 20th day after the end of each calendar month, a report showing (i) the calculation of Repurchase Distributions and any Cash Distributions and the corresponding Current Buyout Amount (and calculation thereof) as of the end of such prior calendar month, (ii) the total number of Existing Systems repurchased under the Repurchase Agreement for such month and the applicable System Capacity, and (iii) the total number of Existing Systems that have not been repurchased under the Repurchase Agreement and their applicable System Capacity.

(g) The Managing Member shall deliver to each Member: (i) concurrent with the delivery to the members of the Project Company, a copy of all reports or notices provided by the Company to the members of the Project Company pursuant to the Project Company LLC Agreement and (ii) promptly following the receipt by the Company or the Project Company (and in any event within 5 Business Days), a copy of all notices received by the Company or the Project Company under the Project Company LLC Agreement or any other Transaction Documents.

Section 7.2 Books and Records and Inspection.

(a) The Managing Member shall cause the Company to keep and shall maintain, full and accurate books of account, financial records and supporting documents that reflect, completely, accurately and in reasonable detail in all material respects, each transaction of the Company and such other matters as are usually entered into the records or maintained by Persons engaged in a business of like character or as are required by law, and all other documents and writings of the Company and all statements and documents required by the Guidance (including, but not limited to, energy production information and financial and accounting records sufficient to demonstrate that the Grant was properly obtained in accordance with the Guidance and any other documents needed to comply with the Guidance maintenance and access to records, requirements and documents needed for the completion of annual project performance reports (including information regarding annual energy production and number of jobs retained) and recapture certification) and as required by this Agreement and the Repurchase Agreement. The books of account, financial records, and supporting documents and the other documents and writings of the Company shall be kept and maintained by the Managing Member at the principal office of the Company. The financial records and reports of the Company and the Project Company shall be kept on an accrual basis and kept in accordance with GAAP.

(b) In addition to and without limiting the generality of Section 7.2(a), the Managing Member shall cause the Company to keep and shall maintain at the Company's principal office:

(i) true and full information regarding the status of the financial condition of the Company, including any financial statements until the applicable statute of limitations expires with respect to the Company tax year to which such information and financial statements relate;

(ii) promptly after becoming available, a copy of the Company's and, if applicable, the Project Company's federal, state, and local income Tax Returns for each year;

(iii) minutes of the proceedings of the Members;

(iv) a current list of the name and last known business, residence or mailing address of each Member and the Administrator;

(v) a copy of this Agreement and the Company's Certificate of Formation, and all amendments thereto, the Project Company's operating agreement and all amendments thereto, together with executed copies of any written powers of attorney pursuant to which this Agreement and such Certificate of Formation and all amendments thereto which have been executed and copies of written consents of Members;

(vi) true and full information regarding the amount of cash and a description and statement of the agreed value of any other property and services contributed by each Member, and the date upon which each became a Member;

(vii) copies of records that would enable a Member to determine the Member's relative shares of the Company's distributions and the Member's relative voting rights; and

(viii) all records related to the production and sale of electricity by the Project Company.

(c) Upon receiving reasonable prior notice to the Managing Member, all books and records of the Company and the Project Company shall be open to inspection and copying by any of the Members or their Representatives during business hours and at such Member's expense, for any purpose reasonably related to such Member's interest in the Company, provided that any such inspection or copying is conducted in a manner which does not unreasonably interfere with the Company's business.

Section 7.3 Bank Accounts, Notes and Drafts.

(a) All funds not required for the immediate needs of the Company shall be placed in Permitted Investments, which investments shall have a maturity appropriate for the anticipated cash flow needs of the Company. All Company funds shall be deposited and held in accounts which are separate from all other accounts maintained by the Members and the Administrator, and the Company's funds shall not be commingled with any funds of any other Person, including the Project Company, any Administrator, any Member or any Affiliate of an Administrator or a Member.

(b) The Members acknowledge that the Company may maintain Company funds in accounts, money market funds, certificates of deposit, other liquid assets in excess of the insurance provided by the Federal Deposit Insurance Corporation, or other depository insurance institutions and that neither the Managing Member nor the Administrator nor the Company shall be accountable or liable for any loss of such funds resulting from failure or insolvency of the depository institution, so long as any such maintenance of funds is in compliance with the first sentence of Section 7.3(a).

(c) Checks, notes, drafts and other orders for the payment of money shall be signed by such officers of the Company, or the Managing Member, as the Company from time to time may authorize. When the Company so authorizes, the signature of any such Person may be a facsimile.

Section 7.4 Financial Statements.

(a) As soon as practicable after the end of each Quarter, but in any event within 60 calendar days after the end of each Quarter, the Managing Member shall furnish to each Member unaudited financial statements with respect to such Quarter for the Company and the Project Company prepared in accordance with GAAP and consisting of (i) a balance sheet showing the Company's and the Project Company's financial position as of the end of such Quarter, (ii) profit and loss statements for the Company and the Project Company for such Quarter, and (iii) a statement of cash flows for the Company and the Project Company for such Quarter. Such statements shall include a statement of Members' equity based on hypothetical liquidation at book value (HLBV) accounting.

(b) By the following April 30 after the end of each Fiscal Year, the Managing Member shall furnish to each Member consolidated financial statements with respect to such Fiscal Year for the Company that are audited and certified by an Accounting Firm and prepared in accordance with GAAP, consisting of (i) a balance sheet showing the Company's financial position as of the end of such Fiscal Year, (ii) profit and loss statements for the Company for such Fiscal Year, (iii) a statement of cash flows for the Company for such Fiscal Year and (iv) related footnotes. Such statements shall include a statement of Members' equity based on hypothetical liquidation at book value (HLBV) accounting.

(c) By the following February 15 after the end of each Fiscal Year, the Managing Member shall furnish to each Member unaudited financial statements with respect to such Fiscal Year for the Company and the Project Company prepared in accordance with GAAP and consisting of (i) a balance sheet showing the Company's and the Project Company's financial position as of the end of such Fiscal Year, (ii) profit and loss statements for the Company and the Project Company for such Fiscal Year, (iii) a statement of cash flows for the Company and the Project Company for such Fiscal Year. Such statements shall include a statement of Members' equity based on hypothetical liquidation at book value (HLBV) accounting.

Section 7.5 Partnership Status and Tax Elections.

(a) The Members intend that the Company will be taxed as a partnership for United States federal, state and local income tax purposes. The Members agree not to elect to be excluded from the application of Subchapter K of Chapter 1 of Subtitle A of the Code or any similar state statute and agree not to elect for the Company to be treated as a corporation, or an association taxable as a corporation, under the Code or any similar state statute.

(b) The Company will make the following elections on the appropriate Tax Returns:

(i) any election necessary to qualify for the Grant and prevent a Class A Recapture Event as it relates to the Grant, or if the Grant is determined by the Members (by a Class Majority Vote) to not be available, any election or claim of any Alternative Tax Program that the Members have decided to elect or claim pursuant to a Class Majority Vote; provided that if the Company and the Project Company seek to claim the ITC, the Members agree to negotiate in good faith and execute any amendments to any of the Transaction Documents, enter into any additional agreements and take all such additional actions as may be reasonably required to effect such an election;

(ii) to the extent permitted under Section 706 of the Code, to adopt as the Company's fiscal year the calendar year;

(iii) to adopt the accrual method of accounting;

(iv) if a distribution of the Company's property as described in Section 734 of the Code occurs or a transfer of Membership Interest as described in Section 743 of the Code occurs, to elect pursuant to Section 754 of the Code to adjust the basis of the Company's properties;

(v) to elect to amortize the organizational expenses of the Company ratably over a period of 180 months as permitted by Section 709(b) of the Code;

(vi) to elect out of additional first year depreciation pursuant to Section 168(k)(2)(D)(iii) of the Code, unless, after consultation with the Class B Member, the Class B Member requests in writing that this election not be made; and

(vii) if approved in writing by Members representing a Class Majority Vote, any other election the Managing Member may deem appropriate.

(c) For Tax years beginning prior to January 1, 2018, the Company shall file an election under Section 6231(a)(1)(B)(ii) of the Code and the Treasury Regulation thereunder to treat the Company as a partnership to which the provisions of Sections 6221 through 6234 of the Code, inclusive, apply.

Section 7.6 Company Tax Returns. The United States federal income Tax Returns for the Company and all other Tax Returns of the Company shall be prepared as directed by the Managing Member in Consultation with the other Members. If a Member notifies the Managing Member that any real property Taxes with respect to the Systems were assessed against or invoiced to such Member, then the Managing Member will cause the Company to pay such Taxes in full and in a timely manner, provided, further, that with respect to each Tax Year ending on the last Friday of November, the Managing Member will cause the Company to prepare preliminary Tax Returns and issue preliminary K-1's to the Members no later than February 1 of the following Tax Year. The Managing Member, in Consultation with the other Members, may extend the time for filing any such Tax Returns as provided for under applicable statutes; provided that, in the event of any such extension, the Managing Member shall provide the other Members with an estimate of the Taxes owed within 20 days of the filing of such extension. At the Company's expense, the Managing Member shall cause the Company to retain an Accounting Firm to prepare or review and sign the necessary federal and state income Tax Returns and information returns for the Company. Each Member shall provide such information, if any, as may be reasonably needed by the Company for purposes of preparing such Tax Returns, provided that such information is readily available from regularly maintained accounting records. At least 30 days prior to filing the federal and state income Tax Returns other than information returns, the Managing Member shall deliver to the other Members for their review a copy of the Company's federal and state income Tax Returns, excluding information returns, in the form proposed to be filed for each Fiscal Year together with a notice of any inconsistencies with the Base Case Model, and shall incorporate all reasonable changes or comments to such proposed Tax Returns requested by the other Members (who shall be required to make all reasonable efforts to provide such changes or comments in a reasonable amount of time) at least 10 days prior to the filing date for such returns. The dispute provisions under Section 11.11 may be invoked if Class B Members owning more than 50% of the Class B Membership Interests disagree with a position taken on any Tax Return; provided that the Accounting Firm preparing the Tax Return still must be able to sign the Tax Return consistent with the resolution of the dispute; provided, further that if the dispute process would not be completed by the date that the Tax Return must be filed under this Section 7.6, then the Managing Member will cause the Company to file the Tax Return as originally prepared by the

required date, but the Managing Member may be required to cause the Company to amend the Tax Return after a conclusion is reached in the dispute process; and provided still further that in the event such challenge confirms the original position in question, the challenging Class B Member shall promptly pay all of the Accounting Firm's reasonable fees and expenses incurred in connection with such challenge. After taking into account any such requested changes, the Managing Member shall cause the Company to timely file, taking into account any applicable extensions, such Tax Returns. Within 20 days after filing such federal and state income Tax Returns and information returns, the Managing Member shall cause the Company to deliver to each Member a copy of the Company's federal and state income Tax Returns and information returns as filed for each Fiscal Year, together with any additional tax-related information in the possession of the Company that such Member may reasonably and timely request in order to properly prepare its own income Tax Returns.

Section 7.7 Tax Audits.

(a) Clean Technologies is hereby designated as the initial "tax matters partner," as that term is defined in Section 6231(a)(7) of the Pre-2018 Code (the "Tax Matters Partner") (for Tax years beginning prior to January 1, 2018), of the Company, with all of the rights, duties and powers provided for in Sections 6221 through 6234 of the Pre-2018 Code, inclusive, and the "partnership representative," as that term is described in Section 6223 of the Code (the "Partnership Representative"), with all of the rights, duties and powers of such position provided for in the Code. Each other Member may provide the Secretary of Treasury with notice that it is a "notice partner" under Section 6223 of the Pre-2018 Code. Clean Technologies is hereby directed and authorized to take whatever steps Clean Technologies, in its reasonable discretion, deems necessary or desirable to perfect such designation as the Tax Matters Partner or Partnership Representative, as the case may be, including filing any forms or documents with the IRS, taking such other action as may from time to time be required under the Treasury Regulations and directing Bloom to take any of the foregoing actions. Clean Technologies shall remain as the Tax Matters Partner or Partnership Representative, as the case may be, so long as it remains the Managing Member and retains any ownership interests in the Company unless Clean Technologies requests that it not serve as Tax Matters Partner or Partnership Representative, as the case may be, and such request is approved by (i) a Class Majority Vote, if such request is made prior to the Flip Date or (ii) a Majority Vote, if such request is made after the Flip Date, or if Members collectively holding more than 50% of the Class B Membership Interests reasonably determine to remove the Tax Matters Partner, or Partnership Representative, as the case may be, for fraud or willful misconduct and appoint a replacement.

(b) For Tax years beginning prior to January 1, 2018, the Tax Matters Partner, in Consultation with the other Members, shall direct the defense of any claims made by the IRS to the extent that such claims relate to the adjustment of Company items at the Company level, except that the strategy to be taken in connection with any such defense and the selection of counsel shall be approved by (i) a Class Majority Vote, if the claims relate to periods before the

Flip Date, (ii) a Majority Vote, if such claims relate to periods after the Flip Date or (iii) a unanimous vote of the Class B Members, if such claims relate to the Grant. For Tax years beginning prior to January 1, 2018, the Tax Matters Partner shall cause the Company to retain and to pay the fees and expenses of counsel approved as described in the preceding sentence and to pay the fees and expenses of other advisors chosen by the Tax Matters Partner in Consultation with the other Members. For Tax years beginning prior to January 1, 2018, the Tax Matters Partner shall promptly deliver to each Member a copy of all notices, communications, reports and writings received from the IRS by the Company relating to or potentially resulting in an adjustment of Company items, shall promptly advise each Member of the substance of any conversations with the IRS in connection therewith and shall keep the Members advised of all developments with respect to any proposed adjustments that come to its or the Administrator's, as the case may be, attention. In addition, for Tax years beginning prior to January 1, 2018, the Tax Matters Partner shall (A) provide each Member with a draft copy of any correspondence or filing to be submitted by the Company in connection with any administrative or judicial proceedings relating to the determination of Company items at the Company level reasonably in advance of such submission, (B) incorporate all reasonable changes or comments to such correspondence or filing, approved or recommended by Members collectively holding more than 50% of the Class B Membership Interests timely requested by any Member and (C) provide each Member with a final copy of correspondence or filing. For Tax years beginning prior to January 1, 2018, the Tax Matters Partner will provide each Member with notice reasonably in advance of any meetings or conferences with respect to any administrative or judicial proceedings relating to the determination of Company items at the Company level (including any meetings or conferences with counsel or advisors to the Company with respect to such proceedings) and each Member shall have the right to participate, at its sole cost and expense, in any such meetings or conferences. For Tax years beginning on or after January 1, 2018, the Partnership Representative shall keep all Members fully and timely informed by written notice, within one week of receiving notice of any audit, administrative or judicial proceedings, meetings or conferences with the IRS or other similar matters that come to its attention in its capacity as Partnership Representative, and all Members shall have the right to review and comment on any submissions to the IRS, and attend and jointly participate in any meetings or conferences with the IRS at its own expense. For Tax years beginning on or after January 1, 2018, each Member shall furnish any information reasonably requested by the Partnership Representative in connection with carrying out its duties, and the Partnership Representative shall not, without the consent of all Members and otherwise in accordance with this Agreement: (1) take or not take any action in respect of an audit contest or other tax matter or proceeding; (2) file a petition under Section 6234 of the Code; (3) file a request for an administrative judgment under Section 6227 of the Code; or (4) make any waiver under Code Section 6232(c)(2) of the Code.

(c) For any issue or matter relating to the period prior to the Flip Date without the approval of Members collectively holding more than 50% of the Class B Membership Interests, the Tax Matters Partner or the Partnership Representative, as the case may be, shall not (i) commence a judicial action (including filing a petition as contemplated in Section 6226(a) or

Section 6228 of the Pre-2018 Code) with respect to a federal income tax matter or appeal any adverse determination of a judicial tribunal; (ii) intervene in any action as contemplated by Section 6226(b) of the Pre-2018 Code; (iii) file any request contemplated in Section 6227(b) of the Pre-2018 Code; or (iv) enter into an agreement extending the period of limitations as contemplated in Section 6229(b)(1)(B) of the Pre-2018 Code or otherwise extend or agree to extend the period of limitations of the Company. For any issue or matter relating to the period prior to the Flip Date without the approval of each of the other Members, the Tax Matters Partner or the Partnership Representative, as the case may be, shall not enter into a settlement agreement with the IRS or otherwise take any action with respect to Taxes which purports to bind the Members. The Tax Matters Partner or Partnership Representative, as the case may be, shall not file any election pursuant to Section 6221(b) of the Code to have the provisions of Subchapter C of Chapter 63 not apply to the Company. Any cost or expense incurred by the Tax Matters Partner or the Partnership Representative, as the case may be, in connection with its duties as Tax Matters Partner or the Partnership Representative, as the case may be, shall be paid by the Company. If the Grant is determined to be unavailable in accordance with the procedures set forth in Section 7.5(b)(i), the Tax Matters Partner or the Partnership Representative, as the case may be, shall elect or claim an Alternative Tax Program only in accordance with Section 7.5(b)(i).

(d) If, for Tax years beginning prior to January 1, 2018, for any reason the IRS disregards the election made by the Company pursuant to Section 7.5(c) and commences any audit or proceeding with respect to a Tax year beginning prior to January 1, 2018 in which it makes a claim, or proposes to make a claim, against any Member that could reasonably be expected to result in the disallowance or adjustment of any items of income, gain, loss, deduction or credit allocated to such Member by the Company, then such Member shall promptly advise the other Members of the same, and such Member, in Consultation with the other Members, shall use commercially reasonable efforts to convert the portion of such audit or proceeding that relates to such items into a Company level proceeding consistent with the Company's election pursuant to Section 7.5(c).

(e) If any Member intends to file, pursuant to Section 6227 of the Pre-2018 Code, a request for an administrative adjustment of any such partnership item of the Company, or to file a petition under Sections 6226, 6228 or other Sections of the Pre-2018 Code with respect to any such partnership item or any other tax matter involving the Company, such Member shall, at least thirty (30) days prior to any such filing, notify the other Members of such intent, which notification must include a reasonable description of the contemplated action and the reasons for such action; provided, however, that this Section 7.7(e) shall not relieve such Member's obligation to use all commercially reasonable efforts to convert a Member level proceeding into a Company level proceeding as provided in Section 7.7(d).

Section 7.8 Cooperation. Subject to the provisions of this Article VII, each Member shall provide the other Members with such assistance as may reasonably be requested by such other Members in connection with the preparation of any Tax Return, any audit or other

examination by any taxing authority, or any judicial or administrative proceedings relating to the liability for any Taxes with respect to the operations of the Company and the Project Company or a Class A Recapture Event.

Section 7.9 Fiscal Year. The fiscal year of the Company (the "Fiscal Year") shall be the same as the taxable year of the Company. The taxable year of the Company will be a year that ends on the last Friday of each November, or such other year as may be required by applicable federal income tax law.

ARTICLE VIII
MANAGEMENT

Section 8.1 Management. Each of the Members acknowledges and agrees that, from and after the Effective Date, the Managing Member shall have responsibility to perform all Administrative Services for and on behalf of the Company. Additionally, the Managing Member shall have all other authority, powers and responsibilities as provided herein; provided that neither the Administrator nor the Managing Member shall (x) take or permit any action that would be a Major Decision hereunder without the prior occurrence of a Class Majority Vote approving such action, or, subject to the requirements imposed upon the Company pursuant to or under the Project Company LLC Agreement, refrain from taking any action that has been approved as a Major Decision hereunder, or (y) subject to the requirements imposed upon the Company pursuant to or under the Project Company LLC Agreement, either (1) take or permit any action that would be an Investor Decision hereunder without the prior consent and direction of Mehetia, or (2) refrain from taking any action directed by Mehetia as an Investor Decision hereunder; provided, that should the Administrator or Managing Member take any such action at the direction of Mehetia as an Investor Decision, and such action results in any claim by a third party (it being understood that any Member or any Affiliate of a Member shall not be deemed to be a third party, but that any Non-Bloom Affiliate Member of the Project Company shall be a third party) against, or damages or liability of the Company, the Project Company (or any of its members), the Administrator and/or the Managing Member owed to any third party (it being understood that any Member or any Affiliate of a Member shall not be deemed to be a third party, but that any Non-Bloom Affiliate Member of the Project Company shall be a third party), Mehetia shall indemnify, defend and hold harmless the Company, the Project Company (or the applicable member(s)), the Administrator and/or the Managing Member, as applicable, against any such claim, damages and liability; further, provided, that Mehetia shall not have any indemnification obligations with respect to any such Investor Decisions if (i) the Managing Member submitted the Investor Decision to Mehetia pursuant to Section 8.4(c), or pursuant to Section 8.3 as a Major Decision for approval and such Major Decision for which approval is requested by the Managing Member is an Investor Decision (ii) to the extent that the claim, damages or liabilities, were a result of the negligence, bad faith, willful misconduct, fraud of or breach by the Administrator, the Managing Member, the Company, the Project Company (or its members), or any Person acting on their behalf (as applicable), or (iii) to the extent that the Project Company or the Company receives any indemnification, insurance or similar payments

from a third party with respect to such claim, damages or liabilities. Notwithstanding the foregoing, in no event shall Mehetia have any indemnification obligation with respect to an Investor Decision for any type of claim (including counter-claim) brought by Bloom or any of its Affiliates as a result of, in connection with or in reaction to the Investor Decision. In each instance in which the Administrator is acting pursuant to its authority hereunder in regards to any Transaction Document, including with respect to any Major Decision or Investor Decision, it shall be deemed a "manager" of the Company under the Act. Except (a) for Major Decisions, (b) for Investor Decisions, and (c) as otherwise required by applicable Legal Requirements or this Agreement, the powers of the Company shall be exercised by or under the authority of, and the business and affairs of the Company shall be managed under the direction of the Managing Member. In addition, the Members may by Class Majority Vote vest in the Managing Member or the Administrator the authority to take actions for and on behalf of the Company not otherwise provided for in this Agreement, including with respect to any specific Transaction Document.

Section 8.2 Managing Member.

(a) The Managing Member shall be the Member designated to act as such hereunder from time to time in accordance with the provisions of this Section 8.2 (the "Managing Member"). The initial Managing Member shall be Clean Technologies. The Managing Member hereby covenants that, commencing on the Effective Date, it shall perform all Administrative Services for and on behalf of the Company. In addition to the foregoing, subject to Section 8.4, the Managing Member shall cause the Company to cause the Project Company, to enforce the Administrative Services Agreement and the MOMA (and any other Material Contracts, including any with Affiliates of Bloom or Clean Technologies) on behalf of the Company and the Project Company; provided, however, that, in the event that the Administrative Services Agreement is terminated and is not replaced, the Managing Member shall perform the work, or engage a third party to perform such work, previously performed by the Administrator prior to the termination of such Administrative Services Agreement in accordance with the Prudent Operator Standard, or if not in accordance with such standard, if approved in advance or ratified by Mehetia.

(b) Upon the termination of the MOMA, the Managing Member shall cause the Company to replace the MOMA in accordance with Section 8.3 and the definition of "Major Decisions" and, to the extent such replacement MOMA is not with an Affiliate of Clean Technologies, the operator (or an Affiliate thereof, if the operator's obligations thereunder are being guaranteed by such Affiliate) under such replacement MOMA shall have substantial experience operating and maintaining comparable equipment.

(c) The Managing Member hereby covenants to cause the Company to, and to cause the Company to cause the Project Company to, implement any Major Decisions approved under this Company LLC Agreement, and not to take any Major Decisions (or comparable decision at the Project Company level) without a Class Majority Vote.

(d) The Managing Member hereby covenants, subject to the requirements imposed upon the Company pursuant to or under the Project Company LLC Agreement, to cause the Company to, and to cause the Company to cause the Project Company (or such other Person as applicable) to, implement any Investor Decisions approved or directed by Mehetia under this Company LLC Agreement, and not to take any Investor Decisions (or comparable decision at the Project Company level) without Mehetia's prior written approval or direction.

(e) Clean Technologies may resign as Managing Member with any such resignation to become effective upon the appointment of a successor Managing Member under this paragraph that is recognized nationally as having substantial experience managing and operating fuel cell facilities. The Members, by a Class Majority Vote prior to the Flip Date and by a Majority Vote thereafter, may at any time (i) remove a Managing Member (x) upon their reasonable determination that there is Cause for removal, or (y) following any Bankruptcy of the Managing Member or foreclosure or involuntary transfer of the Class A Membership Interests held by the Managing Member (or any Bankruptcy of any Person that Controls the Managing Member), and (ii) fill any vacancy as Managing Member caused by removal, resignation or otherwise. The Managing Member may not participate in, and any Membership Interests owned by Clean Technologies or an Affiliate thereof shall be excluded from, any vote to remove or replace a Managing Member under this Section 8.2(e) if the basis alleged for removal of the Managing Member is for Cause.

(f) The Managing Member may, from time to time, designate one or more officers with such titles as may be designated by the Managing Member to act in the name of the Company with such authority as is delegated to the Managing Member hereunder and as may be delegated to such officer(s) by the Managing Member. The current officers are the persons listed on Schedule 8.2(f).

Section 8.3 Major Decisions.

(a) In addition to any other approval required by applicable Legal Requirements or this Agreement, Major Decisions are reserved to the Members, and none of the Company, the Managing Member, the Administrator, or any officer thereof shall do or take or make or approve any Major Decisions with respect to the Company or the Project Company without a Class Majority Vote.

(b) The Managing Member will submit proposed Major Decisions to the Class B Member in writing in accordance with Section 11.1 for their approval, with each submission setting forth in reasonable detail the Major Decision proposed and the basis for the Managing Member's recommendation. Upon receipt of the written submission, the Class B Members will have ten (10) Business Days therefrom to approve or reject the proposal by Class B Members owning a majority of the Class B Membership Interests. If the proposed Major Decision is not approved or rejected by Class B Members owning a majority of the Class B Membership Interests in writing within such period, such proposed Major Decision will be deemed rejected.

Section 8.4 Investor Decisions.

(a) In addition to any other approval required by applicable Legal Requirements or this Agreement, Investor Decisions are reserved to Mehetia, and none of the Company, the Managing Member, Clean Technologies, the Administrator, or any officer thereof shall do or take or make or approve any Investor Decisions with respect to the Company or, the Project Company, without Mehetia's prior written consent or direction.

(b) Mehetia may submit to the Managing Member an Investor Decision in writing in accordance with Section 11.1 setting forth in reasonable detail the Investor Decision proposed and the actions that, subject to the requirements imposed upon the Company pursuant to or under the Project Company LLC Agreement, the Managing Member shall take or allow Mehetia to take, or that the Managing Member will cause the Company to take or cause the Project Company to take (subject to the requirements of the Project Company LLC Agreement). Subject to the requirements imposed upon the Company pursuant to or under the Project Company LLC Agreement, the Managing Member hereby agrees to take all such actions or allow Mehetia to take such actions to effectuate the Investor Decision.

(c) In addition to Section 8.4(b), the Managing Member may submit a proposed Investor Decision to Mehetia in writing in accordance with Section 11.1 for its approval, or direction with respect to such Investor Decision, with each submission setting forth in reasonable detail the Investor Decision proposed or implicated and the basis for the Managing Member's request and recommended action. Upon receipt of the written submission, Mehetia will have ten (10) Business Days therefrom to approve or reject the proposal; provided, however, Mehetia may provide its own direction to the Managing Member at any time with respect to such Investor Decision. If the proposed Investor Decision is not approved or rejected by Mehetia in writing within such period, such proposed Major Decision will be deemed rejected subject to the proviso in the immediately preceding sentence.

Section 8.5 Insurance. The Managing Member shall cause the Company to acquire and maintain (including making changes to coverage and carriers) the casualty, general liability (including product liability), property damage and/or other types of insurance set forth in Schedule 8.5 and the Insurance Report; provided that if any such insurance is not available on commercially reasonable terms, only such insurance shall then be required to be carried pursuant to this Section 8.5 as is then available on commercially reasonable terms. The Class B Members shall be added to such insurance as additional insured and loss payee as their interests may appear, with a waiver of subrogation permitted in their favor (where legally permitted or insurance market practice permits). Such insurance shall require that the Class B Members be provided with 30 days written notice of cancellation (10 days for non-payment of premium). The Managing Member shall cause to be delivered to each Class B Member, promptly after it becomes a Member, certificates from a reputable insurance broker evidencing the maintenance of the insurance required by this Section 8.5, which certificates shall be replaced or updated to

reflect any replacement, renewal or other change to the insurance evidenced thereby, or the addition of any policy not then reflected on the most recently delivered certificates.

Section 8.6 Notice of Material Breach. The Managing Member shall promptly notify the Class B Member (but in no event more than within five Business Days of obtaining actual knowledge) of any (a) notice of default delivered by a party to a Material Contract to the Project Company, the Administrator or the Managing Member or (b) default by a party to a Material Contract (other than a Project Company, the Administrator or any Affiliate thereof) under such Material Contract, in the case of either (a) or (b), which default could reasonably be expected to cause material harm to the Company or any Project Company.

ARTICLE IX
TRANSFERS, CHANGES OF CONTROL AND INDEMNIFICATION

Section 9.1 Prohibited Transfers. No Member shall sell, transfer, assign, convey, pledge, mortgage, encumber, hypothecate or otherwise dispose of all or any part of its Membership Interests or any interest, rights or obligations with respect thereto, or permit a Change of Control of any entity subject to a restriction on Change of Control under this Article IX (any such action, a "Transfer"), except as provided in this Article IX. Prior to the end of the Recapture Period with respect to any System, no Transfer of a Person that directly or indirectly owns an interest in a Member will be permitted if the transfer would cause the Company or Project Company to become a Disqualified Person or cause the Systems, or any portion thereof, to be classified as "tax-exempt use property" for purposes of Section 168 of the Code. After the Recapture Period has ended, the limitations pursuant to this Article IX on Change of Control of any Member shall apply only to such Member directly and shall not apply to any Person that directly or indirectly owns an interest in such Member. Any attempted Transfer of a Membership Interest that does not comply with this Article IX shall be null and void and not recognized by the Company for any purpose.

Section 9.2 Conditions to Transfers of Class A Membership Interests or Changes of Control of Managing Member. Except as otherwise provided in this Article IX, all Transfers of Class A Membership Interests and all Transfers by Bloom of its interests in Clean Technologies must satisfy the following conditions:

(a) The transferring Member must give written notice of the proposed Transfer to each of the Members not less than 10 days prior to the effective date of the proposed Transfer.

(b) The transferring Member and the prospective transferee must each execute, acknowledge and deliver to the Company (as applicable) an assignment agreement substantially in the form of Exhibit D and such other instruments as the other Members may reasonably deem necessary or appropriate to confirm the transferor's intention that the transferee become a Member in its place and the transferee's undertaking to be bound by the terms of this

Agreement and to assume the obligations of the transferor under this Agreement and, to the extent the transferor is to be released from such obligations, the ECCA. The prospective transferee shall make the representations and warranties and be bound by the covenants in Sections 3.11 and 3.12 as of the date of such Transfer; provided that, unless the transferee becomes the Managing Member the covenants in Sections 3.12(b), (c), (d), (g) and (h) shall not apply;

(c) The Transfer will not violate any securities laws or any other applicable federal or state laws rules or regulations, or the order of any court or administrative body having jurisdiction over the Company or the Project Company or any of their assets or any material contract, lease, security, indenture or agreement binding on the Company or the Project Company or their respective assets;

(d) The Transfer will not result in a termination of the Company or the Project Company under Section 708(b)(1)(B) of the Code, unless the transferor has indemnified the other Members against any adverse tax effects in a manner reasonably acceptable to the other Members;

(e) The Transfer will not cause the Company or Project Company to become a Disqualified Person or cause the Systems, or any portion thereof, to be classified as "tax-exempt use property" for purposes of Section 168 of the Code;

(f) The Transfer will not cause there to be more than two Class A Members;

(g) The transferring Member and the prospective transferee shall pay any out-of-pocket expenses of the Company, the Project Company or the other Members resulting from the Transfer;

(h) The transferring Member and the prospective transferee shall have all permits and consents required for such Transfer;

(i) The Transfer will not affect the status of the Project Company as an Exempt Wholesale Generator nor will it cause a disqualification under the REPS Act or any of the Tariffs;

(j) The Transfer will not require the Company to register as an investment company under the 1940 Investment Company Act;

(k) If the Transfer would occur prior to the end of the Recapture Period with respect to any of the Existing Systems, the Transfer will not be effective unless the transferring Member delivers a written opinion of a nationally-recognized law firm, in form and substance satisfactory to the non-transferring Members, that the Transfer will not cause a Class A Recapture Event;

(l) The transferee must be recognized nationally as having substantial experience managing and operating fuel cell facilities, unless otherwise approved by Class B Members owning the majority of Class B Membership Interests;

(m) The Transfer must not cause any adverse tax consequences to the Company, any other Member or the Project Company, in the written opinion of tax counsel reasonably acceptable to the Class B Member;

(n) Prior to the Flip Date, the Transferee must be a Qualified Transferee and the Class B Member shall have consented to such Transfer, such consent not to be unreasonably withheld; and

(o) The Transfer will not cause a breach of, or a default under, the Credit Documents.

Section 9.3 Conditions to Transfers of Class B Membership Interests. Except as otherwise provided in this Article IX, all Transfers of Class B Membership Interests must satisfy the following conditions:

(a) The transferring Member must give written notice of the proposed Transfer to each of the Members not less than 10 days prior to the effective date of the proposed Transfer;

(b) The transferring Member and the prospective transferee must each execute, acknowledge and deliver to the Company (as applicable) an assignment agreement substantially in the form of Exhibit D and such other instruments as the Managing Member may reasonably deem necessary or appropriate to confirm the transferor's intention that the transferee become a Member in its place and the transferee's undertaking to be bound by the terms of this Agreement and to assume the obligations of the transferor under this Agreement and, to the extent the transferor is to be released from such obligations, the ECCA;

(c) The Transfer will not violate any securities laws or any other applicable federal or state laws rules or regulations, or the order of any court or administrative body having jurisdiction over the Company or the Project Company or any of their assets or any material contract, lease, security, indenture or agreement binding on the Company or the Project Company or their respective assets;

(d) The Transfer will not result in a termination of the Company or the Project Company under Section 708(b)(1)(B) of the Code, unless the transferor has indemnified the other Members against any adverse tax effects in a manner reasonably acceptable to the other Members;

(e) The Transfer will not cause the Company or Project Company to become a Disqualified Person or cause the Portfolio, or any portion thereof, to be classified as "tax-exempt use property" for purposes of Section 168 of the Code;

(f) The Transfer will not cause there to be more than three Class B Members; provided that, solely for purposes of making such determination in respect of this paragraph, any Class B Member and any other Class B Member that is an Affiliate of such Class B Member shall be deemed to be a single Class B Member;

(g) The transferring Member and the prospective transferee shall pay any out-of-pocket expenses of the Company, the Project Company or the other Members resulting from the Transfer;

(h) The transferring Member and the prospective transferee shall have all permits and consents required for such Transfer;

(i) The Transfer will not affect the status of any Project Company as an Exempt Wholesale Generator nor will it cause a disqualification under the REPS Act or any of the Tariffs;

(j) The Transfer will not require the Company to register as an investment company under the 1940 Investment Company Act;

(k) If the Transfer would occur prior to the end of the Recapture Period for any of the Existing Systems, the Transfer will not be effective unless the transferring Member delivers a written opinion of a nationally-recognized law firm, in form and substance satisfactory to the non-transferring Members, that the Transfer will not cause a Class B Recapture Event;

(l) Transferee shall be reasonably acceptable to the Class A Members.

(m) Such Transfer by a Class B Member, other than a Transfer to an Affiliate of the transferor or a Transfer to an existing Class B Member, shall not be a Transfer of less than an amount equal to the lesser of (i) 30% of the total Class B Membership Interests or (ii) such Member's entire Class B Membership Interest;

(n) For Transfers prior to the earlier of (i) the contribution by the Class B Member to the Company of 100% of its Equity Commitment Amount or (ii) the Subsequent Funding Termination Date, the transferee must carry an investment grade senior unsecured rating of at least A3 / A- or the Credit Suisse Guaranty must be in full force and effect;

(o) Except for transfers described in Section 9.5 below, the transferee of a Class B Membership Interest must be a passive institutional investor or (i) is not a competitor of Clean Technologies or its affiliates, (ii) is not in litigation or other material dispute with the

Clean Technologies, and (iii) makes substantially the same representations, warranties, and covenants as Class B Members made pursuant to this Agreement;

(p) Transfer must not cause any adverse tax consequences to the Company, any other Member or the Project Company, in the written opinion of tax counsel reasonably acceptable to the Managing Member;

(q) The costs of such Transfer must be borne by the transferee; and

(r) The Transfer will not cause a breach of, or a default under, the Credit Documents.

Section 9.4 Conditions to Changes of Control of Upstream Entities. With respect to any Transfer that is a Change of Control of a Member:

(a) The Transfer will not violate any securities laws or any other applicable federal or state laws rules or regulations, or the order of any court or administrative body having jurisdiction over the Company or the Project Company or any of their assets or any material contract, lease, security, indenture or agreement binding on the Company or the Project Company or their respective assets;

(b) The Transfer will not result in a termination of the Company or the Project Company under Section 708(b)(1)(B) of the Code, unless the transferor has indemnified the other Members against any adverse tax effects in the manner set forth in Section 9.4(h);

(c) The Transfer will not cause the Company or Project Company to become a Disqualified Person or cause the Portfolio, or any portion thereof, to be classified as "tax-exempt use property" for purposes of Section 168 of the Code;

(d) The transferring Person and the prospective transferee shall pay any out-of-pocket expenses of the Company, the Project Company or the other Members resulting from the Transfer;

(e) The transferring entity and the prospective transferee shall have all permits and consents required for such Transfer as they apply to the Company and the Project Company;

(f) The Transfer will not affect the status of any Project Company as an Exempt Wholesale Generator nor will it cause a disqualification under the REPS Act or any of the Tariffs;

(g) The Transfer will not require the Company to register as an investment company under the 1940 Investment Company Act; and

(h) With respect to any Transfer that would result in the termination of the Company or the Project Company as set forth in Section 9.4(b), the transferring Member shall indemnify the Company and the other Members against any adverse effects in a manner reasonably acceptable to the other Members. In connection with such Transfer, the transferring Member shall (i) deliver to each non-transferring Member a guaranty (A) from an entity acceptable to the non-transferring Members having the Required Ratings on the effective date of such Transfer, (B) in an amount not less than the aggregate estimated adverse tax effects with respect to such Transfer and (C) in form and substance satisfactory to the non-transferring Members, or (ii) post collateral in the form of (A) cash, (B) a letter of credit from an Acceptable Credit Party, or (C) liquid securities acceptable to the non-transferring Members, in an amount not less than the aggregate estimated adverse tax effects with respect to such Transfer and in each case in form and substance acceptable to the non-transferring Members.

Section 9.5 Certain Permitted Transfers. Except as otherwise provided in Section 9.1 and this Section 9.5, notwithstanding the provisions set forth in Sections 9.2 and 9.3, the following Transfers (the "Permitted Transfers") may be made at any time and from time to time, without restriction and without notice to, approval of, filing with, consent by, or other action of or by, any Member or other Person:

(a) The issuance of Class B Membership Interests to Mehetia pursuant to the ECCA;

(b) (i) The grant of any security interest in any Class A Membership Interest or any Class B Membership Interest pursuant to any security agreement any Class A Member or Class B Member, as applicable, may enter into with lenders; provided that the requirements in Sections 9.2(a), (c), (d) and (e) shall be satisfied in respect of any such grant of a security interest in Class A Membership Interests, and Sections 9.3(a), (c), (d) and (e) shall be satisfied in respect of a grant of a security interest in a Class B Membership Interest, and (ii) any Transfer in connection with any foreclosure or other exercise of remedies in respect of any Class A Membership Interest or Class B Membership Interest subject to a security interest referred to in this Section 9.5(b)(i); provided, however, that the requirements in Sections 9.2(a), (b), (c), (d), (e), (f), (h), (i), (j), (k), (l) and (m) shall be satisfied in respect of any such Transfer of Class A Membership Interests and the requirements in Sections 9.3(a), (b), (c), (d), (e), (f), (h), (i), (j), (k), (l) and (m) shall be satisfied in respect of any such Transfer of Class B Membership Interests; and provided, further that the provisions of Section 9.2(f) (with respect to Class A Membership Interests) and Section 9.3(f) (with respect to Class B Membership Interests) shall not apply to any Transfer resulting from foreclosure upon, or subsequent transfer of, such Membership Interests;

(c) The Transfer of any Membership Interest solely to an Affiliate of a Member; provided, the requirements set forth in Sections 9.2(a), (b), (c), (d), (e), (f), (g), (h), (i), (j), (k), (l) and (m) shall be satisfied in respect to such Transfer of Class A Membership Interests, and, in the case of a Transfer by a Class B Member, the requirements set forth in Sections 9.3,

except the requirement in Section 9.3(a), which requirement shall be deemed satisfied upon a three day notice, and except the requirements in Sections 9.3(b), (g), (k), (l), (n), (p) and (q), shall be satisfied with respect to such Transfer of Class B Membership Interests (though the requirement in Section 9.3(k) must be met if the transferee is an entity other than an association taxable as a corporation for federal income tax purposes); and

(d) Any Transfer in accordance with Section 9.7 (Purchase Option) or Section 9.8 (Sale Option); provided, however, that the requirements in Sections 9.3(b) and (c) shall be satisfied in respect of any such Transfer, and solely with respect to a Transfer pursuant to Section 9.4, Sections 9.3(c), (d), (e), (g), (i), (j) and (k), shall be satisfied in respect of any such Transfer.

Section 9.6 [Intentionally omitted].

Section 9.7 Purchase Option.

(a) The Class A Member shall have the right, but not the obligation (the "Purchase Option"), at the election of the Class A Member on either the Flip Date or the eleventh anniversary of the Initial Funding Date (the "Purchase Option Date"), upon giving the Company and all other Members 60 days' written notice, to purchase all (but not less than all) of the outstanding Class B Interests from all of the Class B Members by exercise of the Purchase Option (the "Purchase Option Exercise Notice").

(b) The consideration for the Transfer of the Class B Membership Interests to the Class A Member pursuant to the Purchase Option shall be an amount (payable in United States dollars) equal to the Purchase Option Price.

(c) If the Purchase Option is exercised, the closing of such Transfer shall occur on the Business Day that is (i) 60 days after the applicable Purchase Option Exercise Notice is given or (ii) such later date as may be required to obtain either a determination of the Purchase Option Price or any applicable consents or approvals or satisfy any reporting or waiting period under any applicable Legal Requirements.

(d) If the Purchase Option is exercised, at the closing of the Transfer, (1) each Class A Member which has given a Purchase Option Exercise Notice shall pay (by wire transfer of immediately available United States dollars to such United States bank accounts as Class B Members may designate in a written notice to the Company and Class A Members no later than five Business Days prior to the closing date for the Transfer pursuant to the Purchase Option) an amount equal to the Purchase Option Price (determined in accordance with Section 9.7(b)), and (2) each Class B Member shall take the following actions: (i) such Class B Member shall Transfer to the applicable Class A Member all right, title and interest in and to the Class B Membership Interests, free and clear of all Encumbrances other than Permitted Encumbrances; (ii) such Class B Member shall be required to make the representations on Schedule 9 attached

hereto to the applicable Class A Member and the Company; and (iii) such Class B Member shall take all such further actions and execute, acknowledge and deliver all such further documents that are necessary to effectuate the Transfer of the Class B Membership Interests contemplated by this section. Upon the closing of such Transfer, (1) all of such Class B Member's obligations and liabilities associated with the Class B Membership Interests which are the subject of such Transfer will terminate except those obligations and liabilities accrued through the date of such closing, (2) such Class B Member shall have no further rights as a Member, and (3) all the rights, obligations and liabilities associated with the Class B Membership Interests which are the subject of such Transfer shall become the rights, obligations and liabilities of each Person acquiring such Class B Membership Interests.

Section 9.8 Sale Option.

(a) The Class B Member shall have the right, but not the obligation (the "Sale Option"), on the tenth anniversary of the Original Date (the "Sale Option Date"), upon giving the Company and all other Members at least 60 days' advance written notice, to sell all (and not less than all) of its Class B Membership Interests to the Class A Member by exercise of the Sale Option (the "Sale Notice").

(b) The consideration for the Transfer of the Class B Membership Interests to the Class A Member pursuant to the Sale Option shall be an amount (payable in United States dollars) equal to the Sale Price.

(c) If the Sale Option is exercised, the closing of such Transfer shall occur on (i) the tenth anniversary of the Execution Date (or, if not a Business Day, the Business Day immediately preceding the tenth anniversary of the Execution Date) or (ii) such later date as may be required to obtain either a determination of the Sale Price or any applicable consents or approvals or satisfy any reporting or waiting period under any applicable Legal Requirements.

(d) If the Sale Option is exercised, at the closing of the Transfer, (1) each Class A Member which has received a Sale Notice shall pay (by wire transfer of immediately available United States dollars to such United States bank accounts as a Class B Member selling its respective Class B Interests may designate in a written notice to the Company and Class A Members no later than five Business Days prior to the closing date for the Transfer pursuant to the Sale Option) an amount equal to the Sale Price (determined in accordance with Section 9.8(b)), and (2) such Class B Member shall take the following actions: (i) such Class B Member shall Transfer to the applicable Class A Member all right, title and interest in and to the Class B Membership Interests, free and clear of all Encumbrances other than Permitted Encumbrances; (ii) such Class B Member shall be required to make the representations on Schedule 9 attached hereto to the applicable Class A Member and the Company; and (iii) such Class B Member shall take all such further actions and execute, acknowledge and deliver all such further documents that are necessary to effectuate the Transfer of the Class B Membership Interests contemplated by this section. Upon the closing of such Transfer, (A) all of such Class B

Member's obligations and liabilities associated with the Class B Membership Interests which are the subject of such Transfer will terminate except those obligations and liabilities accrued through the date of such closing, (B) such Class B Member shall have no further rights as a Member, and (C) all the rights, obligations and liabilities associated with the Class B Membership Interests which are the subject of such Transfer shall become the rights, obligations and liabilities of each Person acquiring such Class B Membership Interests.

Section 9.9 Regulatory and Other Authorizations and Consents.

(a) In connection with any Transfer pursuant to Sections 9.7 or 9.8 (the "Designated Transfers"), each Member involved shall use all commercially reasonable efforts to obtain all authorizations, consents, orders and approvals of, give all notices to and make all filings with, all Governmental Authorities and third parties that may be or become necessary for the Designated Transfers, its execution and delivery of, and the performance of its obligations under, this Agreement or other Transaction Documents in connection with any such Designated Transfer and will cooperate fully with the other Members in promptly seeking to obtain all such authorizations, consents, orders and approvals, giving such notices and making such filings, including the provision to such third parties and Governmental Authorities of such financial statements and other publicly available financial information with respect to such Member or, if applicable, such Member's guarantor, as the case may be, as such third parties or Governmental Authorities may reasonably request; provided, however, that no Member involved shall have any obligation to pay any consideration to obtain any such consents. In addition, the Members involved shall keep each other reasonably apprised of their efforts to obtain necessary consents and waivers from third parties or Governmental Authorities and the responses of such third parties and Governmental Authorities to requests to provide such consents and waivers.

(b) Without limiting the generality of Section 9.9(a), each Member shall make such filings as may be required under the HSR Act, the Federal Power Act, or any state Legal Requirements relating to the ownership or control of the Systems.

(i) To the extent required by the HSR Act, each Member involved in a Designated Transfer shall (i) file or cause to be filed, as promptly as practicable but in no event later than the fifteenth Business Day after the delivery of any Purchase Option Exercise Notice, as applicable, with the Federal Trade Commission and the United States Department of Justice, all reports and other documents required to be filed by such Member under the HSR Act concerning the Designated Transfer and (ii) promptly comply with or cause to be complied with any requests by the Federal Trade Commission or the United States Department of Justice for additional information concerning the Designated Transfer, in each case so that the initial thirty day waiting period applicable under the HSR Act shall expire as soon as practicable. Each Member involved in a Designated Transfer agrees to request, and to cooperate with the other Members involved in requesting, early termination of any applicable waiting period under the HSR Act. Each of the Class A Members involved in a Designated Transfer shall be responsible for

the filing fees incurred by all Members involved in the Designated Transfer in connection with the initial filings required by the HSR Act in connection with the Designated Transfers (pro rata in proportion to the percentage of Class B Membership Interests each such Class A Member will acquire in connection with the Designated Transfer). Except as expressly provided in the prior sentence with respect to filing fees, each Member involved in a Designated Transfer will be responsible for its own fees and expenses, including any fees and expenses of counsel, accountants or other professional advisors.

(ii) To the extent required by the Federal Power Act, each Member involved in a Designated Transfer shall (i) file or cause to be filed, as promptly as practicable but in no event later than the twenty-first Business Day after the delivery of any Purchase Option Exercise Notice, as applicable, an application for approval of the Designated Transfer pursuant to Section 203 of the Federal Power Act, and (ii) as promptly as practicable but in no event later than the tenth Business Day after the delivery of any Purchase Option Exercise Notice, as applicable, provide to the Company and the Managing Member information needed for the Company to file an application for approval of the Designated Transfer under Section 203 of the Federal Power Act.

Section 9.10 Admission. Any transferee of all or part of any Membership Interests pursuant to a Transfer made in accordance with this Agreement shall be admitted to the Company as a substitute Member upon its execution of a counterpart to this Agreement.

Section 9.11 Security Interest Consent. If any Member grants a security interest in any Membership Interest, upon request by such Member, each other Member will execute and deliver to any person holding such security interest (for itself and/or for the benefit of other lenders) such acknowledgments, consents or other instruments as such person may reasonably request to confirm that such grant and any foreclosure or other exercise of remedies in respect of such Membership constitutes a Permitted Transfer under this Agreement.

Section 9.12 Indemnification; Other Rights of the Members.

(a) Beginning on the Original Date (or, with respect to any additional Member that becomes a Member after the Original Date, on the first date on which such Person becomes a Member hereunder) and continuing thereafter, Clean Technologies agrees to indemnify, defend and hold harmless the Investor Indemnified Parties from and against any and all Investor Indemnified Costs; provided, however, that in no event will Clean Technologies' aggregate obligation (including any prior indemnity payments by Clean Technologies under this Agreement or under the ECCA) to indemnify the Investor Indemnified Parties hereunder exceed 100% of the Funding Payments of the Class B Member made to date except with respect to Investor Indemnified Costs (r) resulting from any payment for indemnification, reimbursement of costs or expenses, payments for damages or other compensatory payments made by the Company pursuant to or in connection with the Project Company LLC Agreement or the New ECCA, (s) resulting from fraud or willful misconduct, (t) resulting from failure to pay any amount due to

Investor Indemnified Parties under the Transaction Documents, (u) resulting from a Third Party Claim, (v) resulting from the failure to enforce a Material Contract with an Affiliate of the Indemnifying Party, (w) resulting from Project Company (or any of the Systems) not qualifying for (or becoming disqualified under) the REPS Act or the Tariffs as a result of any act or omission by Bloom or any Affiliate of Bloom (including, without limitation, (i) Bloom failing to achieve commercial operation (as defined in the QFCP-RC Tariff) of 5 MW of Systems by March 31, 2013 (unless such date has been extended in accordance with the QFCP-RC Tariff), (ii) Bloom failing to achieve commercial operation (as defined in the QFCP-RC Tariff) of 30 MW of Systems, of which at least 20 MW of Systems were actually manufactured by Bloom in the State of Delaware by September 30, 2014 (unless such date has been extended in accordance with the QFCP-RC Tariff), (iii) Bloom failing to be manufacturing fuel cells capable of being powered by renewable fuels from a permanent manufacturing facility located in the State of Delaware as of the date of Commencement of Operations (as defined in the MESPA) of the full nameplate capacity of the Portfolio, or (iv) any of the acts or omissions set forth in Section 4.3 of the MESPA), (x) resulting from Bloom failing to be in compliance with the Letter Agreement (including, if so required by the State of Delaware, posting the security referred to in the Letter Agreement upon or prior to the Commencement of Operation of the first System), (y) resulting from any surcharges pursuant to the Tariffs being deemed a tax under Delaware law, or (z) resulting from any fees, costs, expenses or liabilities relating to the Tariff Indemnity Letters of Credit or ITC Indemnity Letter of Credit. Notwithstanding anything to the contrary, Clean Technologies agrees to indemnify, defend and hold harmless the Investor Indemnified Parties for all damages, losses, claims, liabilities, demands, charges, suits, Taxes, penalties, costs, and reasonable expenses (including court costs and reasonable attorneys' fees and expenses of one law firm for all Investor Indemnified Parties) related to or arising out of a CT Indemnifiable Claim.

(b) Beginning on the Original Date (or, with respect to any additional Member that becomes a Member after the Original Date, on the first date on which such Person becomes a Member hereunder) and continuing thereafter, the Class B Member agrees to indemnify, defend and hold harmless the Clean Technologies Indemnified Parties from and against any and all Clean Technologies Indemnified Costs; provided, however, except with respect to Clean Technologies Indemnified Costs (w) resulting from fraud or willful misconduct, (x) resulting from failure to pay any amount due to Clean Technologies Indemnified Parties under the Transaction Documents, (y) resulting from a Third Party Claim, or any CT Indemnifiable Claim, or (z) resulting from the failure to enforce a Material Contract with an Affiliate of the Indemnifying Party, in no event will the Class B Member's aggregate obligation (including any prior indemnity payments by the Class B Member under this Agreement or under the ECCA) to indemnify the Clean Technologies Indemnified Parties hereunder exceed 100% of the Funding Payments of the Class B Member made to date.

(c) Other than with respect to Indemnified Costs resulting from Third Party Claims, no claim for indemnification may be made with respect to any Indemnified Costs (other than fraud, willful misconduct, or failure to pay any amount due to Indemnified Parties under

any Transaction Document) until the aggregate amount of such costs for which indemnification is (or previously has been) sought by the Indemnified Party under all Transaction Documents exceeds $175,000 and once such threshold amount of claims has been reached, the relevant Indemnified Party and its Affiliates shall have the right to be indemnified only to the extent the amount of Indemnified Costs claimed exceed such threshold amount. Claims for indemnification under this Company LLC Agreement and the other Transaction Documents shall not be duplicative of one another and shall not allow for duplicative recoveries.

Section 9.13 Indemnification of Members by the Company. Except as otherwise set forth in this Agreement, each Member and any Affiliate of a Member, and each of their respective officers, directors, shareholders, employees and agents (each, a "Member Party") shall be exculpated from liability for and defended, indemnified and held harmless by the Company from all Claims arising out of the performance by such Member Party of its obligations under this Company LLC Agreement so long as such Member Party acted in good faith and in a manner reasonably believed by it to be in the best interest of or not opposed to the interest of the Company; provided, however, that no Member Party shall be shall be exculpated from liability for and defended, indemnified and held harmless or entitled to the payment of an indemnity claim under this Article IX.

Section 9.14 Direct Claims. In any case in which an Indemnified Party seeks indemnification under Section 9.12 that is not subject to Section 9.15 because no Third Party Claim is involved, the Indemnified Party shall promptly notify the Indemnifying Party in writing of any amounts that the Indemnified Party claims are subject to indemnification under the terms of this Article IX. The failure of the Indemnified Party to exercise promptness in such notification shall not amount to a waiver of such claim, except to the extent the resulting delay materially and adversely prejudices the position of the Indemnifying Party with respect to such claim.

Section 9.15 Third Party Claims. An Indemnified Party shall give written notice to the Indemnifying Party within 10 days after it has actual knowledge of commencement or assertion of any Third Party Claim in respect of which the Indemnified Party may seek indemnification under Section 9.12. Such notice shall state the nature and basis of such Third Party Claim and the events and the amounts thereof to the extent known. Any failure to so notify the Indemnifying Party shall not relieve the Indemnifying Party from any liability that the Indemnifying Party may have to the Indemnified Party under this Article IX, except to the extent the failure to give such notice materially and adversely prejudices the Indemnifying Party. In case any such action, proceeding or claim is brought against an Indemnified Party, so long as it has acknowledged in writing to the Indemnified Party that it is liable for such Third Party Claim pursuant to this Section 9.15, the Indemnifying Party shall be entitled to participate in and, unless in the reasonable judgment of the Indemnified Party a conflict of interests between it and the Indemnifying Party may exist in respect of such Third Party Claim or such Third Party Claim entails a material risk of criminal penalties or civil fines or non monetary sanctions being imposed on the Indemnified Party or a risk of materially adversely affecting the Indemnified

Party's business (a "Third Party Penalty Claim"), to assume the defense thereof, with counsel selected by the Indemnifying Party and reasonably satisfactory to the Indemnified Party, and after notice from the Indemnifying Party to the Indemnified Party of its election so to assume the defense thereof, the Indemnifying Party shall not be liable to the Indemnified Party for any legal or other expenses subsequently incurred by the latter in connection with the defense thereof other than reasonable costs of investigation or defending such portion of such Third Party Penalty Claim; provided nothing contained herein shall permit Clean Technologies to control or participate in any Tax contest or dispute involving a Class B Member or any Affiliate of a Class B Member, or permit a Class B Member to control or participate in any Tax contest or dispute involving any Affiliate of Clean Technologies other than the Company and the Project Company; and, provided, further, the Parties agree that the handling of any Tax contests involving the Company will be governed by Section 7.7. In the event that (i) the Indemnifying Party advises an Indemnified Party that the Indemnifying Party will not contest a claim for indemnification hereunder, (ii) the Indemnifying Party fails, within 30 days of receipt of any indemnification notice to notify, in writing, such Indemnified Party of its election, to defend, settle or compromise, at its sole cost and expense, any such Third Party Claim (or discontinues its defense at any time after it commences such defense) or (iii) in the reasonable judgment of the Indemnified Party, a conflict of interests between it and the Indemnifying Party exists in respect of such Third Party Claim or the action or claim is a Third Party Penalty Claim, then the Indemnified Party may, at its option, defend, settle or otherwise compromise or pay such action or claim or Third Party Claim in each case, at the sole cost and expense of the Indemnifying Party. In any event, unless and until the Indemnifying Party elects in writing to assume and does so assume the defense of any such claim, proceeding or action, the Indemnifying Party shall be liable for the Indemnified Party's reasonable costs and expenses arising out of the defense, settlement or compromise of any such action, claim or proceeding. The Indemnified Party shall cooperate to the extent commercially reasonable with the Indemnifying Party in connection with any negotiation or defense of any such action or claim by the Indemnifying Party. The Indemnifying Party shall keep the Indemnified Party fully apprised at all times as to the status of the defense or any settlement negotiations with respect thereto. If the Indemnifying Party elects to defend any such action or claim, then the Indemnified Party shall be entitled to participate in such defense with counsel of its choice at its sole cost and expense unless otherwise specified herein; provided that any such participation of the Indemnified Party shall be at the Indemnifying Party's sole cost and expense to the extent such participation relates to a Third Party Penalty Claim. If the Indemnifying Party does not assume such defense, the Indemnified Party shall keep the Indemnifying Party apprised at all times as to the status of the defense; provided, however, that the failure to keep the Indemnifying Party so informed shall not affect the obligations of the Indemnifying Party hereunder. The Indemnifying Party shall not be liable for any settlement of any action, claim or proceeding effected without its written consent; provided, however, that the Indemnifying Party shall not unreasonably withhold, delay or condition any such consent. Notwithstanding anything in this Section 9.15 to the contrary, the Indemnifying Party shall not, without the Indemnified Party's prior written consent, (i) settle or compromise any claim or consent to entry of judgment in respect thereof which involves any condition other

than payment of money by the Indemnified Party, (ii) settle or compromise any claim or consent to entry of judgment in respect thereof without first demonstrating to Indemnified Party the ability to pay such claim or judgment, or (iii) settle or compromise any claim or consent to entry of judgment in respect thereof that does not include, as an unconditional term thereof, the giving by the claimant or the plaintiff to the Indemnified Party, a full and complete release from all liability in respect of such claim.

Section 9.16 No Duplication. Any liability for indemnification under this Article IX shall be determined without duplication of recovery. Without limiting the generality of the prior sentence, if a statement of facts, condition or event constitutes a breach of more than one representation, warranty, covenant or agreement which is subject to the indemnification obligation in Section 9.12, only one recovery of Indemnified Costs per Indemnified Party shall be allowed.

Section 9.17 Sole Remedy. Except in the case of fraud, willful misconduct or failure to pay and except for claims brought under Article 6 of the ECCA, the enforcement of the claims of the Parties under Section 6.6, Section 6.7, Section 6.8, Section 6.9 or Article IX of this Agreement, or the enforcement of claims of the Project Company under the Repurchase Agreement, are the sole and exclusive remedies that a Party shall have under this Agreement for the recovery of Indemnified Costs; provided, however, that notwithstanding anything to the contrary in this Agreement, each Party hereby reserves all equitable remedies.

Section 9.18 Survival. All representations, warranties, covenants and obligations made or undertaken by a Party in this Agreement or in any other Transaction Document are material, have been relied upon by the other Parties and, except as otherwise provided in Section 9.18 or elsewhere in this Agreement (or, with respect to any representations, warranties, covenants and obligations made or undertaken in any other Transaction Document, in such Transaction Document), shall continue in full force and effect, together with the associated rights of indemnification, indefinitely.

Section 9.19 Final Date for Assertion of Indemnity Claims. All claims by an Indemnified Party for indemnification pursuant to this Article IX resulting from breaches of representations or warranties in Article III of this Agreement shall be forever barred unless the other Party is notified within eighteen (18) months after the date such representation or warranty is made; provided that if written notice of a claim for indemnification has been given by an Indemnified Party on or prior to the last day of the respective foregoing period, then the obligation of the other Party to indemnify such Indemnified Party pursuant to this Article IX shall survive with respect to such claim until such claim is finally resolved.

Section 9.20 Reasonable Steps to Mitigate. Each Indemnified Party will take, at the Indemnifying Party's own reasonable cost and expense, all reasonable commercial steps identified by Indemnifying Party to the Indemnified Parties to mitigate all Indemnified Costs (other than any such Indemnified Costs that are Taxes), which steps may include availing itself

of any defenses, limitations, rights of contribution, claims against third Persons and other rights at law or equity. The Indemnified Parties will provide such evidence and documentation of the nature and extent of the Indemnified Costs as may be reasonably requested by the Indemnifying Party.

Section 9.21 Net of Insurance Benefits. All Indemnified Costs shall be net of insurance recoveries from insurance policies of the Project Company (including under the existing title policies) to the extent that any proceeds of such policies, less any costs, expenses or premiums incurred by the Project Company in connection therewith, are distributed by the Project Company to the Company and are in turn distributed by the Company to the Indemnified Party; provided, however, such amount shall account for any costs or expenses incurred by the Indemnified Party in connection with obtaining insurance proceeds with respect to any breach or nonperformance hereunder.

Section 9.22 No Consequential Damages. Indemnified Costs shall not include, and an Indemnifying Party shall have no obligation to indemnify any Indemnified Party for or in respect of, any punitive, consequential or exemplary damages of any nature including but not limited to damages for lost profits or revenues or the loss or use of such profits or revenue, loss by reason of plant shutdown or inability to operate at rated capacity, increased operating expenses of plant or equipment, increased costs of purchasing or providing equipment, materials, labor, services, costs of replacement, power or capital, debt service fees or penalties, inventory or use charges, damages to reputation, damages for lost opportunities, or claims of the Project Company's customers, members or affiliates, regardless of whether said claim is based upon contract, warranty, tort (including negligence and strict liability) or other theory of law unless payable by such Indemnified Party as part of a Third Party Claim; provided, however, that the lost profits or revenues (and the loss or use thereof) language set forth in this Section 9.22 shall not be interpreted to exclude from Indemnified Costs any damages, losses, claims, liabilities, demands charges, suits, Taxes, penalties, costs or expenses that would otherwise be included within the definition of Indemnified Costs because they result from a reduction in the profits of the Project Company, the Company, or both.

Section 9.23 Payment of Indemnification Claims. All claims for indemnification shall be paid by Indemnifying Party in immediately available funds in U.S. dollars. Any undisputed portion of an indemnification claim shall be paid promptly by the Indemnifying Party to the Indemnified Parties involved. An Indemnifying Party may dispute any portion of an indemnification claim, provided, however, that such disputed indemnification claim shall be paid promptly by the Indemnifying Party to the Indemnified Party together with interest at a market rate upon the final determination of the payable amount of the claim (if any) by a court of competent jurisdiction.

Section 9.24 Repayment; Subrogation. If the amount of any Indemnified Costs, at any time after the making of an indemnity payment in respect thereof, is reduced by recovery, settlement or otherwise under any insurance coverage (excluding any proceeds from self

insurance or flow through insurance policies) or under any claim, recovery, settlement or payment by or against any other entity, the amount of such reduction, less any costs, expenses or premiums incurred in connection therewith, must promptly be repaid by the Indemnified Party to the Indemnifying Party net of any Taxes imposed upon the Indemnified Party in respect of such amounts, but taking into account any Tax benefit the Indemnified Party receives as a result of such repayment. Upon making any indemnity payment (other than any indemnity payment relating to Taxes), the Indemnifying Party will, to the extent of such indemnity payment, be subrogated to all rights of the Indemnified Party against any third party, except third parties that provide insurance coverage to the Indemnified Party or its Affiliates, in respect of the Indemnified Costs to which the indemnity payment relates. Without limiting the generality or effect of any other provision hereof, each such Indemnified Party and the Indemnifying Party shall duly execute upon request all instruments reasonably necessary to evidence and perfect the above described subrogation rights, and otherwise cooperate in the prosecution of such claims at the direction of the Indemnifying Party. Nothing in this Section 9.24 will be construed to require any Party to obtain or maintain any insurance coverage.

ARTICLE X
DISSOLUTION AND WINDING-UP

Section 10.1 Events of Dissolution. The Company shall be dissolved and its affairs shall be wound up upon the first to occur of any of the following:

(a) the written consent of the Members representing a Class Majority Vote to dissolve and terminate the Company after the final Recapture Period;

(b) the entry of a decree of judicial dissolution under Section 18-802 of the Act;

(c) the occurrence of the LLC Agreement Termination Date;

(d) the disposition of all or substantially all of the Company's business and assets after the final Recapture Period;

(e) the issuance of a final, nonappealable court order which makes it unlawful for the business of the Company to be carried on; or

(f) at any time there are no members of the Company unless the business of the Company is continued in accordance with the Act.

Section 10.2 Distribution of Assets.

(a) The Members hereby appoint the Managing Member to act as the liquidator upon the occurrence of one of the events in Section 10.1. Upon the occurrence of such an event, the liquidator will proceed diligently to wind up the affairs of the Company and make

final distributions as provided herein and in the Act. The liquidator may sell, and will use commercially reasonable efforts to obtain the best possible price for, any or all Company property, including to Members. In no event, without the approval of Members by a Class Majority Vote, will a sale to a Member be for an amount that is less than fair market value (determined by the Appraisal Method if the Members (by a Class Majority Vote) are unable to agree on the fair market value).

(b) The liquidator will first pay, satisfy or discharge from Company funds all of the debts, liabilities and obligations of the Company (including all expenses incurred in liquidation) or otherwise make adequate provision for payment and discharge thereof (including the establishment of a cash escrow fund for contingent, conditional or unmatured liabilities in such amount and for such term as the liquidator may reasonably determine) in the order of priority as provided by law.

(c) All assets of the Company will be treated as if sold, and the gain treated as realized on those assets will be allocated first to Members with deficits in their Capital Accounts (in the ratio of the deficits if more than one Member's Capital Account is in deficit) in order to eliminate the deficits.

(d) Remaining gain or loss will be allocated next to the Class B Member in an effort to set the Capital Account of the Class B Member at a level that would allow it to reach the Target IRR out of the liquidating distributions if the Target IRR has not already been achieved, and thereafter in the ratio in Section 5.1(a)(ii), provided that no allocation will increase a deficit in the Capital Account of a Class B Member.

(e) After the allocations in clauses (c) and (d) have been made, then cash and property will be distributed pro rata to the Members in the amount of the positive balances in their Capital Accounts by the end of the taxable year during which the liquidation occurs (or, if later, within 90 days after the date of such liquidation).

(f) The distribution of cash and property to a Member under this Section 10.2 constitutes a complete return to the Member of its Capital Contributions and a complete distribution to the Member on its Membership Interests in the Company of all the Company's property and constitutes a compromise to which all Members have consented within the meaning of Section 18-502(b) of the Act. If the assets of the Company remaining after the payment or discharge of the debts and liabilities of the Company are insufficient to return Capital Contributions of each Member, such Member shall have no recourse against the Company or any other Member.

Section 10.3 In-Kind Distributions. There shall be no distribution of assets of the Company in kind without a prior Class Majority Vote.

Section 10.4 Certificate of Cancellation.

(a) When all debts, liabilities and obligations have been paid and discharged or adequate provisions have been made therefor and all of the remaining property and assets have been distributed to the Members, a certificate of cancellation shall be executed and filed by the liquidator with the Secretary of State of the State of Delaware, which certificate shall set forth the information required by Section 18-203 of the Act.

(b) Upon the filing of the certificate of cancellation, the existence of the Company shall cease.

(c) All costs and expenses in fulfilling the obligations under this Section 10.4 shall be borne by the Company.

ARTICLE XI
MISCELLANEOUS

Section 11.1 Notices. Unless otherwise provided herein, any offer, acceptance, election, approval, consent, certification, request, waiver, notice or other communication required or permitted to be given hereunder (collectively referred to as a "Notice"), shall be in writing and delivered (a) in person, (b) by registered or certified mail with postage prepaid and return receipt requested, (c) by recognized overnight courier service with charges prepaid, (d) by facsimile transmission, or (e) by e-mail directed to the intended recipient at the address of such Member on Schedule 4.2(d) or at such other address as any Member hereafter may designate to the others in accordance with a Notice under this Section 11.1. A Notice or other communication will be deemed delivered on the earliest to occur of (i) its actual receipt when delivered in person, (ii) the fifth Business Day following its deposit in registered or certified mail, with postage prepaid, and return receipt requested, (iii) the second Business Day following its deposit with a recognized overnight courier service, (iv) the date of receipt of a facsimile, except if such date of receipt is not a Business Day, then the next Business Day following such date of receipt, provided the sender can and does provide evidence of successful transmission, or (v) the date of transmission of an e-mail, except if such date of transmission is not a Business Day, then the next Business Day following such date of transmission; provided no delivery failure message is received by the sender. Any Notice or other communication received on a day that is not a Business Day or later than 5:00 p.m. on a Business Day shall be deemed to be received on the next Business Day.

Section 11.2 Amendment. Except for an amendment of Schedule 4.2(d), an amendment of Annex II to reflect the issuance of additional Class B Membership Interests or a Transfer of Class B Membership Interests, or an amendment in connection with the admission of a new Member, in each case in accordance with the terms of this Agreement, this Agreement may be changed, modified or amended only by an instrument in writing duly executed by all Members.

Section 11.3 Partition. Each of the Members hereby irrevocably waives, to the extent it may lawfully do so, any right that such Member may have to maintain any action for partition with respect to the Company property.

Section 11.4 Waivers and Modifications. Any waiver or consent, express, implied or deemed, to or of any breach or default by any Person in the performance by that Person of its obligations with respect to the Company or any action inconsistent with this Agreement is not a consent or waiver to or of any other breach or default in the performance by that Person of the same or any other obligations of that Person with respect to the Company or any other such action. Failure on the part of a Person to insist in any one or more instances upon strict performance of any provisions of this Agreement, to take advantage of any of its rights hereunder, or to declare any Person in default with respect to the Company, irrespective of how long that failure continues, does not constitute a waiver by that Person of its rights with respect to that Person or its rights with respect to that default until the applicable statute of limitations period has lapsed. All waivers and consents hereunder shall be in writing duly executed by all Members affected by such waiver or consent and shall be delivered to the other Members in the manner described in Section 11.1.

Section 11.5 Severability. Except as otherwise provided in the succeeding sentence, every term and provision of this Agreement is intended to be severable, and if any term or provision of this Agreement is illegal or invalid for any reason whatsoever, such illegality or invalidity shall not affect the legality or validity of the remainder of this Agreement. The preceding sentence shall be of no force or effect if the consequence of enforcing the remainder of this Agreement without such illegal or invalid terms or provision would be to cause any Party to lose the benefit of its economic bargain.

Section 11.6 Successors; No Third-Party Beneficiaries. This Agreement is binding on and inures to the benefit of the Members and their respective heirs, legal representatives, successors and permitted assigns. Nothing in this Agreement shall provide any benefit to any third party or entitle any third party to any claim, cause of action, remedy or right of any kind, it being the intent of the Members that this Agreement shall not be construed as a third-party beneficiary contract. To the full extent permitted by law, no creditor or other third party having dealings with the Company shall have the right to pursue any other right or remedy hereunder or at law or in equity, it being understood and agreed that the provisions of this Agreement shall be solely for the benefit of, and may be enforced solely by, the parties hereto and their respective successors and permitted assigns. None of the rights of the Members herein set forth to make Capital Contributions or loans to the Company shall be deemed an asset of the Company for any purpose by any creditor or other third party, nor may such rights or obligations be sold, transferred or assigned by the Company or pledged or encumbered by the Company to secure any debt or other obligation of the Company or of any of the Members.

Section 11.7 Entire Agreement. This Agreement, including the Annexes, Exhibits, and Schedules attached hereto (which are hereby incorporated by reference) or the

other agreements, and exhibits, annexes or schedules thereto expressly incorporated herein by reference, constitute the entire agreement of the Members with respect to the matters covered herein. This Agreement supersedes all prior agreements and oral understandings among the parties hereto with respect to such matters, including, for the avoidance of doubt, the 2012 Operating Agreement, and the 2013 Operating Agreement.

Section 11.8 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of Delaware, excluding any conflict of laws rule or principle that might refer the governance or construction of this Agreement to the law of another jurisdiction.

Section 11.9 Further Assurances. In connection with this Agreement and the transactions contemplated hereby, each Member shall execute and deliver any additional documents and instruments and perform any additional acts that may be reasonably required or useful to carry out the intent and purpose of this Agreement and as are not inconsistent with the terms hereof.

Section 11.10 Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be an original but all of which together will constitute one instrument, binding upon all parties hereto, notwithstanding that all of such parties may not have executed the same counterpart. Signatures delivered by facsimile, portable document format (.PDF) or other electronic means (including services such as DocuSign) will be considered original signatures.

Section 11.11 Dispute Resolution.

(a) Except as provided in Section 11.11(b) and Section 11.11(c), in the event a dispute, controversy or claim arises hereunder, the aggrieved party will promptly provide written notification of the dispute to the other party within 10 days after such dispute arises. A meeting will be held promptly between the parties, attended by representatives of the parties with decision-making authority regarding the dispute, to attempt in good faith to negotiate a resolution of the dispute. If the parties are not successful in resolving a dispute within 21 days, the parties will thereafter be entitled to pursue all such remedies as may be available to them; provided that the parties hereby irrevocably submit to the exclusive jurisdiction of any state or federal court in New York county, New York or any state of federal court in the State of Delaware with respect to any action or proceeding arising out of or relating to this Agreement. For the avoidance of doubt, no Member waives its right to maintain a legal action or proceeding in the courts of the State of Delaware with respect to matters relating to the organization or internal affairs of the Company.

(b) If any Class B Member disputes the determination that the Flip Date has occurred (including based on any item or procedure or calculation that affects such determination contained in any notice or report delivered to such Class B Member), such Class B Member shall

notify the other Members not more than 20 days after such Class B Member has received written notice from the Managing Member that the Flip Date was determined to have occurred. In such event, the Members shall consider the issues raised or in dispute and discuss such issues with each other and attempt to reach a mutually satisfactory agreement. If notice of dispute is not given by any Class B Member within such period, the determination that the Flip Date has occurred, and the items, procedures and calculations described above relating thereto, will be final and binding on the Members. If the dispute as to the Managing Member's calculations is not promptly resolved within ten Business Days of such notification of the dispute, the Class B Member and the Managing Member shall each promptly present their interpretations to an Independent Accounting Firm, and shall instruct the Independent Accounting Firm to determine the correct amount of the calculations in dispute (if applicable, in accordance with the methodology in Sections 6.5 or 7.1) and to resolve the dispute promptly, but in no event more than twenty Business Days after having the dispute submitted to it. The Independent Accounting Firm will make a determination as to each of the items in dispute, which must be (i) in writing, (ii) furnished to each Member and (iii) made in accordance with this Agreement, and which determination, absent manifest error, will be conclusive and binding on all Members, taking into account Sections 6.5(b) and (c). Each Member shall use reasonable efforts to cause the Independent Accounting Firm to render its decision as soon as reasonably practicable, including by promptly complying with all reasonable requests by the Independent Accounting Firm for information, books, records and similar items. In the event the Independent Accounting Firm determines that any of the calculations in dispute was incorrect in any material respect, the fees and expenses of the Independent Accounting Firm shall be borne by Class A Members (pro rata in proportion to their Percentage Interests). In all other cases the fees and expenses of the Independent Accounting Firm shall be borne by the Class B Member disputing any of the calculations (if more than one, pro rata in proportion to their Percentage Interests). This Section 11.11(b) shall apply to any dispute brought under Section 7.6 hereof, *mutatis mutandis*.

(c) If Mehetia disputes the amount or determination of any Repurchase Distributions, the Supplemental Buyout Capital Contribution, Cash Distributions, or Compensatory Distributions (including based on any item or procedure or calculation that affects such determination contained in any notice or report delivered to Mehetia, including the calculation and determination of the Current Buyout Amount (including the amount of the Supplemental Buyout Capital Contribution)), Mehetia shall notify the other Members in writing not more than 20 days after Mehetia has received written notice from the Managing Member, setting forth its objections thereto (an "Objections Notice"), which statement will identify in reasonable detail those items and amounts to which Mehetia objects (the "Disputed Amounts"). After the delivery of an Objections Notice, a meeting shall be held promptly between Mehetia and the Managing Member, attended by representatives of each of them with decision-making authority regarding the dispute, to attempt in good faith to negotiate a resolution of the dispute and each Disputed Amount. If Mehetia and the Managing Member do not reach a final resolution within 20 days after the delivery of the Objections Notice Mehetia and the Managing Member will submit any unresolved Disputed Amounts to the Independent Accounting Firm. In such an

event, each of Mehetia and the Managing Member will submit their calculations and their position in the applicable report in which was originally delivered to Mehetia with the Disputed Amounts, with respect to the unresolved Disputed Amounts (but not, for the avoidance of doubt, with respect to any other items), provided that each such report shall not be more favorable to the submitting party as was the initial report delivered to Mehetia or the Objections Notice (as applicable) together with such supporting documentation as it deems appropriate, to the Independent Accounting Firm within 20 days after the date on which such unresolved Disputed Amounts were submitted to the Independent Accounting Firm for resolution, it being agreed that each of Mehetia and the Managing Member will make their respective submission contemporaneously, and with a copy to the other. Each of Mehetia and the Managing Member will use their respective commercially reasonable efforts to cause the Independent Accounting Firm to resolve all Disputed Amounts submitted to it as soon as practicable, but in any event within 30 days after the date on which the Independent Accounting Firm is referred the dispute. The Independent Accounting Firm will resolve such dispute by choosing, in its entirety, the report and calculations proposed by either Mehetia or the Managing Member, and will make no other resolution of such dispute. The report and calculations selected by the Independent Accounting Firm will be final, binding and non appealable by Mehetia or the Managing Member. Each of Mehetia and the Managing Member will bear its own costs and expenses in connection with the resolution of such dispute by the Independent Accounting Firm. The costs and expenses of the Independent Accounting Firm will be paid by the party whose report and calculations is not chosen by the Independent Accounting Firm in its resolution of the dispute. For the avoidance of doubt, if any amount or calculation can be disputed pursuant to this Section 11.11(c) and under Section 2.3(b) of the Repurchase Agreement, Mehetia may only cause a dispute to be brought under the Repurchase Agreement or under this Agreement; provided, for clarity, if Mehetia causes the Managing Member to cause the Project Company to dispute an amount under the Repurchase Agreement, but such amount does not fully resolve or is inconsistent with a Disputed Amount, Mehetia may bring such dispute hereunder.

Section 11.12 Confidentiality.

(a) The Members (other than Clean Technologies) shall, and shall cause their Affiliates and their respective stockholders, members, subsidiaries and Representatives to, hold confidential all information they may have or obtain concerning Clean Technologies, Bloom, the Company and their respective assets, business, operations or prospects or this Agreement (the "Confidential Information"); provided, however, such Confidential Information shall not include information that (i) becomes generally available to the public other than as a result of a disclosure by a Member or any of its Representatives, (ii) becomes available to a Member or any of its Representatives on a nonconfidential basis prior to its disclosure by the Company or its Representatives, (iii) is required or requested to be disclosed by a Member or any of its Affiliates or their respective stockholders, members, subsidiaries or Representatives as a result of any applicable Legal Requirement or rule or regulation of any stock exchange, the Financial Industry Regulatory Authority, Inc. or other regulatory authority or self-regulatory authority having jurisdiction over such Member, (iv) is required or requested by the IRS in connection with the

Existing Systems or a Grant, including in connection with a request for any private letter ruling, any determination letter or any audit, or (v) is independently developed by a Member or any of its Representatives; provided that with respect to clauses (iii) and (iv), if such Confidential Information remains or is reasonably believed to remain generally unavailable to the public, such information will remain Confidential Information in all other respects and for all other purposes. If such party becomes compelled by legal or administrative process to disclose any Confidential Information, such party will provide the other Members with prompt Notice so that the other Members may seek a protective order or other appropriate remedy or waive compliance with the non-disclosure provisions of this Section 11.12(a) with respect to the information required to be disclosed. If such protective order or other remedy is not obtained, or such other Members waive compliance with the non-disclosure provisions of this Section 11.12(a) with respect to the information required to be disclosed, the first party will furnish only that portion of such information that it is advised, by opinion of counsel, is legally required to be furnished and will exercise reasonable efforts, at the other Members' expense, to obtain reliable assurance that confidential treatment will be accorded such information, including, in the case of disclosures to the IRS described in clause (iv) above, to obtain reliable assurance that, to the maximum extent permitted by applicable Legal Requirements, such information will not be made available for public inspection pursuant to Section 6110 of the Code.

(b) Except to the extent necessary for the exercise of its rights and remedies and the performance of its obligations under this Agreement (including without limitation, the ownership, operation and administration of the Company and the Project Company), Clean Technologies and its Affiliates will hold confidential and not disclose directly or indirectly, any of the economic terms particular to this Agreement and the ECCA, including the amount of any Class B Member's Capital Contribution, economic returns thereon or the identity of any Class B Member other than with respect to the disclosures of the type described in clause (a)(i) through (v) above or in clause (c) below that are permitted for the other Members and their respective Affiliates. The foregoing shall not restrict Clean Technologies (or any Affiliate) from using project data related to the Systems in connection with the development of other fuel cells by Clean Technologies (or any Affiliate).

(c) Nothing in Section 11.12(a) and (b) shall be construed as prohibiting a party hereunder from using such Confidential Information in connection with (i) any claim against another Member, the Managing Member or the Administrator hereunder, (ii) any exercise by a party hereunder of any of its rights hereunder (including without limitation, the ownership, operation and administration of the Company and the Project Company) and (iii) a disposition by a Member of all or a portion of its Membership Interest or a disposition of an equity interest in such Member or its Affiliates, provided that such potential purchaser shall have entered into a confidentiality agreement with respect to Confidential Information on customary terms used in confidentiality agreements in connection with corporate acquisitions before any such information may be disclosed. In addition, each Member hereby acknowledges that the United States federal securities laws and applicable European securities laws, among other things, prohibit certain persons in possession of material, non-public information concerning companies or securities

from buying or selling securities issued by those companies or disclosing that material, non-public information to others who buy or sell those securities while in possession of that information (or disclose that information to others who buy or sell). Notwithstanding anything herein to the contrary, the Parties and their respective Representatives may disclose to any and all persons, without limitation of any kind, the U.S. federal income tax treatment and tax structure of the transaction and all materials of any kind (including opinions and other tax analyses) that are provided to such party relating to such tax treatment and tax structure, except where confidentiality is reasonably necessary to comply with securities laws. For this purpose, "tax structure" is limited to facts relevant to the U.S. federal income tax treatment of the transaction and does not include information relating to the identity of the Parties, their affiliates, agents or advisors.

Section 11.13 Joint Efforts. To the full extent permitted by applicable Legal Requirements, neither this Agreement nor any ambiguity or uncertainty herein will be construed against any of the parties hereto, whether under any rule of construction or otherwise. On the contrary, this Agreement has been prepared by the joint efforts of the respective attorneys for, and has been reviewed by, each of the parties hereto.

Section 11.14 Specific Performance. The Members agree that irreparable damage will result if this Agreement is not performed in accordance with its terms, and the Members agree that any damages available at law for a breach of this Agreement would not be an adequate remedy. Therefore, to the full extent permitted by law, the provisions hereof and the obligations of the Members hereunder shall be enforceable in a court of equity, or other tribunal with jurisdiction, by a decree of specific performance, and appropriate injunctive relief may be applied for and granted in connection therewith. Such remedies and all other remedies provided for in this Agreement shall, however, be cumulative and not exclusive and shall be in addition to any other remedies that a Member may have under this Agreement, at law or in equity.

Section 11.15 Survival. All indemnities and reimbursement obligations made pursuant to this Agreement shall survive dissolution and liquidation of the Company until expiration of the longest applicable statute of limitations (including extensions and waivers) with respect to the matter for which a Person would be entitled to be indemnified or reimbursed, as the case may be.

Section 11.16 Effective Date. This Agreement shall be effective as of the date hereof (the "Effective Date"). This Agreement amends, restates and supersedes in its entirety the 2013 Operating Agreement.

Section 11.17 Recourse Only to Member. The sole recourse of the Company for performance of the obligations of any Member hereunder shall be against such Member and its assets and not against any assets or property of any present or future stockholder, partner, member, officer, employee, servant, executive, director, agent, authorized representative or

Affiliate of such Member; provided, however, the foregoing shall not apply to recourse, directly or indirectly, against Bloom under the Bloom Guaranty.

[Remainder of this page left intentionally blank.]

IN WITNESS WHEREOF, each Member has caused this Third Amended and Restated Limited Liability Company Agreement to be signed by a duly authorized officer as of the date first above written.

CLEAN TECHNOLOGIES II, LLC

By:
Name:
Title:

MEHETIA INC.

By:
Name:
Title:

Annex I

DEFINITIONS

[See attached]

ANNEX II

CLASS B MEMBERSHIP INTERESTS

Class B Member	Number of Class B Membership Interests Owned	Percentage of Class B Membership Interests Owned
Mehetia Inc.	**495**	**100%**

SCHEDULE 4.2(b)

CONTRIBUTED PROPERTY

Member	**Contributed Value**
Clean Technologies II, LLC	$[*]
Mehetia Inc.	$[*]

SCHEDULE 4.2(d)

CAPITAL ACCOUNT BALANCE AND PERCENTAGE INTEREST

Member Name and Address	Capital Account Balance	Percentage Interest
Clean Technologies II, LLC c/o Bloom Energy Corporation 4353 N. 1st Street San Jose, California 95134 Attn: [*] Email: [*] Fax: [*]	$[*]	100% of the Class A
Mehetia Inc. Eleven Madison Avenue New York, New York 10010 Attn: [*] Email: [*] Fax: [*]	$[*]	100% of the Class B

with a copy of any notice sent, which will not constitute notice, to:

Credit Suisse Securities (USA) LLC
Eleven Madison Avenue
New York, New York 10010
Attn: [*]

and with a copy of any notice sent, which will not constitute notice, to:

McDermott Will & Emery LLP
340 Madison Avenue
New York, New York 10173
Attn: [*]
Email: [*]
Fax: [*]

SCHEDULE 8.2(f)

OFFICERS

Mark Mesler	Vice President
Timothy Gray	Vice President

SCHEDULE 8.5

INSURANCE

The Managing Member shall cause the Company to acquire and maintain (including making changes to coverage and carriers) the casualty, general liability (including product liability), property damage and/or other types of insurance on the terms set forth in this Schedule.

In each case the policies must be with insurance carriers with a rating of at least A- and a financial size category of at least X by A.M. Best or A by S&P or otherwise reasonably acceptable to Class B Members.

The policies specified in Appendix 1 of this Schedule shall be in full force and effect at all times on and after the Original Date until the LLC Agreement Termination Date subject to renewal no more frequently than annually.

At no time shall there be any gap in cover.

The policy limits and cover of the insurances required in this Schedule shall be sufficient to satisfy the requirements set forth in the Company LLC Agreement, but in no event less than the limits and coverage provisions set forth in Appendix 1 herein. The obligation to verify that the insurance meets the requirements of the Company LLC Agreement shall rest solely with the Company.

The Managing Member shall not violate or permit to be violated any condition, provision or requirement of any insurance policy required by this Schedule, and the Managing Member shall cause Company to perform, satisfy, and comply with all conditions, provisions and requirements of all insurance policies.

The Managing Member hereby waives any and every claim for recovery against Class B Members or their directors, officers and employees and agents for any and all loss or damage covered by any insurance policies to be maintained under this Schedule to the extent such loss or damage is recovered under any such policy.

All policies of insurance required to be maintained pursuant to this Schedule, other than cover required by law, shall be endorsed such that if at any time they are cancelled, lapsed, terminated or suspended (by any party including the insuring parties), such cancellation, lapse, termination or suspension shall not become effective until at least 30 days after receipt by Class B Members from such insurer of such cancellation, lapse, termination or suspension, except for non-payment of premium for which the required written notice shall be 10 days. In addition to this requirement, the Managing Member shall inform the Class B Members as soon as reasonably possible if it becomes aware of any such cancellation, lapse, termination or suspension or of any reasonable prospect of such and shall further require the Company's broker to do the same.

- All policies of insurance required to be maintained pursuant to this Schedule, except workers compensation and employers liability, shall provide: Additional Insured status for Class B Members and their respective affiliates, directors, officers and employees and agents (collectively, the "Additional Insureds"). This requirement shall not apply to any professional indemnity policy.
- Waivers of subrogation from the insurers in favor of the Additional Insureds.
- Policies either (a) non-cancellable except for non-payment of premium with at least 10 days written notice of such to the Class B Members; or (b) cancellation/non-payment provisions in accordance with the provisions of this Schedule.
- Class B Members will have the right but not the obligation to pay premiums on behalf of the Company in case of non-payment.
- Policies shall be unaffected by any bankruptcy or foreclosure relating to the Managing Member, the Company or the Project Company.
- Insurance shall be primary and not excess to or contributing with any other insurance or self-insurance maintained by the Managing Member, the Company, or the Additional Insureds. However, policies can act in excess of such project-specific policies provided by contractors in accordance with the requirements of this Schedule.
- Insurer shall not permit the Managing Member to reduce limits or cover or degrade terms and conditions without the prior written approval of the Class B Members.
- The Additional Insureds shall have no obligations whatsoever including, but not limited to, no obligation to pay premiums and no obligation to pay deductibles.
- Policy limits shall act in excess of deductibles including the indemnity period for time element insurance shall act in excess of the delay deductible for such insurance.
- Insurer costs and expenses including any associated with claims including claims adjustment are for the account of the relevant insurer and further will not be deducted from policy limits or sublimits.

In addition, all property policies including marine cargo (if applicable) and further including any time element insurance shall provide:

- That Class B Members shall be loss payee of any amounts payable under the policies in relation to the Managing Member, the Company or the Project Company.
- Non vitiation in accordance with a multiple insured clause acceptable to the Class B Members or equivalent protection.
- Replacement cost, new for old, with no deduction of any kind including no coinsurance provision or a waiver thereof and no allowance for depreciation (accounting or otherwise), obsolescence or loss of value over time other than in a total constructive loss or other scenario where repair/replacement does not follow loss.
- An advance or partial payment endorsement.
- A clause requiring the insurer to make final payment on any claim within thirty days after the submission of proof of loss and its acceptance by the insurer.
- Except for marine transit policies, a LEG2 exclusion or similar endorsement with no sublimit applied.

In addition, all liability policies except workers compensation and employers liability shall provide:

- Severability.
- Cross liability with no exclusions.

The above requirements shall be referred to as the "Required Provisions". The Required Provisions can be provided either as endorsements to or in the main body of the relevant policy. All policies that replace or renew policies shall contain provisions, including limits, sublimits, deductibles, exclusions and the Required Provisions, that are, mutatis mutandis, in all material regards at least the same as those in place at the Original Date or, if later, the date of first inception of such policy cover, except in relation to risks where exposure no longer exists or where a better level of cover is provided or which would be required in accordance with the provisions of this Schedule.

The Managing Member shall provide Class B Members as soon as reasonably possible prior to the Initial Funding Date, and at least 10 days prior to any subsequent policy inception or renewal, a certificate of pre-agreed format from:

- Each placing broker confirming:
  - Summary policy terms in the pre-agreed format.
  - That all policies required by this Schedule are in full force and effect.
  - All insurance premiums that are due and payable have been paid in full with no premium overdue.

  There shall be appended to such certificate or letter of undertaking certificates from insurers for each policy required by this Schedule listing the major sublimits (to be agreed) and confirming that all Required Provisions that apply to such policy are in place.

- The Insurance Consultant (as defined in the Note Purchase Agreement) confirming that:
  - The insurance provided complies with the requirements of this Schedule and further complies with the requirements of the Managing Member in the Transaction Documents.
  - That the undertakings made by each placing broker conform to the requirements of prudent industry practice.

The insurance provided by the Company shall be at least that evidenced in any certificates or other evidence provided by the Company or the Project Company.

Any of the requirements of this Schedule can be satisfied by single or by combined policies. However, as would be deemed necessary in accordance with prudent industry practice, a joint loss agreement will be required and included as part of the respective policies (for example, if there were separate marine transit and builders all-risk policies, then a 50:50 clause would be required).

If in the opinion of the Managing Member, acting reasonably, any insurance, including the terms and conditions, Required Provisions and limits or deductibles thereof, hereby required by this Schedule to be maintained, other than insurance required to be maintained by law which shall be maintained at all times, shall not be available on commercially reasonable terms in the commercial insurance market, the Managing Member shall promptly inform the Class B Members of such purported unavailability and the Managing Member shall seek a waiver from Class B Members in relation to such purported unavailability in which case the Class B Members, acting after consultation with the Insurance Consultant, shall not unreasonably withhold agreement to waive such requirement to the extent the maintenance thereof is not so available. The granting by Class B Members of any such waiver is conditional on: (i) the Managing Member first requesting such waiver in writing, which request shall be accompanied by written reports prepared by the Company

and its placing broker certifying that such insurance is not available on commercially reasonable terms in the commercial insurance market for projects of similar type and capacity and, in any case where the required amount is not so available, certifying as to the maximum amount which is so available, and explaining in detail the basis for such conclusions and the form and substance of such reports to be reasonably acceptable to the Class B Members after consultation with the Insurance Consultant; (ii) at any time after the granting of any such waiver, the Class B Members may request, and the Managing Member furnish to the Class B Members within fifteen (15) days after such request, supplemental reports reasonably acceptable to the Class B Members updating the prior reports and reaffirming such conclusion; (iii) any such waiver granted by the Class B Members can amend, to the extent reasonably required to mitigate any increased risks created by the absence of insurance cover that is the subject of the waiver, any of the terms of this Schedule; (iv) the Class B Members may require the Company to obtain the best available insurance comparable to the requirements of this Schedule on commercially reasonable terms then available in the commercial insurance market (as determined by the Insurance Consultant); and (v) such waiver shall be effective only so long as such insurance shall not be available on commercially reasonable terms in the commercial insurance market (as determined by the Insurance Consultant) it being understood that the failure of the Managing Member to furnish any supplemental reports shall be deemed to be conclusive evidence that such waiver is no longer effective because such condition no longer exists, but that such failure is not the only way to establish such non-existence.

The policy teams actually provided in accordance with the provisions of this Schedule shall be at least those evidenced to the Company.

Any failure on the part of Class B Members to pursue or obtain the evidence of insurance required by this Schedule from the Managing Member and/or failure to point out any noncompliance of such evidence of insurance shall not constitute a waiver of any of the insurance requirements in this Schedule.

Each liability insurance policy required pursuant to this Schedule that is permitted to be written on a “claims made” basis shall provide (a) a retroactive date (as such term is specified in each of such policies) that is no later than the Original Date and (b) each time any policy written on a “claims made” basis is not renewed or the retroactive date of such policy is to be changed, the Company shall obtain and maintain, or cause to be obtained or maintained, for each such policy or policies the broadest extended reporting period coverage, or “tail”, reasonably available in the commercial insurance market for each such policy or policies but in no case less than three (3) years. The Company may satisfy the requirements of this Schedule by obtaining “prior acts” coverage from a subsequent insurance carrier on terms acceptable to the Class B Members, acting reasonably.

All property insurance including marine cargo and any time element insurance shall not include any annual or term aggregate limits or sublimits except for the perils of windstorm, flood, earth movement and land and water decontamination but only to the extent permitted in Appendix 1 to this Schedule. Liability policies may have general aggregate limits in accordance with prudent insurance market practice.

All insurance policies required to be maintained pursuant to this Schedule shall contain terms and conditions reasonably acceptable to the Class B Members following consultation with the Insurance Consultant.

In the event that at any time the insurance as herein provided or as evidenced shall be reduced or cease to be maintained, then the Class B Members, upon ten (10) Business Days' prior written notice (unless such insurance coverage would lapse within such period, in which event notice should be given as soon as reasonably possible) to the Company of any such failure, may (but shall not be obligated to) take out the required policies of insurance and pay the premiums on the same. All amounts so advanced for such purpose shall become an additional obligation of the Company to the Class B Members and the Company shall forthwith pay such amounts (as provided in the Company LLC Agreement, if any).

The Class B Members can, acting reasonably, require such additional cover to be provided as is required to confirm to prudent industry practice.

The Class B Members shall have the option to be present and/or to send representatives during meetings and/or negotiations with insurers of any loss settlement in relation to the Company or the Project regarding (a) total constructive loss or any scenario in which repair/replacement will not follow loss, (b) any circumstance involving a claim in relation to an event or series of events which has or could be reasonably expected to lead to a default under any Transaction Documents or material contracts. Neither the Managing Member nor any of its Affiliates shall be permitted to settle any such claim with an insurer without the approval of the Class B Members to the agreed settlement.

The Class B Members may, pursuant to its rights and obligations under this Schedule, consult with the Insurance Consultant and require reports, compliance certificates and other work product from the Insurance Consultant.

Terms used in this Schedule, unless otherwise specifically defined herein or in the Company LLC Agreement, shall have the meaning normally ascribed to them in accordance with prudent industry practice in relation to a project similar in type and jurisdiction as the Project.

Appendix 1

Construction Phase Property Policy

From the Initial Funding Date, evidence shall be provided that is reasonably acceptable to the Class B Members that adequate property insurances are in place sufficient to cover the value of (a) the largest transit shipment and offsite storage; and (b) aggregate assets at the Project site prior to the All Risk Property and Business Interruption Insurance being in full force and effect. Furthermore, the Class B Members will be added as additional insured to the construction general liability policy which shall have limits and terms adequate to cover their exposure.

All Risk Property and Business Interruption Insurance

From the Initial Funding Date, "All Risk Property" insurance shall be provided for all property, equipment and construction and erection activities associated with the Project on an "all risk" basis insuring the Company, Project Company and the Additional Insureds, as their interests may appear, including but not limited to coverage for the perils of earth movement (including but not limited to earthquake, landslide, subsidence, sink hole and volcanic eruption), flood, named windstorm. There shall be no requirement for machinery breakdown coverage subject to the agreement of the Class B Members, acting reasonably, that such risks are adequately covered by the Power Performance Warranty.

The policy limit shall be an amount not less than the aggregate full replacement cost of the Project such amount also being referred to as the "full policy limit". Full insurable value shall mean the full replacement cost value of the Project on a "new for old" basis, including but not limited any new or existing buildings or structures, any improvements to new or existing property, equipment, mechanical plant, electrical plant, spare parts, and supplies and temporary works.

Per occurrence sublimits shall be at least as follows:

• Debris removal physical "loss"	25% of the amount payable for the direct
• Architects and engineers fees	$2m
• Expediting expense	$1m
• Blueprints, drawings, etc.	$1m or less
• On site pollution	$100,000

An annual aggregate sublimit shall be permitted for flood of $10M. An annual aggregate sublimit shall be permitted for earth movement of $25M subject to confirmation from the Independent

Engineer and accepted by the Class B Members, acting reasonably, that any such damage is likely to be within this limit. Limits for windstorm shall be full policy limits on a per occurrence basis.

The All Risk Property policy shall include (i) a seventy-two (72) hour flood/named windstorm/earthquake clause, (ii) an unintentional errors and omissions clause. There shall be no serial loss clause.

Business Interruption coverage insuring the loss of expected gross revenues for the largest single Project for a period of not less than the greater of (a) 12 months; and, (b) the longest lead time for replacement as determined by the Class B Members in consultation with the Independent Engineer as a result of physical loss or damage by perils required to be insured under the All Risk Property policy, including all sections preceding this section, which cause a reduction in output.

Contingent business interruption insurance covering loss of gross revenues less non-continuing expenses for:

- Power Suppliers and Public Utilities Extension — loss, including delay, caused by interference/interruption of power/other utility including export substation — full cover.
- Prevention of Ingress/Egress 90 days
- Damage to an export substation cover for loss of expected gross revenues less non-recurrent costs for a six month indemnity period.

Some or all of the requirements for contingent business interruption can be reduced or eliminated subject to the agreement of the Class B Members that such risks or proportions of such risks are adequately covered by the Tariff.

Deductibles shall be the best commercially available in accordance with prudent industry practice not exceeding 2% for earthquake.

Marine Cargo and Marine Business Interruption Insurance

To the extent a material exposure exists, transit coverage, either included in a property policy or under a separate policy (including air, land and ocean cargo, as applicable) on an “all-risk” basis and a “warehouse to warehouse” basis with a per occurrence limit equal to not less than 110% of the value including transit and insurance of such shipment involving the Project to or from any storage site or the Project site at all times for which the Project Company has accepted risk of loss or has responsibility for providing insurance. Coverage shall include loading and unloading, temporary storage (as applicable) and a 50/50 clause (if applicable). Coverage shall be maintained in accordance with prudent industry practice in all regards with per occurrence deductibles of not more than $100,000 for physical damage and other terms and conditions acceptable to the Class B Members.

Marine Business Interruption insurance shall be attached to the Marine Cargo policy providing equivalent cover, mutatis mutandis, to the Business Interruption cover attached to the All Risk Property policy in accordance with the terms of this Schedule.

General Liability

A limit of $1,000,000 per occurrence and in the aggregate shall be provided for:

- Property damage, death and injury (including mental injury).
- Broad form property damage.
- Blanket contractual.
- Products/completed operations
- Advertising injury
- XCU

Deductibles shall be the best commercially available in accordance with prudent industry practice.

Automobile Liability

Automobile liability insurance, to the extent exposure exists, including coverage for owned, non-owned and hired automobiles for both bodily injury and property damage and containing appropriate no-fault insurance provisions or other endorsements in accordance with state legal requirements, with a combined single limit of no less than $1,000,000 per accident with respect to bodily injury, property damage or death. Deductibles shall be the best commercially available in accordance with prudent industry practice.

Workers' Compensation and Employers Liability

If Project Company or the Company has employees, workers' compensation insurance in compliance with statutory requirements and employers liability insurance, to the extent exposure exists, with a limit of not less than $1,000,000 per accident, per employee and per disease including such other forms of insurance that the Project Company or the Company is required by law to provide for the Project, all other states' endorsement and, to the extent any exposure exists, coverage with respect to the USL&H Act and Jones Act, covering loss resulting from bodily injury, sickness, disability or death of the employees of the Project Company or the Company. Deductibles shall be the best commercially available in accordance with prudent industry practice.

Pollution Liability

Pollution liability insurance for liability arising out of property damage or bodily injury to third parties as a result of sudden and accidental pollution including the cost of on-site and off-site clean up in an amount not less than $1,000,000 per occurrence and in the aggregate. Deductibles shall be the best commercially available in accordance with prudent industry practice.

Umbrella Liability Insurance

An aggregate limit of $15,000,000 (or $20,000,000, if so required by any Transaction Document or material contract) shall be attached and in excess of the underlying general liability, automobile liability, employers liability policies on a following form basis with drop down provisions.

Errors and Omissions Liability

Errors and omissions insurance for liability arising out of property damage or bodily injury to third parties as a result of prototype manufacturing errors and omissions liability $1,000,000 per glitch and in the aggregate. Deductibles shall be the best commercially available in accordance with prudent industry practice.

Directors & Officers Insurance

Unless directors and officers are indemnified by the Company to the reasonable satisfaction of the Company, Directors & Officers insurance, including Employment Practices (if employees) in an amount not less than $10,000,000 on industry standard policy forms subject to a retention not to exceed $50,000.

SCHEDULE 9

TRANSFER REPRESENTATIONS AND WARRANTIES

[The Class B Member] is a [ ] duly organized, validly existing and in good standing under the laws of [ ] and has all requisite [ ] power and authority to reconvey the Class B Membership Interests as contemplated by the Agreement.

(a) [The Class B Member] owns directly 100% of the Company's outstanding Class B Membership Interests to the extent that is what it was sold under the [ECCA] [other transfer documentation].

(b) [The Class B Member] has absolute record and beneficial ownership and title to the Membership Interests held by [the Class B Member] to the extent that is what it was sold under the [ECCA] [other transfer documentation], free and clear of any Encumbrances except Permitted Encumbrances.

(c) The assignment agreement effecting the Transfer of the Class B Membership Interests from [the Class B Member] to [the Class A Member] has been duly and validly executed and delivered by [the Class B Member] and constitutes [the Class B Member's] legal, valid and binding obligation, enforceable against it in accordance with its terms (subject, however, to the effects of bankruptcy, insolvency, reorganization, moratorium and similar laws from time to time in effect relating to the rights and remedies of creditors as well as to general principles of equity whether considered at law or in equity).

(d) Neither the execution, delivery and performance by [the Class B Member] of the assignment agreement effecting the Transfer of the Class B Membership Interests from [the Class B Member] to [the Class A Member] nor the consummation of the transactions contemplated thereby will (i) conflict with or result in any breach of any provision of the organizational documents of [the Class B Member], (ii) violate or conflict with (or give rise to any right of termination, cancellation or acceleration under) any of the terms, conditions or provisions of any contract or other instrument or obligation that [the Class B Member] is a party to or by which [the Class B Member] is bound; or (iii) violate any Legal Requirement or any material license, franchise, permit or other authorization applicable to or affecting [the Class B Member] or any of its respective assets.

(e) All consents, approvals and filings required to be obtained or made by the [Class B Member] to execute, deliver and perform the assignment agreement effecting the Transfer of the Class B Membership Interests from [the Class B Member] to [the Class A Member] or the consummation by any such Person of the transactions contemplated thereby shall have been obtained or made and shall be in full force and effect as of the date hereof.

Exhibit A

FORM OF CERTIFICATE FOR CLASS A MEMBERSHIP INTEREST

THE INTERESTS REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "***ACT***") OR ANY STATE SECURITIES LAWS. ACCORDINGLY, SUCH INTERESTS MAY NOT BE SOLD, TRANSFERRED OR OTHERWISE DISPOSED OF WITHOUT COMPLIANCE WITH SUCH ACT AND SUCH STATE SECURITIES LAWS, AND DIAMOND STATE GENERATION HOLDINGS, LLC MAY REQUIRE AN OPINION OF COUNSEL SATISFACTORY TO IT THAT NO VIOLATION OF SUCH ACT AND SUCH STATE SECURITIES LAWS WILL RESULT FROM ANY PROPOSED SALE, TRANSFER OR OTHER DISPOSITION OF SUCH INTERESTS.

THIS CERTIFICATE EVIDENCES AN INTEREST IN DIAMOND STATE GENERATION HOLDINGS, LLC AND SHALL BE A SECURITY FOR THE PURPOSES OF ARTICLE 8 OF THE UNIFORM COMMERCIAL CODE AS IN EFFECT IN THE STATE OF NEW YORK.

No. [__] **Class A Membership Interests**

Diamond State Generation Holdings, LLC
a Delaware Limited Liability Company
Certificate of Interest

This certifies that [_____] is the owner of [_____] Class A Membership Interests in Diamond State Generation Holdings, LLC (the "***Company***"), which membership interests are subject to the terms of the Third Amended and Restated Limited Liability Company Agreement of Diamond State Generation Holdings, LLC, dated as of June 14, 2019 as the same may be further amended, restated, supplemented or otherwise modified from time to time in accordance with the terms thereof (the "***Limited Liability Company Agreement***").

This Certificate of Interest may be transferred by the lawful holders hereof only in accordance with the provisions of the Limited Liability Company Agreement.

IN WITNESS WHEREOF, the said Company has caused this Certificate of Interest to be signed by its duly authorized officer this [__] day of [_____], 20[__].

DIAMOND STATE GENERATION HOLDINGS, LLC

By:_
Name:
Title:

[Reverse]

INSTRUMENT OF TRANSFER OF
MEMBERSHIP INTEREST IN
Diamond State Generation Holdings, LLC

FOR VALUE RECEIVED, the undersigned does hereby sell, assign and transfer unto

_____

(print or type name of assignee)

the membership interest evidenced by and within the Certificate of Interest herewith, and does hereby irrevocably constitute and appoint _____ as attorney to transfer said interest on the books of Diamond State Generation Holdings, LLC with full power of substitution in the premises.

Dated as of:

[_____]
By:_
Name:
Title:

EXHIBIT B

FORM OF CERTIFICATE FOR CLASS B MEMBERSHIP INTEREST

THE INTERESTS REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "***ACT***") OR ANY STATE SECURITIES LAWS. ACCORDINGLY, SUCH INTERESTS MAY NOT BE SOLD, TRANSFERRED OR OTHERWISE DISPOSED OF WITHOUT COMPLIANCE WITH SUCH ACT AND SUCH STATE SECURITIES LAWS, AND DIAMOND STATE GENERATION HOLDINGS, LLC MAY REQUIRE AN OPINION OF COUNSEL SATISFACTORY TO IT THAT NO VIOLATION OF SUCH ACT AND SUCH STATE SECURITIES LAWS WILL RESULT FROM ANY PROPOSED SALE, TRANSFER OR OTHER DISPOSITION OF SUCH INTERESTS.

THIS CERTIFICATE EVIDENCES AN INTEREST IN DIAMOND STATE GENERATION HOLDINGS, LLC AND SHALL BE A SECURITY FOR THE PURPOSES OF ARTICLE 8 OF THE UNIFORM COMMERCIAL CODE AS IN EFFECT IN THE STATE OF NEW YORK.

No. [__] **Class B Membership Interests**

Diamond State Generation Holdings, LLC
a Delaware Limited Liability Company
Certificate of Interest

This certifies that [_____] is the owner of [___] Class B Membership Interests in Diamond State Generation Holdings, LLC (the "***Company***"), which membership interests are subject to the terms of the Third Amended and Restated Limited Liability Company Agreement of Diamond State Generation Holdings, LLC, dated as of June 14, 2019, as the same may be further amended, restated, supplemented or otherwise modified from time to time in accordance with the terms thereof (the "***Limited Liability Company Agreement***").

This Certificate of Interest may be transferred by the lawful holders hereof only in accordance with the provisions of the Limited Liability Company Agreement.

IN WITNESS WHEREOF, the said Company has caused this Certificate of Interest to be signed by its duly authorized officer this [___] day of [_____], 20[__].

DIAMOND STATE GENERATION HOLDINGS, LLC

By:_
Name:
Title:

[Reverse]

INSTRUMENT OF TRANSFER OF
MEMBERSHIP INTEREST IN
Diamond State Generation Holdings, LLC

FOR VALUE RECEIVED, the undersigned does hereby sell, assign and transfer unto

_____

(print or type name of assignee)

the membership interest evidenced by and within the Certificate of Interest herewith, and does hereby irrevocably constitute and appoint _____ as attorney to transfer said interest on the books of Diamond State Generation Holdings, LLC, with full power of substitution in the premises.

Dated as of:

[_____]
By:_
Name:
Title:

EXHIBIT C

RESERVED

EXHIBIT D

FORM OF ASSIGNMENT AGREEMENT

This ASSIGNMENT OF MEMBERSHIP INTERESTS, dated as of [_____] [__], 20[__] (this "Assignment Agreement"), is by and between [_____], a [_____] (the "Assignor") and [_____], a [_____] (the "Assignee").

W I T N E S S E T H :

WHEREAS, Diamond State Generation Holdings, LLC, a Delaware limited liability company (the "Company") was formed by virtue of its Certificate of Formation filed with the Secretary of State of the State of Delaware on [_____], and is governed by the Third Amended and Restated Limited Liability Company Agreement of the Company, dated as of June 14, 2019, executed by the Assignor and [_____], a [_____], with all amendments thereto (the "LLC Agreement");

WHEREAS, the Assignor is currently a [Class A Member][Class B Member] of the Company;

WHEREAS, pursuant to the LLC Agreement, the Assignor has agreed to transfer to Assignee and Assignee has agreed to accept from the Assignor, on the terms and subject to the conditions set forth in the LLC Agreement, [Class A] [Class B] Membership Interests of the Company;

WHEREAS, pursuant to the LLC Agreement, the parties thereto have agreed to admit the Assignee as a [Class A][Class B] Member of the Company; and

NOW, THEREFORE, in consideration of the mutual covenants and agreements and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned do hereby agree as follows:

1. Defined Terms. All capitalized terms not defined herein are used herein as defined in the LLC Agreement.

2. Instructions to Transfer to Assignee. As of the date hereof, the Assignor hereby assigns and transfers unto Assignee complete record and beneficial ownership of [__] [Class A][Class B] Membership Interests in the Company, together with all rights and benefits associated therewith and the Assignee hereby assumes from Assignor complete record and beneficial ownership of [__] [Class A][Class B] Membership Interests in the Company, together with all rights and benefits associated therewith. The Assignor hereby irrevocably instructs the Company to register on the books of the Company the transfer to Assignee of complete record and beneficial ownership of [__][Class A][Class B] Membership Interests in the Company previously owned by Assignor.

3. Further Assurances. Subject to the terms and conditions of the LLC Agreement, at any time, or from time to time after the date hereof, the Assignor and Assignee shall, at the other's reasonable request, and at the requesting party's expense, execute and deliver such instruments of transfer, conveyance, assignment and assumption, in addition to this Assignment Agreement, and take such other action as either of them may reasonably request in order to evidence the transfer effected hereby.

4. Successors and Assigns. This Assignment Agreement and all of the provisions hereof shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns.

5. Counterparts. This Assignment Agreement may be signed in any number of counterparts, each of which shall be deemed an original, with the same effect as if the signatures hereto were upon the same instrument. This Assignment Agreement shall become effective when each party hereto shall have received a counterpart hereof signed by the other party.

6. Governing Law. This Assignment Agreement shall be governed by, and construed and enforced in accordance with, the laws of the State of New York applicable to contracts performed in that State.

[Remainder of page intentionally left blank. Signature page to follow.]

IN WITNESS WHEREOF, each party hereto has caused this Assignment of Membership Interests to be signed on its behalf as of the date first written above.

[_____]
as the Assignor

By: _
Name:
Title:

[_____]
as the Assignee

By: _
Name:
Title:

EXHIBIT E

FORM OF EQUITY CONTRIBUTION NOTICE

[_____], 20[__]

Diamond State Generation Holdings, LLC
4353 N. 1st Street
San Jose, CA 95134
Attn: [*]

Re: Equity Contribution Notice

Ladies and Gentlemen:

Reference is made to that certain Third Amended and Restated Limited Liability Company Agreement (the "Company LLC Agreement") for Diamond State Generation Holdings, LLC (the "Company"), dated June 14, 2019, by and between Clean Technologies II, LLC, a Delaware limited liability company ("Clean Technologies") and Mehetia Inc., a Delaware corporation ("Mehetia" or "Class B Member"). All capitalized terms, unless otherwise defined herein, shall have the meanings ascribed to them in the Company LLC Agreement.

Pursuant to Section 4.4(a) of the Company LLC Agreement, Diamond State Generation Partners, LLC (the "Project Company") hereby delivers to the Company with a copy to Clean Technologies and Class B Members this notice and certifies to such entities as follows as of the Equity Contribution Date:

(1) attached hereto as Exhibit [A] is a schedule which sets forth (a) the Existing Systems expected to be Placed in Service and expected to achieve Commencement of Operations (as such term is defined in the MESPA) in the 2nd quarter following the quarter in which this notice is delivered (or sooner) for which this notice requests Capital Contribution of the balance of the amounts of the 25% Progress Payment for such System contemplated by the MESPA as provided in such schedule, (b) the Existing Systems which have been Placed in Service and have achieved Commencement of Operations for which this notice requests Capital Contribution of the amounts to be used by Project Company to make (with Note Proceeds) the 75% Progress Payment for such System contemplated by the MESPA as provided in such schedule, (c) an update of the status for all Existing Systems for which a Capital Contribution has been requested in a prior Equity Contribution Notice ("Prior Draw Existing Systems", and together with the Existing Systems referred to in the preceding clauses (a) and (b), the "Subject Systems");

(2) the Managing Member's Capital Contribution to the Company of $16,619,399.60 was further contributed by the Company to the Project Company and used by

Project Company to incur Project costs in an amount equal to at least 5% of the cost of all Existing Systems;

(3) attached hereto as Exhibits [B-__] are (a) invoices from Bloom to the Project Company for payments under the MESPA for Subject Systems for which a prior Equity Contribution Notice had requested a Capital Contribution in order to make such payment, which invoice specifies: (i) the customer location of the installation of each Subject System, (ii) the serial number or purchase order number for each Subject System, (iii) the price for each Subject System as determined pursuant to the MESPA, (iv) all amounts previously paid as a deposit on each Subject System and (v) all amounts remaining due and payable on each Subject System, (b) evidence of the payment of such invoices by the Project Company, (c) with respect to Prior Draw Existing Systems for which the 75% Progress Payment has been made under the MESPA, a Bill of Sale for such Prior Draw Existing Systems;

(4) the DPL Agreements have terms that in the aggregate provide to Project Company equal or more favorable economics than set forth in the Base Case Model;

(5) No material ongoing breach exists by Bloom, Clean Technologies, the Company, the Project Company, the Managing Member, DPL or PJM under the ECCA, the Project Company LLC Agreement, the MESPA, the MOMA, the Administrative Services Agreement, the Credit Documents, the DPL Agreements, the PJM Agreements, the Company LLC Agreement or any other Transaction Document or Material Contract, as applicable;

(6) the Project Company is solvent and no event of Bankruptcy has occurred with respect to the Project Company;

(7) each of the representations and warranties of Clean Technologies in Section 3.2 of the ECCA relating to the Existing Systems funded by such Equity Contribution is (i) true and correct in all material respects as of such Equity Contribution Date except to the extent that any such representation or warranty shall have been expressly made only as of an earlier date in which case such representation or warranty was true and correct in all material respects as of such earlier date and (ii) if and to the extent such representations and warranties are qualified by the words "material," "Material Adverse Effect" or similar qualification, true and correct, as qualified, as of the Equity Contribution Date (or such earlier date, as applicable);

(8) (i) all conditions precedent in Section 2.5 and Section 2.7 of the ECCA (other than Section 2.5(aa)) continue to be satisfied and (ii) there have been no material adverse changes from the circumstances addressed in the due diligence reports delivered to Class B Member under Sections 2.5(a) and (b) of the ECCA;

(9) [after the first funding notice:] the prior Equity Contributions have been drawn in accordance with Section 4.3 and Section 4.4 of the Company LLC Agreement, the

Project Company currently has a remaining cash balance from such funds of $[_____], such remaining funds are in the Capital Contributions Account, and the Project Company has used any funds from such Equity Contributions not retained in the Capital Contributions Account to make payments under the MESPA;

(10) the information on each invoice from Bloom to Project Company for payments under the MESPA regarding the Existing Systems to be paid for with proceeds of the Equity Contribution include the following: (i) the location of the installation of each such System, (ii) the serial number for each such System, (iii) the price for each such System as determined pursuant to the MESPA, (iv) all amounts previously paid as a deposit on each such System and (v) all amounts remaining due and payable on each such System;

(11) all material Governmental Approvals required to be obtained by Bloom, Clean Technologies, the Company and the Project Company for the construction and installation of the Subject Systems and the sale of electric energy and sale of RECs from the Subject Systems have been obtained, except for any such Governmental Approvals not yet required to be obtained but which can reasonably be expected to be obtained when needed as specified on Exhibit [C];

(12) Commencement of Operations (as defined under the MESPA) has occurred for the Existing Systems for which this notice requests Capital Contribution of the amounts to be used by Project Company (with Note Proceeds) to make the 75% Progress Payment for such System;

(13) with respect to the Existing Systems for which this notice requests Capital Contribution of the amounts to be used by Project Company (with Note Proceeds) to make the 75% Progress Payment for such System, the Members have received confirmation that the Note Proceeds have either been disbursed from the Construction Escrow Account or will be available for disbursement from the Construction Escrow Account contemporaneous with Project Company's drawdown of such Progress Contribution from the Company (as may be evidenced by, among other things, delivery to the Members of a copy of the Account Withdrawal Instruction applicable to such proceeds which has been countersigned by the Collateral Agent and delivered to the Depositary) or the Required Holders have in writing confirmed to the Members that all conditions precedent to such disbursement from the Construction Escrow Account have been satisfied or waived and the Required Holders are prepared to permit such disbursement contemporaneous with Project Company's drawdown of such Progress Contribution from the Company; and

(14) with respect to the Existing Systems for which this notice requests Capital Contribution of the amounts to be used by Project Company to make (with Note Proceeds) the 75% Progress Payment for such System, the Members have received written certification from the Independent Engineer (as defined in the MESPA) addressed to Project Company certifying,

without any qualification, that such System's commissioning has been successfully completed, that such System is available for full commercial operation, and that Bloom has installed all BOF Work (as defined in the MESPA) necessary for the operation of that System.

In accordance with Section 4.4 of the Company LLC Agreement, the Company is hereby requested to make an Equity Contribution on [_____, 20___] in the amount of $[_____] to the Project Company and to transfer such funds to the following account of the Project Company as set forth below:

Holder Name: Diamond State Generation Partners, LLC

Bank Name:

Account Number:

ABA Number:

Sincerely,

DIAMOND STATE GENERATION HOLDINGS, LLC, as Manager of Diamond State Generation Partners, LLC

By:_____
Name:
Title:

Cc:

Clean Technologies II, LLC
c/o Bloom Energy Corporation
4353 N. 1st Street
San Jose, CA 95134
Attn: [*]

Mehetia Inc.
Eleven Madison Avenue
New York, New York 10010
Attn: [*]

Exhibit [__]

[TO BE REVISED AS NEEDED FOR EACH EQUITY CONTRIBUTION]

Exhibit E - 6

EXHIBIT F

FORM OF REDEMPTION AGREEMENT

[See attached]

..

REDACTED EXHIBIT: This Exhibit contains certain identified information that has been excluded because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed. Redacted information is identified by [*].

FUEL CELL SYSTEM SUPPLY AND INSTALLATION AGREEMENT

between

BLOOM ENERGY CORPORATION,

as Seller

and

DIAMOND STATE GENERATION PARTNERS, LLC,

as Buyer

dated as of June 14, 2019

SA#7369564_22.docx

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FUEL CELL SYSTEM SUPPLY AND INSTALLATION AGREEMENT

This Fuel Cell System Supply and Installation Agreement (this "Agreement"), dated as of June 14, 2019 (the "Agreement Date"), is entered into by and between BLOOM ENERGY CORPORATION, a Delaware corporation ("Seller"), and DIAMOND STATE GENERATION PARTNERS, LLC, a Delaware limited liability company ("Buyer"). Seller and Buyer are referred to in this Agreement individually, as a "Party" and, collectively, as the "Parties."

RECITALS

WHEREAS, Seller is in the business of designing, engineering, constructing, commissioning, operating, and maintaining solid oxide fuel cell power generating facilities;

WHEREAS, Buyer owns all assets comprising (i) a fuel cell generation project comprised of Bloom Systems (as defined below) purchased pursuant to that certain Master Energy Server Purchase Agreement, by and between Buyer and Seller, dated April 13, 2012 and BOF (as defined below) with a Nameplate Capacity of three megawatts (3 MW) located at 512 E. Chestnut Hill Road, Newark, DE 19713 (the "Brookside Facility"); and (ii) a fuel cell generation project comprised of Bloom Systems and BOF with a Nameplate Capacity of twenty-seven megawatts (27 MW) located at 1493 River Road, New Castle, DE 19720 (the "Red Lion Facility" and, together with the Brookside Facility, the "Project") (such Bloom Systems, the "Existing Systems");

WHEREAS, pursuant to the Existing System Repurchase Agreement (as defined below), Seller shall purchase from Buyer, and Buyer shall sell to Seller, in phases, each of the Existing Systems installed in the Project; and

WHEREAS, pursuant to this Agreement, Buyer desires to purchase, and Seller desires to sell, New Systems (as defined below), together with any associated New BOF (as defined below), all to be supplied, installed, and commissioned by Seller in the Project on a phased basis following the decommissioning and removal of the Existing Systems pursuant to the Existing System Repurchase Agreement, all on a turnkey basis pursuant to the terms and conditions of this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants, representations, warranties and agreements hereinafter set forth, and intending to be legally bound hereby, the Parties agree as follows:

AGREEMENT

ARTICLE I.
DEFINITIONS

Section 1.1 Definitions. As used in this Agreement, capitalized terms not otherwise defined shall have the meanings set forth below:

"A&R Administrative Services Agreement" means that certain First Amended and Restated Administrative Services Agreement, amended and restated as of even date herewith, by and between Seller, as "Administrator," and Buyer, as "Project Company."

"A&R MOMA" means that certain Amended and Restated Master Operations and Maintenance Agreement, dated as of even date herewith, by and between Seller, as "Operator," and Buyer as "Owner."

"A&R PUMA" means that certain Third Amended and Restated Purchase, Use and Maintenance Agreement, by and between 2016 ESA Project Company, LLC and Bloom Energy Corporation, dated September 26, 2018, as amended.

"Affiliate" of any Person means a Person that directly, or indirectly through one or more intermediaries, controls, or is controlled by, or is under common control with, the Person specified, provided that notwithstanding anything in this Agreement to the contrary, Seller is not an Affiliate of Buyer. For purposes of this Agreement, the direct or indirect ownership of over fifty percent (50%) of the outstanding voting securities of an entity, or the right to receive over fifty percent (50%) of the profits or earnings of an entity shall be deemed to constitute control. Such other relationships as in fact results in actual control over the management, business and affairs of an entity, shall also be deemed to constitute control.

"Aggregate Purchase Price" means the aggregate Purchase Price under this Agreement *plus* the aggregate Purchase Price (as defined in the A&R PUMA), including any Purchase Price Adders (as defined in the A&R PUMA), under the A&R PUMA *plus* any Taxes or other fees or expenses paid by Buyer or an Affiliate of Buyer to Seller (as defined under this Agreement and the A&R PUMA), including any payment by Buyer or an Affiliate of Buyer of transaction costs incurred by Seller or an Affiliate of Seller and required to be paid by Buyer or an Affiliate of Buyer pursuant to the ECCA.

"Agreement" is defined in the preamble.

"Agreement Date" is defined in the preamble.

"Appraisal Procedure" means within fifteen (15) days of a Party invoking the procedure described in this definition Buyer and Seller shall engage a Qualified Appraiser, mutually acceptable to them, to conclusively determine within fifteen (15) days after appointment the Fair Market Value of a New System.

"Bankruptcy" as to any Person means (a) such Person admits in writing its inability to pay its debts generally as they become due; (b) such Person files a petition or answer seeking reorganization or arrangement under the federal bankruptcy laws or any other Legal

Requirements of the United States of America or any State, district or territory thereof; (c) such Person makes an assignment for the benefit of creditors; (d) such Person consents to the appointment of a receiver of the whole or any substantial part of its assets; (e) such Person has a petition in bankruptcy filed against it, and such petition is not dismissed within sixty (60) days after the filing thereof; (f) a court of competent jurisdiction enters an order, judgment, or decree appointing a receiver of the whole or any substantial part of such Person's assets, and such order, judgment or decree is not vacated or set aside or stayed within sixty (60) days from the date of entry thereof; or (g) under the provisions of any other law for the relief or aid of debtors, any court of competent jurisdiction shall assume custody or control of the whole or any substantial part of such Person's assets and such custody or control is not terminated or stayed within sixty (60) days from the date of assumption of such custody or control.

"Bankruptcy Laws" is defined in Section 9.3.

"Base Case Model" means the economic model titled "Project Leone Model_Southern Power (6.12.2019) – Base Case.xslm," posted to the Electronic Data Room on June 12, 2019.

"Bill of Sale" means a bill of sale substantially in the form set forth in Exhibit B.

"Bloom System" means a solid oxide fuel cell power generating system, capable of being powered by natural gas, which is designed, constructed and installed by Bloom Energy Corporation. For the avoidance of doubt, each Existing System and each New System constitutes a "Bloom System" for purposes of this Agreement.

"Bloom System Meter" means, with respect to a Bloom System, the internal electricity generation meter located within such Bloom System, which is designed to measure the actual electricity output in kWh produced by such Bloom System and which has the specifications listed on Exhibit A.

"BOF" means, for each Site, the (a) existing balance of facility items included in each Facility as of the Agreement Date, including, as applicable, Electrical Interconnection Facilities, the natural gas supply facilities, the water supply facilities, the data communications facilities, the foundations for the Existing Systems and any other facilities and equipment ancillary to the Existing Systems and installed in connection with the Facility at each Site and all other things ancillary to the Facility and required on or in the vicinity of the Site which are necessary for operation of the Existing Systems or which are otherwise required by the Tariff or Site Lease for such Site ("Existing BOF"), and (b) any new balance of facility items installed in a Facility after the Agreement Date, including, as applicable, any new components in respect of Electrical Interconnection Facilities, the natural gas supply facilities, the water supply facilities, or the data communications facilities, the foundations for the New Systems and any other facilities and equipment ancillary to the New Systems and installed in connection with the Facility at each Site and all other things ancillary to the Facility and required on or in the vicinity of the Site which are necessary to achieve Commissioning with respect to any New System at each such Site or which are otherwise

required by the Tariff or Site Lease for any New System or Site ("New BOF"). For clarity, "BOF" excludes any Existing BOF item that is removed from a Facility as part of the Installation Services as of the date of such removal.

"Brookside Facility" is defined in the Recitals.

"BTUs" means British Thermal Units.

"Business Day" means a day other than a Saturday, Sunday or other day on which banks in New York, New York, or San Francisco, California, are authorized or required to close.

"Buyer" is defined in the preamble.

"Buyer Default" is defined in Section 10.2.

"Buyer Indemnitee" is defined in Section 11.3(a).

"Buyer Manager" is defined in Section 3.10(a).

"Calendar Quarter" means each period of three months ending on March 31, June 30, September 30 and December 31.

"Claiming Party" is defined in Section 10.6.

"Code" means the Internal Revenue Code of 1986, as amended.

"Commissioning" means, with respect to any New System, the completion and the performance of all of the following activities:

(a) such New System has been installed at the applicable Facility specified in the Purchase Order, and has been Placed in Service;

(b) (i) such New System, based on a [*] period of operation, (A) is producing power at [*] of the System Capacity of such New System, as measured by the Bloom System Meter and (B) is operating at or above the Minimum Efficiency Level and (ii) Seller has provided Buyer with evidence reasonably satisfactory to Buyer of each of the foregoing;

(c) Seller has (i) performed and successfully completed all necessary acts required under the applicable Interconnection Agreement (e.g., performance testing), if any, and (ii) obtained any required permission from the applicable Person granting Buyer permission to interconnect such New System with the distribution or transmission facilities of such applicable Person;

(d) Seller shall have delivered Seller's Certificate of Commissioning to Buyer; and

(e) Seller shall have delivered to Buyer each of the Seller Deliverables indicated on Exhibit C as items for delivery prior to or at Commissioning.

"Commissioning Date Deadline" means March 19, 2020.

"Commissioning Milestone" means, with respect to any New System, the completion of the requirements of Commissioning.

"Confidential Information" is defined in Section 8.1.

"Construction Report" is defined in Section 5.1(a)(iii).

"DDP (Incoterms 2010)" means Delivered Duty Paid (DDP) as such term is used in the International Rules for the Interpretation of Trade Terms (identified as "INCOTERMS® 2010") as prepared by the International Chamber of Commerce.

"Delivery" means the physical delivery of a New System or New BOF materials or equipment to the applicable Site. Upon achievement of Delivery, such New System or New BOF materials shall have been "Delivered."

"Delivery Date" means for each New System, the date upon which the Delivery Milestone is achieved for such New System, as set forth in Seller's Certificate of Delivery Milestone Completion.

"Delivery Milestone" means, with respect to any New System, the completion of the following activities:

(a) such New System has been Delivered;

(b) such New System has been placed upon its applicable concrete pad in an approved location pursuant to the applicable Site Lease and is available for installation, startup, and Commissioning;

(c) if required by the applicable Site Lease, Buyer has received approval of the Site plans and/or single line drawings from the applicable Site Landlord in respect of the New Systems and New BOF to be installed, and Existing BOF to be reconfigured, at such Site; and

(d) Seller shall have delivered Seller's Certificate of Delivery Milestone Completion to Buyer.

"Deposit" is defined in Section 2.4(a)(i).

"Documentation" means New System documentation for a Facility, including testing, engineering, specifications, and operations and maintenance manuals, Training Materials, drawings, reports, standards, schematics, directions, samples and patterns, including any such Documentation required to be delivered prior to Commissioning under Section 3.3(a)(v).

"DPL" means Delmarva Power & Light Company, d/b/a Delmarva Power, an investor owned utility company regulated by the Delaware Public Service Commission.

"DPL Agreements" means the service applications between Buyer and DPL with respect to the REPS Act, the Tariff and the Gas Tariff, whereby DPL shall (a) serve as the agent for collection of amounts due from Buyer (if any) and for disbursement of amounts due to Buyer under the Tariff and (b) sell to Buyer natural gas under the Gas Tariff.

"DSGP Operating Agreement" means that certain Third Amended and Restated Limited Liability Company Agreement of Diamond State Generation Partners, LLC, as amended and restated as of even date herewith, among SP Diamond State Class B Holdings, LLC, and Diamond State Generation Holdings, LLC.

"ECCA" means that certain Equity Capital Contribution Agreement, dated as of the date hereof, among Owner, Diamond State Generation Holdings, LLC, SP Diamond State Class B Holdings, LLC, and Operator.

"Efficiency" means, with respect to a New System, the quotient of F/E, where (a) F = the fuel consumed by such Bloom System measured in BTUs on a higher heating value basis, as measured by the mass flow controller, which has the specifications listed on Exhibit A and which is included in such New System, and (b) E = the electricity produced by such Bloom System, measured in kWh, as measured by the Bloom System Meter.

"Electrical Interconnection Facilities" means the equipment and facilities required to safely and reliably interconnect a Facility to the transmission system of DPL or distribution system of PJM pursuant to the Interconnection Agreement for such Facility, including the collection system between each New System, transformers and all switching, metering, communications, control and safety equipment, including the facilities described in any applicable Interconnection Agreement.

"Electronic Data Room" means the electronic dataroom known as "Project Leone Dataroom" established by the Seller and made available to the Investor.

"Environmental Law" means any Legal Requirement which pertains to health, safety, any Hazardous Material, or the environment (including ground or air or water or noise pollution or contamination, and underground or above ground tanks) and shall include without limitation, the Solid Waste Disposal Act, 42 U.S.C. § 6901 et seq.; the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. § 9601 et seq., as amended by the Superfund Amendments and Reauthorization Act of 1986; the Hazardous Materials Transportation Act, 49 U.S.C. § 1801 et seq.; the Federal Water Pollution Control Act, 33 U.S.C. § 1251 et seq.; the Clean Air Act, 42 U.S.C. § 7401 et seq.; the Toxic Substances Control Act, 15 U.S.C. § 2601 et seq.; the Safe Drinking Water Act, 42 U.S.C. § 300f et seq.; and any other state or federal environmental statutes, and all rules, regulations, orders and decrees now or hereafter promulgated under any of the foregoing, as any of the foregoing now exist or may be changed or amended or come into effect in the future.

"Environmental Requirements" means any Environmental Law, agreement or restriction (including any condition or requirement imposed by any insurance or surety company), as the same now exists or may be changed or amended or come into effect in the future, which pertains to health, safety, any Hazardous Material, or the environment.

"Existing BOF" has the meaning set forth in the definition of "BOF."

"Existing System Repurchase Agreement" means that certain Repurchase Agreement, dated as of even date herewith, by and between Seller, as "Buyer," and Buyer, as "Seller."

"Existing Systems" is defined in the Recitals.

"Facility" means, with respect to each of the Brookside Facility and the Red Lion Facility, the Existing Systems, the New Systems, and the BOF at such Site, as may at any point in time share a single Interconnection Point and be operated as a unified whole.

"Facility Services" has the meaning afforded to such term in the A&R MOMA.

"Fair Market Value" means, with respect to any New System, the price at which such asset would change hands between a willing buyer and a willing seller, neither being under any compulsion to buy or to sell, and both having reasonable knowledge of the relevant facts, and specifically with respect to a New System or any portion thereof, as determined consistently with Section 4.05 of Revenue Procedure 2007-65.

"FERC" means the Federal Energy Regulatory Commission and any successor.

"Force Majeure Event" means any event or circumstance that (a) prevents a Party from performing its obligations under this Agreement; (b) was not reasonably foreseeable by such Party; (c) was not within the reasonable control of, or the result of the negligence of such Party or a breach of this Agreement by such Party; and (d) such Party is unable to reasonably mitigate, avoid or cause to be avoided with the exercise of due diligence. "Force Majeure Event" may include, provided that the conditions in (a) through (d) in the foregoing sentence are met, a failure or interruption of performance due to an act of God, civil or military authority, war, civil disturbances, terrorist activities, fire, explosions, the external power delivery system (a/k/a the grid) being out of the required specifications or totally failing (a/k/a brownout or blackout), or electric grid curtailment. Notwithstanding the foregoing, Force Majeure Event does not include the lack of economic resources of a Party.

"Fundamental Representation" means the representations provided in Section 6.1(b), Section 6.1(h), Section 6.1(k), Section 6.1(o), and Section 6.1(s).

"GAAP" means United States generally accepted accounting principles consistently applied.

"Gas Supply Agreement" means, with respect to (a) the Brookside Facility, that certain Large Volume Gas Qualified Fuel Cell Provider – Renewable Capable Service Agreement, dated as of June 19, 2012, by and between DPL and Buyer; and (b) the Red Lion Facility, that

certain Large Volume Gas Qualified Fuel Cell Provider – Renewable Capable Service Agreement, dated as of December 12, 2012, by and between DPL and Buyer.

"Gas Tariff" means DPL's Service Classification "LVG-QFCP-RC" filed for gas service applicable to REPS Qualified Fuel Cell Provider Projects and approved by the DPSC in Order no. 8062 dated October 18, 2011, as adopted and supplemented by DPSC's Findings, Opinion and Order No. 8079, dated December 1, 2011.

"Governmental Approvals" means (a) any authorizations, consents, approvals, licenses, rulings, permits, tariffs, rates, certifications, variances, orders, judgments, decrees by or with a relevant Governmental Authority and (b) any required notice to, any declaration of, or with, or any registration or filing by, or with, any relevant Governmental Authority.

"Governmental Authority" means any foreign, federal, state, local or other governmental, regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, court, tribunal, arbitrating body or other governmental authority, or the applicable Regional Transmission Organization or Independent System Operator subject to the jurisdiction of FERC (i.e., PJM as of the Agreement Date).

"Hazardous Material" means and includes those elements or compounds which are contained or regulated as a hazardous substance, toxic pollutant, pesticide, air pollutant, or as defined in any Environmental Law, order or decree of any Governmental Authority for the protection of human health, water, safety or the environment or is otherwise included in the definition of "Hazardous Materials," "Hazardous Substance" or a similar term in a Site Lease.

"Indemnifiable Loss" means any claim, demand, suit, loss, liability, damage (including any losses arising as a result of the loss or recapture of any ITC), obligation, payment, fine, cost or expense (including the cost and expense of any investigation, action, suit, proceeding, assessment, judgment, settlement or compromise relating thereto and reasonable attorneys' fees and reasonable disbursements in connection therewith).

"Indemnified Party" is defined in Section 11.4.

"Indemnifying Party" is defined in Section 11.4.

"Installation Services" is defined in Section 3.3(a).

"Intellectual Property" shall mean any or all of the following and all rights therein, whether arising under the laws of the United States or any other jurisdiction (a) all patents and patent applications (and all reissues, divisions, re-examinations, renewals, extensions, provisionals, continuations and continuations-in-part thereof), patent disclosures and inventions (whether patentable or not); (b) all trade secrets, know-how and confidential and proprietary information; (c) all copyrights and copyrightable works (including computer programs) and registrations and applications therefor and any renewals, modifications and extensions thereof; (d) all moral and economic rights of authors and inventors, however denominated, throughout the world; (e) unregistered and registered design rights and any registrations and

applications for registration thereof; (f) trademarks, service marks, trade names, service names, brand names, trade dress, logos, slogans, corporate names, trade styles, domain names and other source or business identifiers, whether registered or not, together with all applications therefor and all extensions and renewals thereof and all goodwill associated therewith; (g) semiconductor chip "mask" works, and registrations and applications for registration thereof; (h) database rights; (i) all other forms of intellectual property, including waivable or assignable rights of publicity or moral rights; and (j) any similar, corresponding or equivalent rights to any of the foregoing anywhere in the world.

[*]

"Interconnection Agreement" means, with respect to (a) the Brookside Facility, that certain Standard Agreement for Interconnection and Parallel Operation of Generation Facilities, dated as of March 27, 2012, by and between DPL and Buyer, with respect to PJM Generation Interconnection Request Queue Position X2-083; and (b) the Red Lion Facility, that certain Interconnection Service Agreement, dated as of June 19, 2012, by and among PJM Interconnection, L.L.C., Buyer, and DPL, with respect to PJM Generation Interconnection Request Queue Position X1-097.

"Interconnection Point" means, with respect to (a) the Brookside Facility, the "Point of Interconnection" specified in the Interconnection Agreement for such Facility; and (b) the Red Lion Facility, the "Point of Interconnection" specified in the Interconnection Agreement for such Facility.

"Investor" means Southern Power Company.

"Invoice Due Date" means the date specified on a Payment Notice duly delivered by Seller to Buyer for the applicable New Systems in a given calendar month.

"IP License" is defined in Section 9.1.

"IRS" means the Internal Revenue Service.

"ITC" means an investment tax credit pursuant to Code Sections 38(b)(1), 46 and 48(a).

"Knowledge" means (a) as to any Person other than a natural person, the actual knowledge (including any knowledge which would reasonably have been obtained after due inquiry) of such Person and its managers, directors officers and employees who have responsibility for the transactions contemplated by this Agreement, and (b) in respect of any Person who is a natural Person, the actual knowledge (including any knowledge which would reasonably have been obtained after due inquiry) of such Person.

"kW" means kilowatt.

"kWh" means kilowatt-hour.

"Legal Requirement" means any law, statute, act, decree, ordinance, rule, directive (to the extent having the force of law), tariff, order, treaty, code or regulation or any interpretation of any of the foregoing, as enacted, issued or promulgated by any Governmental Authority, NERC, any Person that NERC has delegated its authority to under the Federal Power Act or any Person that operates an interstate electric transmission system, including all amendments, modifications, extensions, replacements or re-enactments thereof, in each case applicable to or binding upon such Person or any of its properties or to which such Person or any of its property is subject.

"Liens" means any lien, security interest, mortgage, hypothecation, encumbrance or other restriction on title or property interest.

"Major Service Provider" is defined in Section 12.14.

"Managers" means Seller Manager and Buyer Manager.

"Manufacturer's Warranty" is defined in Section 4.1(b).

"Manufacturer's Warranty Period" means, for (a) each New System, the period beginning on the Commissioning Date of such New System and ending on the first (1st) anniversary thereof, and (b) the New BOF at a Facility, the period beginning on the date that installation and commissioning of such BOF has been completed and ending on the first (1st) anniversary of the Commissioning Date of last New System Commissioned at such Facility.

"Material Adverse Effect" means, for any Person or any Facility, as applicable, any change, effect or occurrence that, individually or in the aggregate, is or could reasonably be expected to be materially adverse to (a) the business, earnings, assets, results of operations, property or condition (financial or otherwise) of such Person or any Facility, as applicable, (b) the validity or enforceability of the Tariff, any Transaction Document, any Site Lease or the transactions contemplated by this Agreement, or (c) any Person's ability to perform its obligations under any Transaction Document or any Site Landlord's ability to perform its obligations under the applicable Site Lease.

"Maximum Aggregate Southern Portfolio Purchase Price" means [*].

"Maximum Liability" means, with respect to each Party, [*].

"Milestone(s)" means each of the (a) Delivery Milestone, and (b) the Commissioning Milestone.

"Minimum Efficiency Level" means an Efficiency equal to 7,550 BTU/kWh.

"MW" means megawatt.

"Nameplate Capacity" means the maximum electrical output of a generator as rated by the manufacturer determined at the normal operating conditions designated by the manufacturer.

"NERC" means the North American Electric Reliability Corporation or any successor.

"New BOF" has the meaning set forth in the definition of "BOF."

"New System" means a new solid oxide fuel cell power generating system, capable of being powered by natural gas, that is designed, constructed and installed by Seller at the applicable Site to replace one or more Existing Systems repurchased and removed by Seller pursuant to the Existing System Repurchase Agreement.

"Party" and "Parties" have the meanings set forth in the preamble.

"Payment Notice" means a notice delivered from Seller to Buyer pursuant to Section 2.5(c) substantially in the form set forth in Exhibit D.

"Performance Standards" is defined in Section 3.9.

"Permits" means all Governmental Approvals that are necessary under applicable Legal Requirements or this Agreement to have been obtained at such time in light of the stage of development of the Project to perform the Installation Services for the New Systems as contemplated in this Agreement or for a Party to enter into this Agreement or to consummate any transaction contemplated hereby, in each case in accordance with all applicable Legal Requirements.

"Permitted Liens" means any (a) Liens that are released or otherwise terminated at or prior to the date of achievement of the Delivery Milestone of the encumbered assets; (b) obligations or duties to any Governmental Authority arising in the ordinary course of business (including under licenses and Permits held by Buyer and under all Legal Requirements); (c) obligations or duties under easements, leases or other property rights; and (d) any other Liens agreed to in writing by Seller and Buyer.

"Person" means any individual, partnership, limited liability company, joint venture, corporation, trust, unincorporated organization, or governmental entity or any department or agency thereof.

"PJM" means PJM Interconnection, LLC.

"PJM Agreements" is defined in the Tariff.

"PJM Market Rules" means (a) the rules and obligations set forth in Section C (*Sales of Energy, Capacity, Other Available Product*) of the Tariff, and (b) the provisions of all applicable PJM rules and procedures pertaining to generation and transmission, including the rules and procedures concerning the dispatch of generation or scheduling transmission set forth in the applicable PJM tariff, the PJM operating agreement, and applicable PJM manuals.

"Placed in Service" means, with respect to any New System, the completion and performance of all of the following activities: (a) obtaining the necessary licenses and Permits (if any)

for the operation of such New System and the sale of power generated by the New System in accordance with clause (d) of this definition, (b) satisfactory completion of all tests necessary for the proper operation of such Facility in accordance with clause (d) of this definition, (c) if necessary, synchronization of such New System onto the electric distribution and transmission system of DPL or PJM, as applicable, and (d) the commencement of regular, continuous, daily operation of such New System.

"Pre-Commissioning Equipment Warranty" is defined in Section 4.1(a).

"Pre-Commissioning Equipment Warranty Period" is defined in Section 4.1(a).

"Project" is defined in the Recitals.

"Project Model" means the economic model incorporating a number of facts, including the availability and amount of tax credits and other incentives, to be delivered from Seller to Buyer from time to time pursuant to Section 2.7.

"Prudent Electrical Practices" means those practices, methods, equipment, specifications and standards of safety and performance, as the same may change from time to time, as are commonly used by a significant portion of the grid-tied fuel cell electrical generation industry operating in the United States and/or approved or recommended by the NERC as good, safe and prudent engineering practices in connection with the design, construction, operation, maintenance, repair and use of electrical and other equipment, facilities and improvements of electrical generating facilities, including any applicable practices, methods, acts, guidelines, standards and criteria of FERC and all applicable Legal Requirements.

"Purchase Date" means, with respect to a New System, the date that the conditions set forth in Section 2.6(b) (as such conditions may be waived by Buyer in its sole discretion) are satisfied with respect to such New System, as such date is evidenced in the Bill of Sale for such New System.

"Purchase Order" means Buyer's purchase order for a New System or New Systems to be purchased by Buyer in substantially the form of Exhibit E.

"Purchase Price" means a price for the design, installation and purchase of each New System, determined pursuant to Section 2.7. The Purchase Price for the period between the Agreement Date and the first adjustment thereto pursuant to Section 2.7 shall be calculated at the rate designated for such period in the Base Case Model plus any Taxes for the account of Buyer under Section 2.4(d) in respect of such New System; *provided, however*, that Taxes shall not be included in the calculation of the Purchase Price for invoices issued pursuant to Section 2.4(a)(i).

"Qualified Appraiser" means a nationally recognized third-party appraiser reasonably acceptable to Buyer and Seller which shall (a) be qualified to appraise power systems similar to the New Systems, and experienced in such businesses in the general geographic region of the relevant Facility, and (b) not be associated with either Buyer or Seller or any Affiliate thereof. If the Parties cannot agree on a third-party appraiser within fifteen (15) days of a

Party invoking the Appraisal Procedure, then Marshall & Stevens Incorporated shall act as the Qualified Appraiser.

"Qualified Fuel Cell Provider" shall have the meaning afforded such term in Section 352(16) of the Renewable Energy Portfolio Standards Act, as amended by S.B. 124, enacted July 10, 2011 (Title 26, Chap. 1, section 351 et seq. of the Code of the State of Delaware).

"Qualified Fuel Cell Provider Project" shall have the meaning afforded such term in Section 352(17) of the Renewable Energy Portfolio Standards Act, as amended by S.B. 124, enacted July 10, 2011 (Title 26, Chap. 1, section 351 et seq. of the Code of the State of Delaware).

"Red Lion Facility" is defined in the Recitals.

"Representatives" of a Party means such Party's authorized representatives, including its professional and financial advisors.

"REPS Act" means the Renewable Energy Portfolio Standards Act, as amended by S.B.124, enacted July 10, 2011 (Title 26, Chap. 1, section 351 et seq. of the Code of the State of Delaware).

"Repurchase Amount" means, with respect to any New System, the sum of (a) the applicable Repurchase Value, (b) one hundred percent (100%) of the Taxes, if any, which were paid by or on behalf of Buyer pursuant to Section 2.4(d) for such New System, and (c) one hundred percent (100%) of any Taxes, if any, that are required to be paid by Seller in connection with the return and repurchase of such New System.

"Repurchase Value" means, with respect to any New System, the greater of (a) the Fair Market Value of such New System (as determined under the Appraisal Procedure if Buyer and Seller cannot agree as to that Fair Market Value within ten (10) days), and (b) 100% of the Purchase Price for such New System until the first anniversary of Commissioning, declining by [*] on such first anniversary and on each anniversary of such date thereafter (for example, on the fourth anniversary of Commissioning, the Repurchase Value will decline to [*] of the Purchase Price), in each case as calculated as of the date that Seller becomes obligated to pay such amount to Buyer.

"SCADA" means the supervisory control and data acquisition systems.

"Seller" is defined in the preamble.

"Seller Default" is defined in Section 10.1.

"Seller Deliverables" means, with respect to each New System, the items listed in Exhibit C.

"Seller Indemnitee" is defined in Section 11.2.

"Seller Personnel" means any Person who is performing any Installation Services at the direction (or on behalf) of Seller, including the Seller Manager, any subcontractors (at any tier), Service Providers (including Major Service Providers), Representatives, or agents (irrespective if such Person is employed or engaged by Seller, Buyer, an Affiliate of Seller or any other Person).

"Seller's Certificate of Commissioning" means a certificate, substantially in the form set forth in Exhibit H, issued by Seller to Buyer pursuant to paragraph (d) of the definition of Commissioning.

"Seller's Certificate of Delivery Milestone Completion" means a certificate, substantially in the form set forth in Exhibit G, issued by Seller to Buyer pursuant to paragraph (d) of the definition of Delivery Milestone.

"Seller's Intellectual Property" is defined in Section 9.1.

"Seller Manager" is defined in Section 3.10(a).

"Service Provider" means an installation contractor appointed by Seller and, if required, approved by Buyer pursuant to Section 12.14.

"Shipment" means for each New System, shipment of such New System from Seller's manufacturing facility to the Site.

"Site" means, with respect to the Brookside Facility and the Red Lion Facility, the real property leased to Buyer for the use of such Facility pursuant to the Site Lease for such Facility.

"Site Landlord" means the applicable landlord under a Site Lease.

"Site Lease" means, with respect to (a) the Brookside Facility, that certain Lease Agreement, dated as of April 19, 2012, by and between the Delaware Department of Transportation and Buyer; and (b) the Red Lion Facility, that certain Amended and Restated Lease Agreement, dated as of June 26, 2012, by and between DPL and Buyer.

"Software" shall mean all computer software that is necessary for Buyer to own and operate the New Systems in compliance with the terms of this Agreement, the Tariff, PJM Market Rules, the PJM Agreements, the DPL Agreements, the DSGP Operating Agreement, and the Site Leases.

"Software License" is defined in Section 9.2(a).

"Specifications" means the specifications for the New Systems, as applicable, as set forth in Exhibit A.

"Southern Portfolio" means all [*].

"System Capacity" means, with respect to a New System, the "System Capacity" set forth on the applicable specification sheet provided by the manufacturer of such New System.

"Tariff" means Service Classification "QFCP-RC" as administered by DPL, as approved by the DPSC in Order no. 8062 dated October 18, 2011, as adopted and supplemented by DPSC's Findings, Opinion and Order No. 8079, dated December 1, 2011.

"Tax" (and, with correlative meaning, "Taxes") means:

(a) any taxes, customs, duties, charges, fees, levies, penalties or other assessments imposed by any federal, state, local or foreign taxing authority, including income, gross receipts, windfall profit, severance, property, production, sales, use, license, excise, franchise, net worth, employment, occupation, payroll, withholding, social security, alternative or add-on minimum, ad valorem, transfer, stamp, or environmental tax, or any other tax, custom, duty, fee, levy or other like assessment or charge of any kind whatsoever, together with any interest, penalty, addition to tax, or additional amount attributable thereto; and

(b) any liability for the payment of amounts with respect to payment of a type described in clause (a), including as a result of being a member of an affiliated, consolidated, combined or unitary group, as a result of succeeding to such liability as a result of merger, conversion or asset transfer or as a result of any obligation under any tax sharing arrangement or tax indemnity agreement.

"Term" means the period which (a) shall commence on the Agreement Date and (b) shall, unless terminated earlier under ARTICLE X of this Agreement or unless extended by mutual agreement of the Parties, terminate on the date on which the last New System in the Project achieves Commissioning.

"Third Party Claim" means any claim, action, or proceeding made or brought by any Person who is not (a) a Party to this Agreement, or (b) an Affiliate of a Party to this Agreement.

"Third Party Warranty" is defined in Section 3.7.

"Training Materials" is defined in Section 12.15.

"Transaction Documents" means the ECCA, DSGP Operating Agreement, the A&R MOMA, this Agreement, the A&R Administrative Services Agreement, and the Existing System Repurchase Agreement.

Section 1.2 Other Definitional Provisions.

(a) All exhibits, annexes, and schedules attached to this Agreement are incorporated herein by this reference and made a part hereof for all purposes. References to sections, exhibits, annexes and schedules are, unless otherwise indicated, references to sections, exhibits, annexes and schedules to this Agreement. References to a section shall mean the referenced section and all sub-sections thereof.

(b) As used in this Agreement and in any certificate or other documents made or delivered pursuant hereto or thereto, financial and accounting terms not defined in this Agreement or in any such certificate or other document, and financial and accounting terms partly defined in this Agreement or in any such certificate or other document to the extent not defined, will have the respective meanings given to them under GAAP. To the extent that the definitions of financial and accounting terms in this Agreement or in any such certificate or other document are inconsistent with the meanings of such terms under GAAP, the definitions contained in this Agreement or in any such certificate or other document will control.

(c) The words "hereof," "herein," "hereunder," and words of similar import when used in this Agreement will refer to this Agreement as a whole and not to any particular provision of this Agreement. The terms "including" and "includes" mean "including without limitation" and "includes without limitation," respectively.

(d) The definitions contained in this Agreement are applicable to the singular as well as the plural forms of such terms and to the masculine as well as to the feminine and neuter genders of such terms.

(e) Any agreement or instrument defined or referred to herein or in any instrument or certificate delivered in connection herewith means (unless otherwise indicated herein) such agreement or instrument as from time to time amended, amended and restated, modified or supplemented and includes (in the case of agreements or instruments) references to all attachments thereto and instruments incorporated therein.

(f) Any references to a Person are also to its permitted successors and assigns.

(g) References to any statute, code or statutory provision are to be construed as a reference to the same as it exists as of the Agreement Date or Purchase Date, as applicable, and include references to all bylaws, instruments, orders and regulations for the time being made thereunder or deriving validity therefrom unless the context otherwise requires.

ARTICLE II.
PURCHASE AND SALE

Section 2.1 Appointment of Seller. Subject to Section 12.13, Buyer hereby appoints Seller to act as Buyer's provider of New Systems and Installation Services, and Seller hereby accepts such appointment and agrees to provide all such New Systems and Installation Services, inclusive of all labor, equipment, materials, supplies, and tests therefor, in accordance with the terms and conditions set forth in this Agreement. Seller's entire consideration for supplying the New Systems, the associated BOF therefor, and the Installation Services for such New Systems shall be the Purchase Price for such New System. Seller shall bear the financial risk regarding any cost overruns, claims for subcontractors or other liabilities in respect of the New Systems and the associated Installation Services.

Section 2.2 Conceptual Design. Each New System and BOF to be installed hereunder shall be installed in accordance with the conceptual design for the Project, as set forth hereto as Annex A. Unless Buyer in its sole discretion agrees otherwise in writing, all New Systems and BOF to be installed hereunder shall be installed at the Red Lion Facility and not the Brookside Facility.

Section 2.3 Purchase Orders.

(a) In connection with the Agreement Date and thereafter not later than ten (10) Business Days prior the first date of each calendar month, Seller will provide to Buyer a draft Purchase Order from Buyer for the New Systems that Seller expects will be Delivered in the applicable calendar month. So long as no Seller Default has occurred and is continuing hereunder, Buyer will, within five (5) Business Days of such notice, submit to Seller an executed Purchase Order for such New Systems. So long as no Buyer Default has occurred and is continuing hereunder, Seller shall promptly accept each such Purchase Order by countersigning and returning it to Buyer; provided that the failure of Seller to countersign or return to Buyer a Purchase Order shall not invalidate such Purchase Order and Seller shall be obligated to deliver such New System under such Purchase Order as contemplated by this Agreement.

(b) Notwithstanding anything to the contrary set forth in this Agreement, the Parties acknowledge and agree that, unless mutually agreed in writing by the Parties, in no event shall the Aggregate Purchase Price exceed the Maximum Aggregate Southern Portfolio Purchase Price. Accordingly, in furtherance and not in limitation of the foregoing, Seller shall not provide Buyer with a Payment Notice for, and Buyer shall have no obligation to issue a Purchase Order or otherwise pay any portion of the Purchase Price in connection with, any New System(s) which, upon Commissioning with respect to such New System(s), would result (or be reasonably likely to result) in the Aggregate Purchase Price exceeding the Maximum Aggregate Southern Portfolio Purchase Price, unless mutually agreed in writing by the Parties.

Section 2.4 Invoicing of Purchase Price.

(a) Seller shall invoice Buyer hereunder as follows:

(i) on the Agreement Date, a Deposit for all New Systems to be purchased hereunder in the amount of [*] (the "Deposit"); and

(ii) upon Commissioning for each New System, the remainder of the Purchase Price, if any, not previously paid (calculated, and adjusted from time to time, in accordance with this Agreement), for such New System, plus one hundred percent (100%) of the Taxes to be paid by Buyer pursuant to Section 2.4(d) for such New System.

(b) Each invoice issued pursuant to Section 2.4(a)(ii) shall:

(i) include the following information for each applicable New System:

(1) Buyer's Purchase Order number;

(2) the Facility and location (e.g., the Bloom "Site ID") within such Facility in which such New System is installed;

(3) the serial number and System Capacity of each New System;

(4) the Purchase Price, including details of (x) all amounts previously paid towards or credited against the Purchase Price, and (y) all amounts remaining due and payable on the Purchase Price;

(5) the Delivery Date;

(6) the Purchase Date;

(7) Seller wiring instructions/ACH instructions and contact information for a Seller Representative or Seller's bank to confirm the validity of such instructions; and

(8) the date of achievement of Commissioning.

(ii) include a final waiver and release of Liens for such New System, conditioned only upon final payment of the Purchase Price for such New System, executed by Seller in substantially the form set forth in Exhibit I.

(c) Buyer shall, promptly following receipt of an invoice and reasonable supporting documentation thereof, remit to Seller all deposits, performance assurance, or amounts otherwise posted or provided by Seller in connection in connection with any Government Approvals, or interconnection applications, in each case with respect to a New System and to the extent that such amounts are returned by such counterparty to Buyer and not Seller.

(d) Buyer shall pay all state and local sales, use or other transfer Taxes required to be paid by Buyer and attributable to the transfer of the New System to Buyer, except that Seller shall be responsible for and pay any Taxes arising as a result of any components of such New System or any New System being acquired from a source outside of the United States.

(e) Seller shall consider in good faith any requests made by Buyer following the Agreement Date to include additional information related to any New Systems to be purchased hereunder in connection with invoices issued with respect to New Systems that have been Commissioned.

Section 2.5 Payment of Purchase Price.

(a) Buyer shall pay the Deposit on the Agreement Date and shall pay all other outstanding Purchase Price invoices on a monthly basis in accordance with the terms of this Section 2.5.

(b) Not less than eight (8) Business Days prior to the Invoice Due Date for all invoices to be paid by Buyer for the applicable calendar month, Seller shall deliver to Buyer:

(i) A draft Payment Notice, setting forth the anticipated aggregate Purchase Price for all New Systems to be paid in such month; and

(ii) Seller's Certificates of Commissioning evidencing the achievement of the Commissioning Milestone achieved by the applicable New Systems prior to the date of such draft Payment Notice.

(c) Not less than four (4) Business Days prior to the applicable Invoice Due Date for all invoices issued pursuant to Section 2.4(a)(ii) that are to be paid by Buyer for such calendar month, Seller shall deliver to Buyer:

(i) an executed Payment Notice, setting forth the actual aggregate Purchase Price for all New Systems to be paid by Buyer in such month, which amount shall in no event exceed the amount notified by Seller to Buyer in the applicable draft Payment Notice except to the extent of any adjustment to such amount resulting from Section 2.7;

(ii) Seller's Certificates of Commissioning, to the extent not previously delivered, evidencing the achievement of the Commissioning Milestones achieved as of such date by the applicable New Systems between the date on which the draft Payment Notice and accompanying Seller's Certificates of Commissioning were delivered and the date on which the executed Payment Notice was delivered.

(d) Buyer shall, on the applicable Invoice Due Date indicated in the executed Payment Notice delivered by Seller pursuant to Section 2.5(c), make Purchase Price payments for each New System included in such Payment Notice for which Seller has issued invoices pursuant to Section 2.4(a)(ii) and delivered Seller's Certificates of Commissioning evidencing the satisfaction of the Commissioning Milestone.

(e) If Buyer defaults in any payment when due for any New System (other than with respect to amounts being disputed in good faith), Seller may, on not less than five (5) Business Days prior notice to Buyer, at its option and without prejudice to its other remedies, require that (until all such outstanding payment defaults have been cured) the payment of the portion of the Purchase Price for future New Systems required under Section 2.4(a)(ii) above be made immediately prior to the Shipment of the applicable New Systems.

(f) Seller shall promptly pay all subcontractors working on the New Systems delivered and installed under this Agreement (including, for clarification, subcontractors working off-Site), and shall, at the time of each payment made to any such subcontractor, obtain a partial or final Lien waiver, as applicable, in a form approved by Buyer, and promptly provide Buyer with a copy of each such Lien waiver for any payments made to (i) a subcontractor in excess of [*] for any invoice or [*] in the aggregate or (ii) a Major Service Provider. Seller shall discharge any Liens by such subcontractors within thirty (30) days of receiving notice thereof. Seller shall release all Liens in favor of Seller on each Facility upon final payment of the Purchase Price for the final New System installed at such Facility. Upon the failure of Seller to discharge a Lien required to be discharged under this Section 2.5, or else promptly to provide a bond in an amount and from a surety acceptable to Buyer to protect against such Lien, in each case, within thirty (30) days after Seller is aware of the existence thereof, Buyer may, but shall not be obligated to, pay, discharge or obtain a bond or security for such Lien and, upon such payment, discharge or posting of security therefor, shall be entitled immediately to recover from Seller the amount thereof, together with all reasonable and necessary expenses actually incurred by Buyer in connection with such payment or discharge, or to set off all such amounts against any amounts owed by Buyer to Seller hereunder or under the A&R MOMA.

(g) With respect to any payment due from one party to the other pursuant to this Agreement, unless being contested in good faith, interest shall accrue daily at the lesser of a monthly rate of one and five-tenths percent (1.5%) or the highest rate permissible by law on the unpaid balance.

(h) Buyer at its sole option is hereby authorized to setoff any undisputed amounts owed Buyer under the A&R MOMA or this Agreement, as applicable, and which are past due against any amounts owed by Buyer to Seller under the A&R MOMA or this Agreement. The rights provided by this paragraph are in addition to and not in limitation of any other right or remedy (including any right to set-off, counterclaim, or otherwise withhold payment) to which Buyer may be entitled (whether by operation of law, contract or otherwise).

Section 2.6 Purchase and Sale of New Systems.

(a) Upon the satisfaction of the conditions set forth in Section 2.6(b) (as may be waived by Buyer in its sole discretion) with respect to a New System, Seller shall sell, assign, convey, transfer and deliver to Buyer, and Buyer shall purchase, assume and acquire from Seller, all of Seller's right, title and interest in and to such New System, effective as of the Purchase Date.

(b) Conditions Precedent to the Purchase Date. Buyer's obligation to purchase, assume, and acquire a New System from Seller shall be subject to Seller's satisfaction of the following conditions precedent (as may be waived by Buyer in its sole discretion):

(i) such New System has not been Placed in Service;

(ii) Seller has delivered Seller's Certificate of Delivery Milestone Completion for such New System to Buyer;

(iii) Seller has delivered a Bill of Sale for such New System to Buyer, dated as of the date set forth in Seller's Certificate of Delivery Milestone Completion for such New System; and

(iv) each representation and warranty made by Seller on such Purchase Date is true and correct as of such Purchase Date; and

(v) each of the Transaction Documents remains in full force and effect.

Section 2.7 Purchase Price Adjustments.

(a) Not later than ten (10) Business Days (i) prior to the end of each Calendar Quarter and (ii) after the final day of the calendar month in which the final New System is purchased hereunder, Seller shall deliver to Buyer a revised Project Model, reflecting the Base Case Model updated solely to reflect (1) with respect to each New System that has achieved the Commissioning Milestone, (A) the dates on which Buyer paid each portion of the Purchase Price for such New System and the amount of such payments, (B) the date on which such New System achieved the Commissioning Milestone, and (C) if applicable, any reduction of ITC resulting from a failure of Seller to achieve the Commissioning Milestone in respect of such New System by the Commissioning Date Deadline for any reason, including a Force Majeure Event, and (2) with respect to each New System that Seller reasonably expects to achieve the Commissioning Milestone following the delivery of such revised Project Model, (A) the dates on which Buyer has paid, or is expected to pay, each portion of the Purchase Price for such New System and the amount of such payments, (B) the date on which Seller reasonably expects such New System to achieve the Commissioning Milestone and (C) any reduction of ITC expected to result from a failure of Seller to achieve the Commissioning Milestone in respect of such New System by the Commissioning Date Deadline for any reason, including a Force Majeure Event.

(b) Notwithstanding anything to the contrary set forth in Section 2.7(a),

(i) In the event that the calculation performed pursuant to Section 2.7(a) as of any date would, if applied to all New Systems that are reasonably expected to achieve Commissioning after such date (each, a "[*]"), result (or be reasonably likely to result) in the Aggregate Purchase Price exceeding the Maximum Aggregate Southern Portfolio Purchase Price, the Purchase Price for each such Post-Calculation New System shall instead be that amount that would result in the Aggregate Purchase Price equaling the Maximum Aggregate Southern Portfolio Purchase Price.

(ii) For the avoidance of doubt and notwithstading anything to the contrary set forth in this Section 2.7, in no event shall any adjustment to the Purchase Price result (or be reasonably likely to result) in the Aggregate Purchase Price

exceeding the Maximum Aggregate Southern Portfolio Purchase Price, unless mutually agreed in writing by the Parties.

(c) Parties will mutually agree on an adjusted Purchase Price for the New Systems within five (5) Business Days of Buyer's receipt of the revised Project Model pursuant to Section 2.7(a), which shall be used as (i) the final Purchase Price for all New Systems invoiced and paid in the current Calendar Quarter (or, in the case of the final Project Model adjustment, the applicable month), and (ii) the Purchase Price for purposes of all invoices delivered in the following Calendar Quarter (until the date of the next adjustment made pursuant to this Section 2.7). Within five (5) Business Days of the Parties' agreement on such adjusted Purchase Price, Buyer shall amend and reissue each invoice previously delivered by Seller to Buyer for the current Calendar Quarter (or, in the case of the final Project Model adjustment, the applicable month) to reflect the Purchase Price determined pursuant to this Section 2.7(c). For the avoidance of doubt, no adjustments shall be made hereunder with respect to any payments from Buyer to Seller made in any Calendar Quarter prior to the current Calendar Quarter. Without in any way limiting the provisions of Section 6.1(k), Seller makes no representation, warranty or guaranty regarding Buyer's expected rate of return as a result of the purchase of the New Systems hereunder.

(d) Following the reissuance of invoices pursuant to Section 2.7(c), if Buyer has made any over-payments or under-payments in respect of such invoices, Seller shall apply such over-payments or under-payments as a credit against, or addition to, the amount owed by Buyer with respect to the invoices to be paid on the final Invoice Due Date of the current Calendar Quarter (or, in the case of the final Project Model adjustment, the applicable month); provided, however, that if such adjustment results in Buyer owing no payments to Seller with respect to such invoices but fails to fully compensate Buyer for prior over-payments, Seller shall remit the remaining balance of any over-payments to Buyer within thirty (30) days following the applicable Invoice Due Date.

ARTICLE III.
DELIVERY AND INSTALLATION OF NEW SYSTEMS AND NEW BALANCE OF FACILITIES

Section 3.1 Access to Site. Seller shall be responsible for ascertainment of the suitability of the Facilities, the environment around the Facilities, the Facilities' soil condition and other ground conditions for installation of the New Systems. Buyer shall provide Seller with access to the Facilities as necessary to permit Seller to deliver each New System to the applicable Site and to install and Commission such New System in the applicable Project in accordance with the applicable Site Lease.

Section 3.2 Delivery; Title; Risk of Loss. Delivery of each New System shall be DDP (Incoterms 2010) to its Site, in accordance with the Uniform Commercial Code then in effect. Title to each New System and to any related New BOF (to the extent the Cost Segregation Report reflects that such New BOF is part of the "fuel cell power plant" of such New System within the meaning of Section 48(c)(1)(C) of the Code) shall pass to Buyer upon the Purchase Date of such New System,

and such title shall be good and marketable and free of all Liens, except for Permitted Liens. From and after the Purchase Date of each New System all risk of loss or damage to such New System and such related New BOF shall be borne by Buyer. Title and risk of loss or damage to all other New BOF at a Facility that is not part of the "fuel cell power plant" of any New System at such Facility within the meaning of Section 48(c)(1)(C) of the Code shall pass to Buyer on the date that installation and commissioning of such New BOF has been completed, and such title shall be good and marketable and free of all Liens, except for Permitted Liens.

Section 3.3 Installation Services.

(a) Seller shall perform all development, design, engineering, procurement, construction, and commissioning services necessary in connection with the installation, interconnection, testing, start-up, and commissioning the New Systems to achieve Commissioning (collectively, "Installation Services"), including the following activities:

(i) Seller shall be solely responsible for the means, methods, techniques, sequences, and procedures employed for execution and completion of the engineering, procuring, constructing, installing, and commissioning any New BOF and for reconfiguring any Existing BOF required for New Systems to achieve Commissioning, and Seller shall cause each New System to achieve Commissioning without any compensation or reimbursement by Buyer, other than the Purchase Price under this Agreement;

(ii) Within thirty (30) days following Commissioning of the last New System Purchased hereunder and installed at a Facility, Seller shall remove and dispose of any Existing BOF that is unnecessary for operation of the New Systems at a Facility; *provided*, that Seller may leave in place any properly stubbed and undamaged natural gas, water and/or electrical stub-ups and any undamaged concrete pads if such items in the condition that Seller leaves them are permitted to be so left in place under the applicable Site Lease, Prudent Electrical Practices, and applicable Legal Requirements;

(iii) Seller shall obtain and maintain, or cause to be obtained and maintained (where required, in the name of Buyer), all Permits necessary to design, install, commission, construct, occupy, and operate each New System at each Site;

(iv) Seller shall cause to be performed any and all studies, reports and applications (in the name of Buyer) that are necessary for interconnection to the distribution and transmission facilities of DPL or PJM, as applicable to the particular Facility;

(v) Seller shall perform all commissioning work in accordance with the provisions of Schedule 3.3(a)(iii).

(vi) If requested by Buyer, Seller shall provide operator training and associated training materials to personnel and Representatives of Buyer sufficient

to instruct Buyer on operation of such New System in connection with safety requirements and in conformance with Prudent Electrical Practices;

(vii) Commissioning. Promptly following achievement of the Delivery Milestone for each New System, Seller shall provide installation, inspection, commissioning and start-up for such New System in accordance with the installation manuals provided for such New System and the applicable Site Lease, and shall make best efforts to cause such New System to achieve Commissioning within sixty (60) days of the date of achievement of the Delivery Milestone for such New System, as set forth in Seller's Certificate of Delivery Milestone Completion for such New System. Without limitation of the foregoing, each New System shall be connected by Seller to the applicable natural gas source, water source, SCADA, and Electrical Interconnection Facilities;

(viii) Seller shall deliver to Buyer each of the Seller Deliverables set forth on Exhibit C in accordance with the timing for each such item as set forth on such Exhibit C;

(ix) Following Commissioning of all New Systems to be installed in a Facility, Seller shall promptly remove all waste materials and rubbish from and around the Site as well as all of its tools, construction equipment, machinery, and surplus materials as reasonably necessary to restore each Site to a condition reasonably satisfactory to the applicable Site Landlord or as otherwise required by the applicable Site Lease;

(x) Seller's supply of the New Systems hereunder, and performance of the Installation Services therefor, shall be fully comprehensive of all services, labor, and equipment necessary to complete installation of a fully commissioned and operating New System in accordance with this Agreement, the applicable Interconnection Agreement, and the applicable Site Lease;

(xi) Seller shall, and shall cause each of its subcontractors to, install the New Systems at each Site using items that are new, and undamaged at the time of such use or installation; and

(xii) Seller shall pay all amounts owed to its subcontractors and vendors in connection with the performance of the Installation Services on a timely basis and shall hold Buyer harmless against any claims asserted by such subcontractors and vendors.

(b) Seller shall be responsible, at its sole cost and expense, for maintaining and complying with all Permits required to perform the Installation Services under this Agreement. Buyer agrees to cooperate with and assist Seller in obtaining such Permits.

(c) Seller shall cause all Installation Services to be performed in a good and workmanlike manner, free from defective materials, and in accordance with the Performance Standards, free and clear of all Liens other than Permitted Liens.

Section 3.4 Commissioning Date Deadline. Provided that Buyer has waived the Maximum Aggregate Southern Portfolio Purchase Price restrictions set forth in Section 2.3(b) and Section 2.7(b) no later than November 15, 2019, Seller shall supply all New Systems and perform, or cause to be performed, all Installation Services in a timely manner to achieve Commissioning of all 27.5MW of New Systems by the Commissioning Date Deadline; provided, however, that if the Maximum Aggregate Southern Portfolio Purchase Price restrictions set forth in Section 2.3(b) and Section 2.7(b) are not waived, then Seller shall supply all New Systems and perform, or cause to be performed, all Installation Services in a timely manner to achieve Commissioning by the Commissioning Date Deadline of the greatest number of such New Systems as can be Commissioned consistent with the limitations of Section 2.3(b) and Section 2.7(b).

Section 3.5 Insurance. Seller shall maintain the insurance described in Annex B.

Section 3.6 Disposal; Right of First Refusal.

(a) Except as set forth in Section 12.4, Section 11.9 of the MOMA, or in connection with a repurchase of an Existing System pursuant to the Existing System Repurchase Agreement, in the event that Buyer decides to scrap, abandon or otherwise dispose of any Bloom System, Buyer shall notify Seller and Seller shall have the right but not the obligation to obtain title to the Bloom System and remove the Bloom System at Seller's cost; provided, however, that Seller will not be responsible for remediation of the Site in which the Bloom System was located.

(b) Except as set forth in Section 12.4 or in connection with a repurchase of an Existing System pursuant to the Existing System Repurchase Agreement, in the event that Buyer or its Affiliates desire to sell or otherwise transfer title to any Bloom System to a transferee other than an Affiliate of Buyer, Buyer shall notify Seller and Seller shall have the right of first refusal to purchase or acquire the Bloom System on the same terms and conditions of such sale. In the event that Seller exercises such right of first refusal, Seller shall, promptly following payment of the purchase price of such Bloom System, remove the Bloom System at Seller's cost, including the remediation of the Site in which the Bloom System was located in accordance with the terms of the applicable Site Lease.

Section 3.7 Third Party Warranties. If any express or implied warranties, indemnities, guaranties, remedies, covenants and other rights which any subcontractor or supplier has made to Seller with respect to any good, service, or other deliverable furnished under this Agreement in respect of a New System or New BOF (each a "Third Party Warranty") would provide an additional rights to Buyer beyond the warranties under ARTICLE IV, then (a) such Third Party Warranty providing additional rights will be for the benefit of and passed through to Buyer to the fullest extent possible, (b) Seller transfers and assigns to Buyer all of Seller's right, title and interest under such Third Party Warranty to exercise such additional rights, and (c) Seller hereby appoints Buyer as attorney-in-fact coupled with an interest to exercise and enforce all such additional rights in the name of either Buyer or Seller. Nothing in this Section 3.7 will limit Seller's obligations to Buyer under ARTICLE IV.

Section 3.8 Access; Cooperation. Seller shall provide to Buyer such other information that is in the possession of Seller or its Affiliates or is reasonably available to Seller regarding the permitting, engineering, construction, or operations of Seller, its subcontractors or the Facilities, and other data concerning Seller, its subcontractors or the Facilities that Buyer may, from time to time, reasonably request in writing, subject to Seller's obligations of confidentiality to third parties with respect to such information. Seller shall not knowingly take any action or omit to take any action as would cause Buyer in any material respect to violate any Legal Requirements, and to the extent that Seller has knowledge of any such existing or prospective violation take, or cause to be taken, commercially reasonable actions, to redress or mitigate any such violation, which action shall be at Seller's sole expense if Seller is obligated to perform such action as part of this Agreement, and otherwise shall be at Buyer's sole expense. For the avoidance of doubt, Seller shall not be excused from any indemnification obligations, claims for damages or Indemnifiable Losses suffered by Buyer to the extent caused by Seller's violation of Legal Requirements or Buyer's violation of Legal Requirements to the extent relating to, resulting from or arising out of or in connection with any act or omission by Seller, Seller Affiliate or any Seller Personnel in respect of Installation Services or any Operator Personnel in respect of Facility Services that Seller is obligated to perform on behalf of Buyer. Seller shall give to Buyer prompt written notice of any material disputes with Governmental Authorities. Seller shall furnish, or cause to be furnished, to Buyer copies of all material documents furnished to Seller by any Governmental Authority in respect of Buyer or any New System.

Section 3.9 Performance Standards. For the purpose of this Agreement, Seller shall perform under this Agreement in accordance and consistent with each of the following to the extent applicable to the sale of the New Systems and New BOF and the performance of the Installation Services (unless the context requires otherwise): (A) plans and specifications subject to Permits under Legal Requirements and applicable to each New System; (B) the manufacturer's recommendations with respect to all equipment and all maintenance and operating manuals or service agreements, whenever furnished or entered into, including any subsequent amendments or replacements thereof, issued by the manufacturer, provided they are consistent with generally accepted practices in the fuel cell industry; (C) the requirements of all applicable insurance policies; (D) preserving all rights to any incentive payments, warranties, indemnities or other rights or remedies, and enforcing or assisting with the enforcement of the applicable warranties, making or assisting in making all claims with respect to all insurance policies; (E) the Tariff, the PJM Market Rules, the DPL Agreements and the PJM Agreements; (F) all Legal Requirements and Permits/Governmental Approvals; (G) any applicable provisions of the Site Leases; (H) Prudent Electrical Practices; (I) the relevant provisions of each Interconnection Agreement; (J) the Seller Corporate Safety Plan provided in Exhibit J (as updated by Seller from time to time, with a copy provided promptly to Buyer); (K) the Seller Subcontractor Quality Plan provided in Exhibit K (as updated by Seller from time to time, with a copy provided promptly to Buyer); and (L) all Environmental Requirements (collectively, the "Performance Standards"); provided, however, that meeting the Performance Standards shall not relieve Seller of its other obligations under this Agreement.

Section 3.10 Coordination of Relationship.

(a) Managers. Seller will appoint an individual to serve as its primary contact person with regard to this Agreement (the "Seller Manager"), and Buyer will appoint an

individual to serve as its primary contact person with regard to this Agreement (the "Buyer Manager"). Seller's initial Seller Manager and Buyer's initial Buyer Manager are each set forth on Exhibit L. Each Party may, from time to time, designate another individual as a proposed replacement for its respective Manager by notice to the other Party.

(b) Manager Meetings. The Buyer Manager and the Seller Manager will serve as each Party's main contact to, and for, the other Party with regard to day-to-day matters affecting the Parties' relationship in relation to Installation Services. The Buyer Manager and the Seller Manager (or their designees) will meet, by phone or in person, as often as they feel necessary to monitor and manage such day-to-day activities. Such managers shall operate by consensus to the extent practicable but shall have no authority to amend or waive compliance with the terms and conditions of this Agreement, or to approve actions of the Parties that are inconsistent with this Agreement. Any such waivers or amendments shall be implemented only as described in Section 12.1 or Section 12.2, as the case may be.

ARTICLE IV.
WARRANTIES

Section 4.1 Pre-Commissioning Equipment Warranty; Manufacturer's Warranty.

(a) Subject to Section 4.2 and Section 11.5(a), Seller warrants to Buyer that, during the period commencing on the achievement of the Delivery Milestone and continuing until achievement of Commissioning for a New System (the "Pre-Commissioning Equipment Warranty Period"), (i) such New System shall conform to the Specifications for New Systems set forth on Exhibit A, and (ii) such New System and any associated New BOF shall be free from defects in design, materials and workmanship that would prevent such New System for achieving Commissioning (collectively, the "Pre-Commissioning Equipment Warranty").

(b) Subject to Section 4.2 and Section 11.5(a), Seller warrants to Buyer that, during the Manufacturer's Warranty Period, (i) each New System shall conform to the Specifications for New Systems set forth on Exhibit A, and (ii) each New System, any New BOF, and any Existing BOF that was reconfigured as part of the Installation Services shall be free from defects in design, materials and workmanship (collectively, the "Manufacturer's Warranty").

(c) Seller shall correct (including, in Seller's sole discretion, through replacement thereof), as promptly as reasonably practical (and in any case within thirty (30) days), at Seller's sole expense, all New Systems or BOF provided, or Installation Services performed, by it or its subcontractors under this Agreement which proves to be (i) in breach of the Pre-Commissioning Equipment Warranty during the Pre-Commissioning Equipment Warranty Period for such New System, or (ii) in breach of the Manufacturer's Warranty during the Manufacturer's Warranty Period. WITHOUT LIMITING (I) SELLER'S OBLIGATION TO INDEMNIFY BUYER PURSUANT TO (A) SECTION 11.3(A) (II) IN RESPECT OF A BREACH OF A SITE LICENSE OR

INTERCONNECTION AGREEMENT ATTRIBUTABLE TO DEFECTIVE NEW SYSTEMS, BOF, OR INSTALLATION SERVICES AS STATED ABOVE, AND/OR (B) WITH RESPECT TO THIRD PARTY CLAIMS PURSUANT TO SECTION 11.3, AND/OR (C) ANY OTHER EXPRESS REMEDY SET FORTH IN THIS AGREEMENT THAT MAY BE AVAILABLE IN CONNECTION WITH A SELLER FAILURE TO TIMELY CORRECT DEFECTIVE NEW SYSTEMS, BOF, OR INSTALLATION SERVICES (INCLUDING A SELLER OBLIGATION TO REMOVE OR REPURCHASE A DEFECTIVE NEW SYSTEM, IF APPLICABLE), BUYER'S SOLE REMEDY FOR A BREACH OF THE PRE-COMMISSIONING EQUIPMENT WARRANTY SHALL BE THE CORRECTION OF DEFECTIVE NEW SYSTEM PURSUANT TO THIS SECTION 4.1(C).

(d) The Pre-Commissioning Equipment Warranty and Manufacturer's Warranty is not transferable to any third person, including any Person who buys a New System from Buyer, without Seller's prior written consent (which shall not unreasonably be withheld).

(e) Any period of time in which the Pre-Commissioning Equipment Warranty or Manufacturer's Warranty is in breach for a New System shall not extend the Pre-Commissioning Equipment Warranty Period or Manufacturer's Warranty Period for such New System.

Section 4.2 Exclusions. The Pre-Commissioning Equipment Warranty and Manufacturer's Warranty, as applicable, shall not cover any obligations on the part of Seller to the extent caused by or arising from (a) the New Systems or New BOF being affected by vandalism or other third-party's actions or omissions occurring after Commissioning (other than to the extent that Seller, Seller Affiliate, the Service Provider or a subcontractor thereof fails to properly protect the New Systems or New BOF and Seller was required to do so under the A&R MOMA); (b) any interruption in the supply of natural gas or interconnection services, or a failure of the natural gas or interconnection services supplied to the applicable Facility to comply with Seller's specifications (unless caused by Seller, Seller Affiliate, the Service Provider or a subcontractor thereof); (c) the removal of any safety device by Buyer or its Representatives (as opposed to removal by Seller, Seller Affiliate, the Service Provider or a subcontractor thereof); (d) any conditions caused by unforeseeable movement in the environment in which the New Systems are installed (provided that normal soil settlement, shifting, subsidence or cracking will not constitute 'unforeseeable movement'); (e) accidents, abuse, improper third party testing (unless caused by Seller, Seller Affiliate, the Service Provider or a subcontractor thereof) or Force Majeure Events; or (f) installation, operation, repair or modification of the New Systems or BOF by anyone other than Seller or Seller's authorized agents. SELLER SHALL HAVE NO OBLIGATION UNDER THE PRE-COMMISSIONING EQUIPMENT WARRANTY NOR THE MANUFACTURER'S WARRANTY AND MAKES NO REPRESENTATION AS TO NEW SYSTEMS OR BOF WHICH HAVE BEEN OPENED OR MODIFIED BY ANYONE OTHER THAN SELLER, SELLER'S AFFILIATE, A SERVICE PROVIDER OR A SUBCONTRACTOR THEREOF, OR ANY OF SUCH PERSON'S REPRESENTATIVES, IN EACH CASE TO THE EXTENT OF ANY DAMAGE OR OTHER NEGATIVE CONSEQUENCE OF SUCH OPENING OR MODIFICATION.

Section 4.3 Disclaimers. EXCEPT FOR THE REPRESENTATIONS AND WARRANTIES SET FORTH IN THIS ARTICLE IV AND ARTICLE VI, THE NEW SYSTEMS ARE TRANSFERRED "AS IS, WHERE IS," AND SELLER EXPRESSLY DISCLAIMS ANY REPRESENTATIONS OR WARRANTIES OF ANY KIND OR NATURE, EXPRESS OR IMPLIED, AS TO LIABILITIES, OPERATIONS OF THE FACILITIES, VALUE OR QUALITY OF THE FACILITIES OR THE PROSPECTS (FINANCIAL AND OTHERWISE), RISKS AND OTHER INCIDENTS OF THE FACILITIES, AND SPECIFICALLY DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY, USAGE, SUITABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE WITH RESPECT TO THE FACILITIES, OR ANY PART THEREOF. NO PERSON IS AUTHORIZED TO MAKE ANY OTHER WARRANTY OR REPRESENTATION CONCERNING THE PERFORMANCE OF THE FACILITIES (PROVIDED, THAT THE FOREGOING DISCLAIMER SHALL NOT NEGATE OR DISCLAIM ANY REPRESENTATIONS OR WARRANTIES PROVIDED UNDER ANY OF THE OTHER TRANSACTION DOCUMENTS).

Section 4.4 Title. Title to all replacement items, parts, materials and equipment supplied under or pursuant to the Pre-Commissioning Equipment Warranty shall transfer to Buyer upon transfer of title of the affected New System or New BOF pursuant to Section 3.2. Title to all replacement items, parts, materials and equipment supplied under or pursuant to the Manufacturer's Warranty shall transfer to Buyer upon installation or inclusion in a New System or in the BOF for the applicable Facility. Upon replacement of an item or part as part of the Pre-Commissioning Equipment Warranty or Manufacturer's Warranty provided hereunder, Seller shall remove such item or part and shall have the right to dispose of such replaced property in any manner that it chooses in its sole discretion.

ARTICLE V.
RECORDS AND AUDITS

Section 5.1 Record-Keeping Documentation; Audit Rights.

(a) Seller shall ensure that records concerning Seller's Installation Services activities hereunder are properly created and maintained at all times in accordance with all Legal Requirements, including FERC requirements regarding record retention for Holding Companies in 18 C.F.R. Part 368 and any successor regulations to the extent applicable to Seller. Such records shall include the following:

(i) records and documentation in respect of each New System's satisfaction of each Milestone, including records and documentation regarding the Delivery of New Systems, the achievement of Commissioning, and the fact and date(s) such New System has achieved each of the four separate criteria set forth the definition of "Placed in Service";

(ii) any other records, reports, or other documentation reasonably requested by Buyer to support an ITC eligibility determination with respect to a New System. Seller agrees to use commercially reasonable efforts to promptly provide

such documentation to Buyer, and shall provide a reasonable explanation for any inability to provide such documentation; and

(iii) until the date of achievement of Commissioning of the final New System for the Project, a "Construction Report" delivered in connection with the Payment Notice corresponding to each invoice delivered pursuant to Section 2.4(a)(ii), specifying for each New System individually (A) the forecasted commencement of construction, Delivery Date, and date of Commissioning of such New System projected to be included in the Project, (B) the actual commencement of construction, Delivery Date and date of Commissioning of such New System included in the Project as of the date of such Construction Report, and (C) a summary narrative regarding the source of any delays in the achievement of any of the foregoing milestones as compared to the dates forecasted in the immediately prior Construction Report; and

(iv) subject to Operator's reasonable concerns regarding protection of highly confidential information and/or trade secrets any other records, reports, or other documentation reasonably requested by Buyer. Seller agrees to use commercially reasonable efforts to promptly provide such documentation to Buyer, and shall provide a reasonable explanation for any inability to provide such documentation.

(b) All such records required to be created and maintained pursuant to Section 5.1(a) shall (i) be kept available at Seller's office and made available for Buyer's inspection upon request at all reasonable times, and (ii) be retained for the relevant retention period provided in 18 C.F.R. § 368.3 or any successor regulation as amended from time, to the extent applicable to Seller, or any longer period required under the Tariff, or by DPL or PJM. Any documentation prepared by Seller during the Term for the purposes of this Agreement shall be directly prepared for Buyer's benefit and immediately become Buyer's property. Any such documentation shall be stored by Seller on behalf of Buyer until its final delivery to Buyer. Seller may retain a copy of all records related to each Facility for future analysis.

(c) Buyer shall have the right no more than once during any calendar year and going back no more than two (2) calendar years preceding the calendar year in which an audit takes place, upon reasonable prior written notice, including using an independent public accounting firm reasonably acceptable to Seller, to examine such records during regular business hours in the location(s) where such records are maintained by Seller for the purposes of verifying Buyer's compliance with its obligations hereunder; provided, however, that such records may be audited only once under this Section 5.1(c). Buyer shall pay its own cost and the costs of any third party consultants engaged by Buyer in connection with the audit unless such audit reveals that inaccuracies in Seller's records have resulted in an overpayment by Buyer of two and one-half percent or more (2.5%) than the amount that would have otherwise been payable by Buyer during the period being audited, in which case Seller shall pay all of Buyer's costs and the costs of any third party consultants engaged by Buyer in connection with such audit.

Section 5.2 Reports; Other Information. Without in any way limiting Seller's other reporting, notification, and other similar obligations under this Agreement, during the Term, Seller shall furnish to Buyer the following reports, notices, and other information regarding the New Systems and Installation Services (which may be effected by e-mail communication to the Buyer Manager or other appropriate Buyer Representative):

(a) Promptly upon Seller's knowledge of the occurrence of any damage to any New System or Site, notice of such damage in reasonable detail;

(b) Details of any event or circumstance which could reasonably be expected to prevent Buyer from being able to fully benefit from the Tariff, promptly upon either (i) Seller's receipt of any written notice or communication from DPL or any other Governmental Authority notifying Seller, including a copy of such notice or communication, or (ii) upon the Knowledge of the Seller Manager, any Vice President of Project Finance, or C-Level officer of Seller, or any individual listed on Schedule 5.2(b); and

(c) Subject to Operator's reasonable concerns regarding protection of highly confidential information and/or trade secrets, any information Buyer may reasonably request in connection with any claim filed by Buyer under any insurance maintained with respect to the Facilities, and any information such insurance providers may reasonably request in connection with such claim.

ARTICLE VI.
REPRESENTATIONS AND WARRANTIES OF SELLER

Section 6.1 Representations and Warranties of Seller. Seller represents and warrants to Buyer as of the Agreement Date and as of each Purchase Date as follows:

(a) Incorporation; Qualification. Seller is a corporation duly incorporated, validly existing and in good standing under the laws of the State of Delaware and has all requisite corporate power and authority to own, lease, and operate its business as currently conducted. Seller is duly qualified to do business as a foreign corporation and is in good standing under the laws of each jurisdiction that its business, as currently being conducted, shall require it to be so qualified, except where the failure to be so qualified would not have a Material Adverse Effect on Seller or its ability to perform its obligations hereunder.

(b) Authority. Seller has full corporate power and authority to execute and deliver this Agreement and the other Transaction Documents to which it is a party and to consummate the transactions contemplated hereby and thereby. The execution and delivery by Seller of the Transaction Documents to which it is a party and the consummation by Seller of the transactions contemplated thereby have been duly and validly authorized by all necessary corporate action required on the part of Seller, and the Transaction Documents to which it is a party have been duly and validly executed and delivered by Seller. Each of the Transaction Documents to which Seller is a party and the [*] constitute the legal, valid and binding agreement of Seller, enforceable against

Seller in accordance with its terms, except as enforcement may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting creditors' rights generally and by general principles of equity (regardless of whether considered in a proceeding in equity or at law).

(c) Consents and Approvals; No Violation. Neither the execution, delivery and performance of this Agreement nor the other Transaction Documents to which it is a party nor the consummation by Seller of the transactions contemplated hereby and thereby will (i) conflict with or result in any breach of any provision of the certificate of incorporation or bylaws of Seller, (ii) with or without the giving of notice or lapse of time or both, conflict with, result in any violation or breach of, constitute a default under, result in any right to accelerate, result in the creation of any Lien (other than Permitted Liens) on Seller's assets, or create any right of termination under the conditions or provisions of any note, bond, mortgage, indenture, any material agreement or other instrument or obligation to which Seller is a party or by which it, or any material part of its assets may be bound, in each case that would individually or in the aggregate result in a Material Adverse Effect on Seller or its ability to perform its obligations hereunder or (iii) constitute violations of any law, regulation, order, judgment or decree applicable to Seller, which violations, individually or in the aggregate, would result in a Material Adverse Effect on Seller or its ability to perform its obligations hereunder.

(d) Legal Proceedings. There are no pending or, to Seller's Knowledge, threatened claims, disputes, governmental investigations, suits, actions (including non-judicial real or personal property foreclosure actions), arbitrations, legal, administrative or other proceedings of any nature, domestic or foreign, criminal or civil, at law or in equity, against Seller that challenge the enforceability of this Agreement or any of the other Transaction Documents to which Seller is a party or the ability of Seller to consummate the transactions contemplated hereby or thereby, in each case, that could reasonably be expected to result in a Material Adverse Effect on Seller or its ability to perform its obligations hereunder.

(e) U.S. Person. Seller is not a "foreign person" within the meaning of Section 1445(b)(2) of the Code and has provided a Certificate of Non-Foreign Status in the form and substance required by Section 1445 of the Code and the regulations thereunder.

(f) Purchase Price of New System. The Purchase Price paid for each New System does not exceed an amount that is equal to the Fair Market Value of each New System, as determined on an arm's length basis.

(g) Title; Liens. As of each date title is required to pass to Buyer hereunder with respect to any assets comprising a New System, Seller has and will convey good and marketable title to such assets to be sold to Buyer on such date and all such assets are free and clear of all Liens other than Permitted Liens. Except to the extent arising by law, neither Seller nor any of its subcontractors have placed any Liens on the Sites or the Facilities other than Permitted Liens. To the extent that Seller has actual knowledge that

any of its subcontractors has placed any Lien on a New System or Site, then Seller shall cause such Liens to be discharged, or shall provide a bond in an amount and from a surety acceptable to Buyer to protect against such Lien, in each case, within thirty (30) days after Seller is aware of the existence thereof. Seller shall indemnify Buyer against any such Lien claim, provided that if the applicable Site Lease requires additional or more stringent action, Seller shall also indemnify Buyer for the costs and expenses of such actions.

(h) Intellectual Property. To Seller's Knowledge, no New System and no other product or service marketed or sold (or proposed to be marketed or sold) by Seller hereunder violates or will violate any license or infringes or will infringe any Intellectual Property rights of any other Person. Seller has received no written communications alleging that such Seller has violated, or by conducting its business, would violate any of the patents, trademarks, service marks, tradenames, copyrights, trade secrets, mask works or other proprietary rights or processes of any other Person.

(i) Consents and Approvals. Seller has received all material third party consents which are required as of such date for the consummation and performance of the transactions contemplated hereunder.

(j) Real Property. The real property referred to in each Site Lease is all the real property that is necessary for the construction, installation, operation and maintenance of the Facilities other than those real property interests that can be reasonably expected to be available on commercially reasonable terms as and to the extent required. Each Site has been licensed to Buyer pursuant to the terms of the applicable Site Lease. For clarity, no Site has been leased to Buyer.

(k) Tax Representations.

(i) Each New System is a fuel cell power plant that has a Nameplate Capacity of at least 0.5 kilowatts of electricity using an electrochemical process and has an electricity-only generation efficiency greater than 30 percent. Each Facility will function independently of each other Facility in the Project to generate electricity for transmission and sale and is an integrated system comprised of a fuel cell stack assembly and associated balance of plant components that has all the necessary components to convert a fuel into electricity using electrochemical means.

(ii) As of Purchase Date for each New System, no federal, state, or local Tax credit (including the ITC) has been claimed with respect to any property that is part of such New System.

(iii) No application has been submitted for a grant provided under Section 1603 of the American Recovery and Reinvestment Tax Act of 2009, as amended by the Tax Relief, Unemployment Insurance Reauthorization and Job Creation Act of 2010, with respect to any property that is part of any New System.

(iv) No private letter ruling has been obtained for the transactions contemplated hereunder from the IRS.

(v) As of the Purchase Date of each New System, such New System was not originally Placed in Service and, specifically, clauses (c) and (d) of the definition of the term "Placed in Service" have not been met with respect to such New System.

(vi) As of the Purchase Date, the cost of the New System that is energy property for purposes of Section 48 of the Code is accurately listed in the Base Case Model.

(vii) No New System is comprised of any property that (A) is "used predominately outside of the United States" within the meaning of Code Section 168(g), (B) is imported property of the kind described in Code Section 168(g)(6), (C) except due to the status of any member of Buyer, is "tax-exempt use property" within the meaning of Code Section 168(h), or (D) except due to the status of any member of Buyer, is property described in Code Section 50(b).

(viii) Other than de minimis property, material or parts, each Facility consists of property, materials or parts not used by any Person prior to having been first placed in a state of readiness and availability for their specific design function as part of the Facility.

(ix) No portion of the basis of the New System is attributable to "qualified rehabilitation expenditures" within the meaning of Section 47(c)(2)(A) of the Code.

(x) No grants (for purposes of this paragraph, "grants" shall not include any credits, benefits, emissions reductions, offsets or allowances, howsoever entitled, attributable to the generation from the Facilities, and its respective avoided emission of pollutants) have been provided by the United States, a state, a political subdivision of a state, or any other Governmental Authority for use in constructing or financing any New System or with respect to which Seller is the beneficiary. No proceeds of any issue of state or local government obligations have been used to provide financing for any New System the interest on which is exempt from tax under Code Section 103. No subsidized energy financing (within the meaning of Code Section 45(b)(3)) has been provided, directly or indirectly, under a federal, state, or local program provided in connection with any New System.

(xi) Seller is not related to DPL within the meaning of Code Section 267 or Code Section 707.

(l) Bankruptcy. No event of Bankruptcy has occurred with respect to Seller.

(m) [Reserved].

(n) Material Adverse Effect.

(i) As of the Agreement Date, no Material Adverse Effect has occurred with respect to Seller or, to the Knowledge of Seller, PJM, DPL, or any Site Landlord.

(ii) As of each Purchase Date, no Material Adverse Effect has occurred between the Agreement Date and the applicable Purchase Date (A) with respect to the applicable Facility in which the New System would be installed and Commissioned, (B) with respect to Seller, or (C) to the Knowledge of Seller, with respect to PJM, DPL, or the Site Landlord for the applicable Facility in which the New System would be installed and Commissioned.

(o) Governmental Approvals. Seller, as applicable on behalf of Buyer, has obtained all Governmental Approvals required as of Delivery Date to install and Commission the applicable New System(s) in compliance with Applicable Law. As of each of the dates each New System is Placed in Service and achieves Commissioning, Seller, as applicable on behalf of Buyer, shall have obtained all Governmental Approvals required for such operation of such New System and each of the Governmental Approvals obtained as of such date is validly issued, final and in full force and effect and is not subject to any current legal proceeding or to any unsatisfied condition. On each of such dates, Seller, as applicable on behalf of Buyer, shall be in compliance in all material respects with all applicable Governmental Approvals and has not received any written notice from a Governmental Authority of an actual or potential violation of any such Governmental Approval, and none of the persons referenced in Section 5.2(b)(ii) has received any other communication from a Governmental Authority of an actual or potential violation of any such Governmental Approval.

(p) Compliance. Seller has performed in all respects all obligations, and complied in all material respects with the agreements and covenants, required to be performed by or complied with by Seller hereunder.

(q) No Breaches. As of the Agreement Date, each Interconnection Agreement, Gas Supply Agreement, and Site Lease is a legal, valid, binding and enforceable obligation of Buyer and, to Seller's Knowledge, of each other party thereto, and each Interconnection Agreement, Gas Supply Agreement, and Site Lease is in full force and effect. To Seller's Knowledge, neither Buyer nor any other Person party thereto is in material breach or violation of any Interconnection Agreement, Gas Supply Agreement, or Site Lease, and no event has occurred, is pending or is threatened, which, after the giving of notice, with lapse of time, or otherwise, would constitute any such breach or default by Buyer or any other party thereto.

(r) Insurance. Seller has obtained the insurance described in Annex B, all such policies remain in full force and effect, and all insurance premiums that are due and payable have been paid in full with no premium overdue.

(s) QFCP-RC Tariff. During the term of this Agreement, the Portfolio shall not fail to receive full payment and service under the Tariff for any of the following reasons:

(i) Seller shall not be a Qualified Fuel Cell Provider throughout the original term of the Tariff due to any action or inaction of Operator in violation of this Agreement; or

(ii) Seller shall take any action in violation of the A&R MOMA or this Agreement which causes: (A) Buyer not to qualify (or lose qualification) for service under the Tariff or (B) the Portfolio not to qualify (or lose qualification) as a Qualified Fuel Cell Provider Project.

Section 6.2 Survival Period. All claims by Buyer hereunder relating to breaches of representations and warranties contained in ARTICLE VI with respect to a New System shall be forever barred unless the Seller is notified in writing within twelve (12) months following the date of achievement of Commissioning for such New System, except for breaches and warranties contained in (a) Section 6.1(a), Section 6.1(b), Section 6.1(c), Section 6.1(g), and Section 6.1(o), which shall survive indefinitely, and (b) Section 6.1(k) and Section 6.1(h), which will survive until six (6) months following the expiration of the applicable statute of limitations. For the avoidance of doubt, the Parties hereby agree and acknowledge that the foregoing survival periods are a contractual statute of limitations and any claims based upon a breach of representations and warranties in ARTICLE VI must be brought or filed prior to the expiration of such survival period.

ARTICLE VII.
REPRESENTATIONS AND WARRANTIES OF BUYER

Section 7.1 Representations and Warranties of Buyer. Buyer represents and warrants to Seller as of the Agreement Date and as of each Purchase Date, as follows.

(a) Organization. Buyer is a limited liability company duly formed, validly existing and in good standing under the laws of the State of Delaware and has all requisite limited liability company power and authority to own, lease, and operate its business as currently conducted.

(b) Authority. Buyer has full limited liability company power and authority to execute and deliver this Agreement and the other Transaction Documents to which it is a party and to consummate the transactions contemplated hereby and thereby. The execution and delivery by Buyer of this Agreement and the other Transaction Documents to which it is a party and the consummation by Buyer of the transactions contemplated hereby and thereby have been duly and validly authorized by all necessary corporate action required on the part of Buyer and the Transaction Documents to which Buyer is a party have been duly and validly executed and delivered by Buyer. Each of the Transaction Documents to which Buyer is a party constitutes the legal, valid and binding agreement of Buyer, enforceable against Buyer in accordance with its terms, except as enforcement may be limited by applicable bankruptcy, insolvency, reorganization,

moratorium or similar laws affecting creditors' rights generally and by general principles of equity (regardless of whether considered in a proceeding in equity or at law).

(c) Consents and Approvals; No Violation. Neither the execution, delivery and performance of this Agreement nor the other Transaction Documents to which Buyer is a party nor the consummation by Buyer of the transactions contemplated hereby and thereby will (i) conflict with or result in any breach of any provision of the articles of formation of Buyer nor Buyer's limited liability company agreement, (ii) with or without the giving of notice or lapse of time or both, conflict with, result in any violation or breach of, constitute a default under, result in any right to accelerate, result in the creation of any Lien on Buyer's assets, or create any right of termination under the conditions or provisions of any note, bond, mortgage, indenture, material agreement or other instrument or obligation to which Buyer is a party or by which it, or any material part of its assets may be bound, in each case that would individually or in the aggregate result in a Material Adverse Effect on Buyer or its ability to perform its obligations hereunder or (iii) constitute violations of any law, regulation, order, judgment or decree applicable to Buyer, which violations, individually or in the aggregate, would result in a Material Adverse Effect on Buyer or its ability to perform its obligations hereunder.

(d) Legal Proceedings. There are no pending or, to Buyer's Knowledge, threatened claims, disputes, governmental investigations, suits, actions (including non-judicial real or personal property foreclosure actions), arbitrations, legal, administrative or other proceedings of any nature, domestic or foreign, criminal or civil, at law or in equity, by or against Buyer that challenge the enforceability of this Agreement or the other Transaction Documents to which Buyer is a party or the ability of Buyer to consummate the transactions contemplated hereby or thereby, in each case, that could reasonably be expected to result in a Material Adverse Effect on Buyer or its ability to perform its obligations hereunder.

(e) Consents and Approvals. Buyer has received all material third party consents which are required as of such date for the consummation and performance of the transactions contemplated hereunder.

(f) Bankruptcy. No event of Bankruptcy has occurred with respect to Buyer.

(g) No Other Representations. Buyer is not relying on any representations or warranties whatsoever, express, implied, at common law, statutory or otherwise, except for the representations or warranties expressly set out in the Transaction Documents.

Section 7.2 Survival Period. All claims by Seller hereunder relating to breaches of representations and warranties contained in ARTICLE VII with respect to a New System shall be forever barred unless the Seller is notified in writing within twelve (12) months following the date of achievement of Commissioning for such New System, except for breaches and warranties contained in Section 7.1(a), Section 7.1(b), Section 7.1(c), which shall survive indefinitely. For the avoidance of doubt, the Parties hereby agree and acknowledge that the foregoing survival periods

are a contractual statute of limitations and any claims based upon a breach of representations and warranties in ARTICLE VII must be brought or filed prior to the expiration of such survival period.

ARTICLE VIII.
CONFIDENTIALITY

Section 8.1 Confidential Information. Subject to the other terms of this ARTICLE VIII each Party shall, and shall cause its Affiliates and its respective stockholders, members, subsidiaries and Representatives to, hold confidential the terms of this Agreement and all information it has obtained or obtains from the other Party in connection with this Agreement concerning Seller and Buyer and their respective assets, business, operations or prospects (the "Confidential Information"), including all materials and information furnished by Seller in performance of this Agreement, regardless of form conveyed or whether financial or technical in nature, including any trade secrets and proprietary know how and Software whether such information bears a marking indicating that they are proprietary or confidential or not; provided, however, that Confidential Information shall not include (a) the fact that the Parties have entered into this Agreement, (b) the nature of the transactions contemplated by this Agreement, (c) the Buyer's capital expenditures or financing plans related to the transactions contemplated by this Agreement, or (d) information that (i) is or becomes generally available to the public other than as a result of any fault, act or omission by a Party or any of its Representatives, (ii) is or becomes available to a Party or any of its Representatives on a non-confidential basis from a source other than the other Party or its Representatives, provided that such source was not and is not bound by any contractual, legal or fiduciary obligation of confidentiality with respect to such information or (iii) was or is independently developed or conceived by a Party or its Representatives without use of or reliance upon the Confidential Information of the other Party, as evidenced by sufficient written record.

Section 8.2 Restricted Access. Subject to Section 10.9:

(a) Buyer agrees that the New Systems themselves contain Seller's valuable trade secrets. Buyer agrees (i) to restrict the use of such information to matters relating to the Facilities, and such other purposes, if any, expressly provided herein, and (ii) to restrict access to such information as provided in Section 8.3(b).

(b) Seller's Confidential Information will not be reproduced without Seller's prior written consent, and following termination of this Agreement all copies of such written information will be returned to Seller upon written request (not to be made while materials are still of use to the operation of a New System and no Buyer Default has occurred and is continuing) or shall be certified by Buyer as having been destroyed, unless otherwise agreed by the Parties. Buyer's Confidential Information will not be reproduced by Seller without Buyer's prior written consent, and following termination of this Agreement all copies of such written information will be returned to Buyer upon written request or shall be certified by Seller as having been destroyed. Notwithstanding the foregoing, each Party and its Representatives may each retain archival copies of any Confidential Information to the extent required by law, regulation or professional standards or copies of Confidential Information created pursuant to the automatic backing-up of electronic files where the delivery or destruction of such files would cause

undue hardship to the receiving Party, so long as any such archival or electronic file back-up copies are accessible only to legal or information technology personnel, provided that such Confidential Information will continue to be subject to the terms of this Agreement.

(c) Subject to ARTICLE IX, Section 8.2(a), and Section 8.2(b), the New Systems are offered for sale and are sold by Seller subject to the condition that such sale does not convey any license, expressly or by implication, to manufacture, reverse engineer, duplicate or otherwise copy or reproduce any part of the Facilities, documentation or Software without Seller's express advance written permission. Subject to ARTICLE IX hereof, Buyer agrees not to remove the covering of any New System, not to access the interior or to reverse engineer, or cause or knowingly allow any third party to open, access the interior or reverse engineer any New System or Software provided by Seller. Subject to ARTICLE IX hereof, and anything contemplated pursuant to this Agreement, only Seller or its Representatives may open or access the interior of a New System.

Section 8.3 Permitted Disclosures.

(a) Legally Compelled Disclosure. Confidential Information may be disclosed (i) as required or requested to be disclosed by a Party or any of its Affiliates or their respective stockholders, members, subsidiaries or Representatives as a result of any applicable Legal Requirement or rule or regulation of any stock exchange, the Financial Industry Regulatory Authority, Inc. or other regulatory authority or self-regulatory authority having jurisdiction over such Party, (ii) as required or requested by the IRS, the Department of Justice or the Office of the Inspector General in connection with a New System, cash grant, or tax credits relating thereto, including in connection with a request for any private letter ruling, any determination letter or any audit or (iii) as required under any Interconnection Agreement or any of the other Transaction Documents. If a Party becomes compelled by legal or administrative process to disclose any Confidential Information, such Party shall, to the extent permitted by Legal Requirements, provide the other Party with prompt notice so that the other Party may seek a protective order or other appropriate remedy or waive compliance with the non-disclosure provisions of this Section 8.3 with respect to the information required to be disclosed. If such protective order or other remedy is not obtained, or such other Party waives compliance with the non-disclosure provisions of this Section 8.3 with respect to the information required to be disclosed, the first Party shall furnish only that portion of such information that it is advised by counsel is legally required to be furnished and shall exercise reasonable efforts, at the expense of the Party whose Confidential Information is being disclosed, to obtain reliable assurance that confidential treatment will be accorded such information, including, in the case of disclosures to the IRS described in clause (ii) above, to obtain reliable assurance that, to the maximum extent permitted by applicable Legal Requirements, such information will not be made available for public inspection pursuant to Section 6110 of the Code.

(b) Disclosure to Representatives. Notwithstanding the foregoing, and subject always to the restrictions in Section 8.2, a Party may disclose Confidential Information received by it to its and its Affiliates' actual or potential investors or financing parties

and its and their employees, consultants, legal counsel or agents who have a need to know such information; provided that such Party informs each such Person who has access to the Confidential Information of the confidential nature of such Confidential Information, the terms of this Agreement, and that such terms apply to them. The Parties shall use commercially reasonable efforts to ensure that each such Person complies with the terms of this Agreement and that any Confidential Information received by such Person is kept confidential.

(c) Securities Filings. A Party may file this Agreement as an exhibit to any relevant filing with the Securities Exchange Commission (or equivalent foreign agency) in accordance with Legal Requirements only after complying with the procedure set forth in this Section 8.3(c). In such event, the Party seeking such disclosure shall prepare a draft confidential treatment request and proposed redacted version of this Agreement to request confidential treatment for this Agreement, and the other Party agrees to promptly (and in any event, no less than fourteen (14) days after receipt of such confidential treatment request and proposed redactions) give its input in a reasonable manner in order to allow the Party seeking disclosure to file its request within the time lines prescribed by Legal Requirements. The Party seeking such disclosure shall exercise commercially reasonable efforts to obtain confidential treatment of the Agreement from the Securities Exchange Commission (or equivalent foreign agency) as represented by the redacted version reviewed by the other Party. Each Party shall bear its own costs in connection with such efforts.

(d) Other Permitted Disclosures. Nothing herein shall be construed as prohibiting a Party hereunder from using such Confidential Information in connection with (i) any claim against the other Party, (ii) any exercise by a Party hereunder of any of its rights hereunder, (iii) a financing or proposed financing by Seller or Buyer or their respective Affiliates, (iv) a disposition or proposed disposition by any direct or indirect Affiliate of Buyer of all or a portion of such Person's equity interests in Buyer, (v) a disposition or proposed disposition by Buyer of any New System, or (vi) any disclosure required to be made pursuant to the Tariff, an Interconnection Agreement, a Gas Supply Agreement, or a Site Lease, provided that, in the case of items (iii), (iv) and (v), the potential financing party or purchaser has entered into a confidentiality agreement with respect to Confidential Information on customary terms used in confidentiality agreements in connection with corporate financings or acquisitions before any such information may be disclosed and a copy of such confidentiality agreement has been provided to the non-disclosing party for informational purposes, which copy of such confidentiality agreement may contain redactions of confidential information relating to the potential financing source or purchaser. No disclosures of Confidential Information shall be made by Buyer in exercise of its rights under this Section 8.3(d) until Seller has first had the opportunity to exercise its right to take or purchase the New System in question, if applicable.

ARTICLE IX.
LICENSE AND OWNERSHIP; SOFTWARE

Section 9.1 IP License to Use. Subject to Section 9.2, Seller grants to Buyer a limited (as described herein), non-exclusive, royalty-free, irrevocable (except as described in ARTICLE X hereof), non-transferable (except as described herein) license to use the Intellectual Property, including Seller's proprietary Software, contained in the Documentation and the New Systems purchased hereunder (collectively, "Seller's Intellectual Property") in conjunction with the purchase, use, operation, maintenance, repair and sale of the New Systems and in conjunction with each New System in accordance with the terms hereof, the Tariff, and each Interconnection Agreement (the "IP License"); provided, that (a) such license may be transferred or sub-licensed upon a transfer of a New System to any Person who acquires such New System, subject to Buyer's compliance with provisions of the A&R MOMA applicable to such transfer, (b) such license may be transferred or sub-licensed by Buyer to any third party Buyer is entitled to engage to maintain any New System pursuant to Section 8.2(c), (c) such license may be transferred by Buyer to any successor or assign of Buyer permitted pursuant to Section 12.4, and (d) in the event of a voluntary or involuntary Bankruptcy of Buyer, Seller hereby expressly consents to the assumption and assignment of the IP License by Buyer as necessary to allow Buyer's continued use of each New System and/or Facility in accordance with the terms hereof and, as applicable, the Tariff and each Interconnection Agreement. Seller shall retain all right, title and ownership of any and all Intellectual Property licensed by Seller hereunder. No right, title or interest in any such Intellectual Property is granted, transferred or otherwise conveyed to Buyer under this Agreement except as otherwise expressly set forth herein. Buyer shall not, except as otherwise provided herein, modify, network, rent, lease, loan, sell, distribute or create derivative works based upon Seller's Intellectual Property in whole or part, or cause or knowingly allow any third party to do so.

Section 9.2 Grant of Third Party Software License.

(a) Seller grants to Buyer a limited (as described herein), non-exclusive, royalty-free, irrevocable (except as described in ARTICLE X hereof), non-transferable (except as described herein) license to use the third party Software (the "Software License"); provided, that (i) such license may be transferred or sub-licensed upon a transfer of a New System to any Person who acquires such New System, (ii) such license may be transferred or sub-licensed by Buyer to any third party Buyer is entitled to engage to maintain any New System pursuant to Section 8.2(c), and (iii) such license may be transferred by Buyer to any successor or assign of Buyer permitted pursuant to Section 12.4. No right, title or interest in any Software provided to Buyer (including all copyrights, patents, trade secrets or other intellectual or intangible property rights of any kind contained therein) is granted, transferred, or otherwise conveyed to Buyer under this Agreement except as expressly set forth herein. Buyer agrees not to reverse engineer or decompile the Software or otherwise use the Software for any purpose other than in connection with the use of the Facilities. Further, Buyer shall not modify, network, rent, lease, loan, sell, distribute or create derivative works based upon the Software in whole or part, or cause or knowingly allow any third party to do so.

(b) All data collected on the Facilities by Seller using the Software and data collected on the Facilities using Seller's internal proprietary Software are the sole property of Seller to be used by Seller in accordance with Legal Requirements, and Seller hereby grants to Buyer a limited, non-exclusive, irrevocable (except as set forth in ARTICLE X

hereof), royalty-free license to use the data collected on the Facilities using such Software or Seller's internal proprietary software only for purposes of using such Facilities and administering the Transaction Documents or as required pursuant to the terms of the Tariff, any Site Lease or Interconnection Agreement, provided the provisions of ARTICLE VIII on confidentiality are maintained.

Section 9.3 Effect on Licenses. All rights and licenses granted under or pursuant to this Agreement by Seller are, and shall otherwise be deemed to be, for purposes of Section 365(n) of the U.S. Bankruptcy Code and of any similar provisions of applicable laws under any other jurisdiction (collectively, the "Bankruptcy Laws"), licenses of rights to "intellectual property" as defined under the Bankruptcy Laws. If a case is commenced by or against Seller under the Bankruptcy Laws (excluding a reorganization proceeding under Chapter 11 of the U.S. Bankruptcy Code if Seller is continuing to perform all of its obligations under this Agreement), Seller (in any capacity, including debtor-in-possession) and its successors and assigns (including a trustee under the Bankruptcy Laws) shall, as Buyer may elect in a written request, immediately upon such request:

(a) perform all of the obligations provided in this Agreement to be performed by Seller including, where applicable, providing to Buyer portions of such intellectual property (including embodiments thereof) held by Seller and such successors and assigns or otherwise available to them and to which Buyer is entitled to have access under this Agreement; and

(b) not interfere with the rights of Buyer under this Agreement, or the other Transaction Documents, to such intellectual property (including such embodiments), including any right to obtain such intellectual property (or such embodiments) from another entity, to the extent provided in the Bankruptcy Laws.

Section 9.4 No Software Warranty. Buyer acknowledges and agrees that the use of the Software is at Buyer's sole risk. The Software and related documentation are provided "AS IS" and without any warranty of any kind and Seller EXPRESSLY DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Section 9.5 IP Related Covenants. If Seller grants, bargains, sells, conveys, mortgages, assigns, pledges, warrants or transfers any Intellectual Property or Software that is required (a) for Seller or its Affiliates to perform their respective obligations under the Transaction Documents or (b) for the continued maintenance and operation of the Facilities without a material decrease in performance of the Facilities, Seller shall cause such act or transaction to be subject to the grant of the IP License and Software License under this Agreement.

Section 9.6 Representations and Warranties. Seller represents and warrants to Buyer as of the Agreement Date and as of each Commissioning Date as follows with respect to all Intellectual Property that is required (i) for Seller or its Affiliates to perform their respective obligations under this Agreement and each other Transaction Document, and (ii) for the continued operation of the New Systems in accordance with the A&R MOMA, the Tariff, and the Interconnection Agreements without a material decrease in performance of the New Systems:

(a) Seller owns or has the right to use and to authorize Buyer to use all such Intellectual Property and Software;

(b) Seller and its Affiliates are not infringing on any Intellectual Property of any third party with respect to the actions described in subsection (i) and (ii) of Section 9.6 and the New Systems do not infringe on any Intellectual Property of any third party;

(c) the [*] is a legal, valid, binding and enforceable obligation of Seller (except as enforcement may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting creditors' rights generally and by general principles of equity (regardless of whether considered in a proceeding in equity or at law)), and to Seller's Knowledge, of each other party thereto, and such agreement is in full force and effect; and

(d) Seller is not in material breach or violation of the [*], and, to Seller's Knowledge, no event has occurred, is pending or is threatened, which, after the giving of notice, with lapse of time, or otherwise, would constitute any such breach or default by Seller.

ARTICLE X.
EVENTS OF DEFAULT AND TERMINATION

Section 10.1 Seller Default. The occurrence at any time of any of the following events shall constitute a "Seller Default":

(a) Failure to Pay. The failure of Seller to pay any undisputed amounts owing to Buyer on or before the day following the date on which such amounts are due and payable under the terms of this Agreement or the A&R MOMA and Seller's failure to cure each such failure within ten (10) Business Days after Seller receives written notice from Buyer of each such failure;

(b) Failure to Perform Other Obligations. Unless due to a Force Majeure Event, the failure of Seller to perform or cause to be performed any other material obligation required to be performed by Seller under this Agreement or the A&R MOMA, or the failure of any representation and warranty set forth herein or therein to be true and correct as and when made; provided, however, that if such failure by its nature can be cured, then Seller shall have a period of thirty (30) days after receipt of written notice of such failure to cure the same and a Seller Default shall not be deemed to exist during such period; provided, further, that if Seller commences to cure such failure during such period and is diligently and in good faith attempting to effect such cure, said period shall be extended for sixty (60) additional days; notwithstanding the foregoing, the cure period set forth above will in no event exceed (and will be deemed modified as necessary to match) the cure period applicable to any particular failure or breach under the Tariff or the applicable Interconnection Agreement, if any;

(c) Failure to Remedy Injunction. The failure of Seller to remedy any injunction that prohibits Buyer's use of any New System as contemplated by Section 11.1 within sixty (60) days of Seller's receipt of written notice of Buyer being enjoined therefrom;

(d) Bankruptcy. If Seller is subject to a Bankruptcy; or

(e) Failure to Achieve Full Deployment. Unless due to a Force Majeure Event, Seller's breach of Section 3.4.

Section 10.2 Buyer Default. The occurrence at any time of the following events with respect to Buyer shall constitute a "Buyer Default":

(a) Failure to Pay. The failure of Buyer to pay any undisputed amounts owing to Seller on or before the day following the date on which such amounts are due and payable under the terms of this Agreement and Buyer's failure to cure each such failure within ten (10) Business Days after Buyer receives written notice of each such failure;

(b) Failure to Perform Other Obligations. Unless due to a Force Majeure Event, the failure of Buyer to perform or cause to be performed any material obligation required to be performed by Buyer under this Agreement or the failure of any representation and warranty set forth herein to be true and correct as and when made; provided, however, that if such failure by its nature can be cured, then Buyer shall have a period of thirty (30) days after receipt of written notice of such failure to cure the same and a Buyer Default shall not be deemed to exist during such period; provided, further, that if Buyer commences to cure such failure during such period and is diligently and in good faith attempting to effect such cure, said period shall be extended for sixty (60) additional days; or

(c) Bankruptcy. If Buyer is subject to a Bankruptcy.

Section 10.3 Buyer's Remedies Upon Occurrence of a Seller Default. If a Seller Default has occurred under Section 10.1(d), Buyer may terminate this Agreement by written notice, and assert all rights and remedies available to Buyer under Legal Requirements subject to the limitations of liability set forth in Section 11.5. If a Seller Default has occurred under Section 10.1(a), Section 10.1(b) or Section 10.1(c), Buyer may terminate this Agreement only with respect to those New Systems for which such Seller Default has occurred by written notice, and (i) assert all rights and remedies available to Buyer under Legal Requirements with respect to those New Systems for which a Seller Default has occurred, subject to the limitations of liability set forth in Section 11.5, or (ii) require Seller and, if so required, Seller shall repurchase the relevant New System in respect of which this Agreement is being terminated from Buyer on an AS IS basis by paying the Repurchase Amount in respect of any such New System, calculated as of the date of such payment, in which case Seller shall take title to such New System upon paying the Repurchase Amount, and such New System shall no longer constitute a portion of the Project. If a Seller Default has occurred under Section 10.1(e), Buyer may terminate this Agreement by written notice, and assert all rights and remedies available to Buyer under this Agreement or Legal Requirements subject to the limitations of liability set forth in Section 11.5; *provided, that* termination of this Agreement in connection

with a Seller Default under Section 10.1(e) shall not excuse Buyer from its obligations to take title to and make payment for any New System that has been Commissioned on or prior to the Commissioning Date Deadline; *provided further, that* unless otherwise consented to in writing by Buyer, Seller shall stop performing Installation Services in respect of any New System that has not been Commissioned on or prior to the Commissioning Date Deadline. If a New System will be removed pursuant to this Section 10.3, Seller shall at its sole cost and expense remove the New System and any other ancillary equipment (including the concrete pad and any other improvements to the applicable Site to the extent required under the applicable Site Lease) from the applicable Site, restoring the relevant portion of the Site to its condition before the installation, including closing all utility connections and properly sealing any Site penetrations in the manner required by all Legal Requirements and the applicable Site Lease.

Section 10.4 Seller's Remedies Upon Occurrence of a Buyer Default. If a Buyer Default has occurred Seller may terminate this Agreement by written notice only with respect to those New Systems for which a Buyer Default has occurred and remains uncured, and assert all rights and remedies available to Seller under Legal Requirements with respect to those New Systems for which a Buyer Default has occurred, subject to the limitations of liability set forth in Section 11.5, including retaining any prior payments with respect to such New Systems and selling such New Systems to another buyer.

Section 10.5 Preservation of Rights. Termination of this Agreement shall not affect any rights or obligations as between the Parties which may have accrued prior to such termination or which expressly or by implication are intended to survive termination whether resulting from the event giving rise to termination or otherwise, including Section 3.6, Section 3.7, Section 3.8, ARTICLE V, ARTICLE VI, ARTICLE VII, ARTICLE VIII, ARTICLE IX, and ARTICLE XI, and ARTICLE XII. The list of the Knowledge persons referenced in Section 5.2(b)(ii), and any Seller or Seller Affiliate successor employees to such persons in such capacities, shall survive the termination or expiration of this Agreement for purposes of the A&R MOMA until the expiration or termination of the A&R MOMA.

Section 10.6 Force Majeure. If either Party is rendered wholly or partially unable to perform any of its obligations under this Agreement by reason of a Force Majeure Event, that Party (the "Claiming Party") will be excused from whatever performance is affected by the Force Majeure Event to the extent so affected; provided, however, that (a) the Claiming Party, within a reasonable time after the occurrence of such Force Majeure Event gives the other Party notice describing the particulars of the occurrence; (b) the suspension of performance shall be of no greater scope and of no longer duration than is reasonably required by the Force Majeure Event; (c) no liability of either Party for an event that arose before the occurrence of the Force Majeure Event shall be excused as a result of the Force Majeure Event; (d) the Claiming Party shall exercise commercially reasonable efforts to correct or cure the event or condition excusing performance and resume performance of all its obligations; and (e) when the Claiming Party is able to resume performance of its obligations under this Agreement, the Claiming Party shall promptly give the other Party notice to that effect and shall promptly resume performance.

Section 10.7 No Duplication of Claims; Cumulative Limitation of Liability Caps. Notwithstanding anything to the contrary in this Agreement, (a) the Parties acknowledge and agree

that no claiming or indemnified party shall be entitled to a double recovery for the same monetary loss or damage under the provisions of this Agreement and the provisions of any other Transaction Document; (b) to the extent that all or any portion of the Pre-Commissioning Equipment Warranty, Manufacturer's Warranty or any other warranty, guarantee or indemnification provision set forth herein is duplicative of any warranty, guarantee or indemnification coverage provided under the A&R MOMA, the Parties acknowledge and agree that Buyer shall be entitled to pursue recovery for money damages in respect of a single event or circumstance, at its sole option, under either this Agreement or the A&R MOMA, as applicable, and that limitation of liability caps set forth in each such agreement are to be calculated on an aggregate basis taking into account all claims for indemnification, warranty or otherwise (if any) made under this Agreement or the A&R MOMA, and (c) if an "Indemnifiable Loss" or other amount paid for any event(s) or circumstance(s) under this Agreement or the A&R MOMA, as the case may be, would be taken into account for purposes of calculating the "Maximum Liability" under such agreement, then such amount will also be taken into account for purposes of calculating the "Maximum Liability" under the other such agreement. For the avoidance of doubt, the provisions of subsections (b) and (c) of this Section 10.7 shall not limit Seller's liability under any other Transaction Document with respect to any Existing System.

Section 10.1 Actions to Facilitate Continued Operations After a Buyer Termination. Notwithstanding anything else herein to the contrary, and without limitation of the rights set forth in this ARTICLE X hereof, if any New System is no longer covered by the A&R MOMA or another agreement between Buyer and Seller (or any Affiliate of Seller) regarding the operation and maintenance of such Facility as a result of the termination of the A&R MOMA with respect to such New System (A) in connection with a Seller Default or (B) in connection with the expiration of the Extended Warranty Period (as defined in the A&R MOMA), Buyer shall be entitled to maintain, or cause a third party to maintain, such New System (each such maintainer, a "Third Party Operator"), including replacing consumables and components as needed or desired, including, if applicable, electricity sales pursuant to the Tariff; provided that:

(a) No less than thirty (30) calendar days prior to the event of such termination pursuant to subsection (B) above, to the extent Buyer requires any maintenance services for such New System following such termination, Buyer shall notify Seller of such requirements in writing. If Seller desires to perform such maintenance services, Seller shall provide within five (5) Business Days to Buyer the material terms and conditions (including the scope of services offered, the price(s) quoted for such services, and the terms of any performance warranties to be provided in connection with such services) pursuant to which it is willing to provide such maintenance services for such New System, which shall be no less favorable to Buyer than Seller's standard rates, terms and warranties as of such date. If Buyer declines to engage Seller to perform such services, or the Parties are unable to execute appropriate documentation to reflect such services, Buyer may (subject to Section 10.8(b)) seek to engage a Third Party Operator to perform such services, provided that, prior to engaging any such Third Party Operator to maintain such New System, Buyer shall provide written notice to Seller of the material terms and conditions on which such third party has offered to provide such service (including (X) the scope of services offered, (Y) the price(s) quoted for such services, and (Z) the terms of any performance warranties to be provided in connection with such services). Seller shall have ten (10) Business Days to notify Buyer if Seller will agree to perform the

applicable services for a price not to exceed the quoted amount and otherwise on terms no less favorable to Buyer than those included in the notice required hereunder. If Seller agrees to provide such services, the Parties will negotiate in good faith regarding appropriate documentation to reflect such services. If Seller declines to provide such services, Buyer may engage a Third Party Operator on terms no more favorable to such Third Party Operator than those provided in the notice to Seller.

(b) Without in any way limiting the provisions of the foregoing Section 10.8(a), Buyer shall in all events use commercially reasonable efforts to engage a Third Party Operator to provide such maintenance that is not a competitor of Seller or its Affiliates and is not in litigation or other material dispute with Seller.

ARTICLE XI.
INDEMNIFICATION

Section 11.1 IP Indemnity.

(a) Except as expressly limited below, Seller agrees to indemnify, defend and hold Buyer, its members, and their Affiliates and their respective managers, officers, directors, employees and agents harmless from and against any and all Third Party Claims and Indemnifiable Losses (including in connection with obtaining any Intellectual Property necessary for continuation of completion, operation and maintenance of New Systems purchased by Buyer from Seller), arising from or in connection with any alleged infringement, conflict, violation or misuse of any patents, copyrights, trade secrets or other third party Intellectual Property rights by New Systems purchased by Buyer from Seller (or the use, operation or maintenance thereof) or the exercise of the IP License or the Software License granted pursuant to Section 9.1 and Section 9.2 hereunder. Buyer shall give Seller prompt notice of any such claims. Seller shall be entitled to participate in, and, unless in the opinion of counsel for Seller a conflict of interest between the Parties may exist with respect to such claim, assume control of the defense of such claim with counsel reasonably acceptable to Buyer. Buyer authorizes Seller to settle or defend such claims in its sole discretion on Buyer's behalf, without imposing any monetary or other obligation or liability on Buyer and subject to Buyer's participation rights set forth in this Section 11.1. Buyer shall assist Seller upon reasonable request by Seller and, at Seller's reasonable expense, in defending any such claim. If Seller does not assume the defense of such claim, or if a conflict precludes Seller from assuming the defense, then Seller shall reimburse Buyer on a monthly basis for Buyer's reasonable defense expenses of such claim through separate counsel of Buyer's choice reasonably acceptable to Seller. Even if Seller assumes the defense of such claim, Buyer may, at its sole option, participate in the defense, at Buyer's expense, without relieving Seller of any of its obligations hereunder. Should Buyer be enjoined from selling or using any New System as a result of such claim, Seller will, at its sole option and discretion, either (i) procure or otherwise obtain for Buyer the right to use or sell the New System; (ii) modify the New System so that it becomes non-infringing but still substantially meets the original functional specifications of the New System (in which event, for the avoidance of doubt, all warranties hereunder shall continue to apply unmodified); (iii) upon return of the New

System to Seller, as directed by Seller, provide to Buyer a non-infringing New System meeting the functional specifications of the New System, or (iv) when and if none of the first three options is reasonably available to Seller, authorize the return of the New System to Seller and, upon receipt thereof, return to Buyer all monies paid by Buyer to Seller for the cost of the New Systems and BOF, net of any monies paid by Seller to Buyer pursuant to the New System Portfolio Output Warranty, Efficiency Guaranty and/or Output Guaranty to the extent such Seller payments are allocable to such New System; provided that Seller shall not elect the option in the preceding clause (i) without Buyer's written consent if such election could reasonably be expected to materially decrease Buyer's revenues or materially increase Buyer's operating expenses.

(b) THIS INDEMNITY SHALL NOT COVER ANY CLAIM:

(i) for Intellectual Property infringement, conflict, violation or misuse arising from or in connection with any combination made by Buyer of any New System with any other product or products or modifications made by or on behalf of Buyer to any part of the New System, unless (A) such combination or modification is in accordance with Seller's specifications for the New System, (B) such combination or modification is made by or on behalf of or at the written request of Seller where Seller has requested the specific combination or modification giving rise to the claim by Buyer, or (C) such other product or products would not infringe the Intellectual Property rights of a third party but for the combination with any part of the New System; or

(ii) for infringement of any Intellectual Property rights arising in whole or in part from any aspect of the New System which was designed by or requested by Buyer on a custom basis.

Section 11.2 Indemnification of Seller by Buyer. Buyer shall indemnify, defend and hold harmless Seller, its officers, directors, employees, shareholders, Affiliates and agents (each, a "Seller Indemnitee") from and against any and all Indemnifiable Losses asserted against or suffered by any Seller Indemnitee arising out of a Third Party Claim (other than a claim for a Seller Indemnitee's breach of any contract to which a Seller Indemnitee is a party) and in any way relating to, resulting from or arising out of or in connection with any Third Party Claims against a Seller Indemnitee to the extent arising out of or in connection with (a) (1) the negligent or intentional acts or omissions of Buyer or its subcontractors, agents or employees or others under Buyer's control (excluding any act or omission by Seller, any Seller Indemnitee or any Seller Personnel), (2) breach by Buyer of its representations, warranties or obligations under this Agreement (except to the extent caused by any Seller Indemnitee or Seller Personnel), or (3) any breach of a Site Lease or Interconnection Agreement, except to the extent relating to, resulting from or arising out of or in connection with any act or omission by Seller, any Seller Indemnitee or any Seller Personnel, or (b) the operation of New Systems by any Person other than Seller or an Affiliate or subcontractor of Seller after such New Systems have been Purchased by Buyer pursuant to this Agreement (but subject to Seller's warranties, covenants and indemnities under this Agreement and any other Transaction Document to which Seller is a party); provided that Buyer shall have no obligation to indemnify Seller to the extent caused by or arising out of any (i) negligence, fraud or willful misconduct of any Seller

Indemnitee or the breach by Seller or any Seller Indemnitee of its covenants, representations and warranties under this Agreement or in any Seller's Certificate of Commissioning or (ii) operation of Bloom Systems by a party outside of Buyer's control or direction (including any Seller Personnel) or by a party taking such action despite Buyer's reasonable efforts to prevent the same.

Section 11.3 Indemnification of Buyer by Seller.

(a) Seller shall indemnify, defend and hold harmless Buyer, its members, managers, officers, directors, employees, Affiliates and agents (each, a "Buyer Indemnitee") from and against any and all Indemnifiable Losses (other than Indemnifiable Losses addressed in Section 11.1) asserted against or suffered by any Buyer Indemnitee arising out of a Third Party Claim, and in any way relating to, resulting from or arising out of or in connection with any Third Party Claims against a Buyer Indemnitee to the extent arising out of or in connection with (i) the negligent or intentional acts or omissions of Seller or any Seller Personnel (other than matters addressed separately in Section 11.1, which shall be governed by the terms thereof), (ii) a breach by Seller of its representations, warranties or obligations under this Agreement or in any Seller's Certificate of Commissioning, or any breach of a Site Lease or Interconnection Agreement, to the extent relating to, resulting from or arising out of or in connection with any act or omission by Seller or any Seller Personnel, or (iii) any injury, death, or damage to property caused by a defect in a New System; provided that, Seller shall have no obligation to indemnify Buyer to the extent caused by or arising out of (x) any negligence, fraud or willful misconduct of a Buyer Indemnitee, except to the extent caused by any Seller Personnel, (y) the breach by Buyer or any Buyer Indemnitee of its covenants, representations and warranties under this Agreement or any Site Lease or Interconnection Agreement, except to the extent such a breach is caused by Seller's (or any Seller Personnel's) breach of this Agreement (including any failure to perform obligations on behalf of Buyer in accordance with the terms of this Agreement), or (z) the inability of Buyer to ultimately utilize any tax benefits.

(b) Except as otherwise set forth in this Agreement, in the event that Buyer incurs any liability, cost, loss or expense to a Site Landlord (including relating to a breach of a Site Lease) in relation to the repurchase by or return to Seller of any New System under this Agreement, Seller shall indemnify and hold Buyer harmless for any such liability, cost, loss or expense incurred by Buyer.

(c) Seller acknowledges and agrees that each Site Landlord is an intended third party beneficiary of Seller's indemnification obligations in favor of the Buyer Indemnitees and that Buyer may, with Seller's reasonable consent following cooperative discussions between the Parties regarding the least disruptive manner of resolving the applicable Site Landlord claim, elect to assign to a Site Landlord the right to seek indemnification directly from Seller in the event that Buyer owes to such Site Landlord any indemnification obligations arising out of or in connection with any breach of a Site Lease arising out of any actions or inactions of Seller under this Agreement that give rise to an indemnification obligation of Seller in favor of any Buyer Indemnitee.

Section 11.1 Indemnification of Buyer by Seller. Except as otherwise provided in Section 11.1, if any indemnifiable claim is brought against a Party (the "Indemnified Party"), then the other Party (the "Indemnifying Party") shall be entitled to participate in, and, unless in the reasonable opinion of counsel for the Indemnifying Party a conflict of interest between the Parties may exist with respect to such claim, assume the defense of such claim, with counsel reasonably acceptable to the Indemnifying Party. If the Indemnifying Party does not assume the defense of the Indemnified Party or if a conflict precludes the Indemnifying Party from assuming the defense, then the Indemnifying Party shall reimburse the Indemnified Party on a monthly basis for the Indemnified Party's reasonable defense expenses through separate counsel of the Indemnified Party's choice. Even if the Indemnifying Party assumes the defense of the Indemnified Party with acceptable counsel, the Indemnifying Party, at its sole option, may participate in the defense, at its own expense, with counsel of its own choice without relieving the Indemnifying Party of any of its obligations hereunder.

Section 11.2 Limitation of Liability.

(a) Notwithstanding anything to the contrary in this Agreement, in no event shall a Party be liable to the other Party for an amount in excess of the Maximum Liability unless and to the extent such liability is the result of (A) fraud, willful default, willful misconduct, or gross negligence of a Party or that Party's employees, agents, subcontractors (except that for the purposes of this provision, Seller and any applicable Seller Personnel will not be deemed to be employees, agents or subcontractors of Buyer), (B) a Third Party Claim, (C) a claim of Seller against Buyer for Buyer's failure to pay the Purchase Price for any Facility (which amounts shall not be included in calculating Buyer's Maximum Liability), (D) a claim with respect to injury to or death of any individual, (E) Seller's abandonment to the extent constituting a repudiation of this Agreement in respect of all or any part of the Facilities, (F) events or circumstances in respect of which insurance proceeds are available or that would have been available but for a failure by Seller to maintain, or comply with the terms of, insurance that it is required to obtain and maintain under this Agreement, and any amounts so received will not be included when calculating Seller's Maximum Liability, (G) a claim of Buyer against Seller for Seller's breach of a Fundamental Representation, or (H) any purchase price adjustment pursuant to Section 2.7. Subject always to the Maximum Liability limitations set forth in the preceding sentence, except for damages or amounts specifically provided for in this Agreement or in connection with the indemnification for damages awarded to a third party under a Third Party Claim, damages hereunder are limited to direct damages, and in no event shall a Party be liable to the other Party, and the Parties hereby waive claims, for indirect, punitive, special or consequential damages or loss of profits; provided, however, that the loss of profits language set forth in this Section 11.5(a) shall not be interpreted to exclude from Indemnifiable Losses (X) any losses arising as a result of the loss or recapture of any ITC or (Y) recovery for any losses merely because such losses would result in a reduction in the profits of Buyer, Diamond State Generation Holdings, LLC, SP Diamond State Class B Holdings, LLC, or any or all of such Persons. Notwithstanding anything to the contrary set forth herein, in no event shall the limitation of liability set forth above as it pertains to Seller limit Seller's obligations to Buyer for any payments owed by Seller to Buyer regarding (i) the Repurchase Amount in respect

of any New Systems, or (ii) Indemnifiable Losses arising from the loss or recapture of any ITC. Any amounts paid or payable by Seller to Buyer as described in the preceding sentence will not be included when calculating Seller's Maximum Liability.

(b) Each Party hereby agrees that any claim for damages against the other Party under this ARTICLE XI shall be reduced to the extent of any related insurance proceeds actually received by such claiming Party.

Section 11.3 Survival. The Parties' respective rights and obligations under this ARTICLE XI shall survive any total or partial termination of this Agreement.

ARTICLE XII.
MISCELLANEOUS PROVISIONS

Section 12.1 Amendment and Modification. This Agreement may be amended, modified or supplemented only by written agreement of Buyer and Seller.

Section 12.2 Waiver of Compliance; Consents. Except as otherwise provided in this Agreement, any failure of any of the Parties to comply with any obligation, covenant, agreement or condition herein may be waived by the Party entitled to the benefits thereof only by a written instrument signed by the Party granting such waiver, but any such waiver of such obligation, covenant, agreement or condition shall not operate as a waiver of, or estoppel with respect to, any subsequent failure to comply therewith.

Section 12.3 Notices. All notices, provisions of Documentation, reports, certifications, or other documentation, and other communications hereunder shall be in writing and shall be deemed given when received if delivered personally or by facsimile transmission with completed transmission acknowledgment or by electronic mail, or when delivered if mailed by overnight delivery via a nationally recognized courier or registered or certified first class mail (return receipt requested), postage prepaid, to the recipient Party at its below address (or at such other address or facsimile number for a Party as shall be specified by like notice; provided, however, that notices of a change of address shall be effective only upon receipt thereof and that any notice provided by electronic mail will be followed promptly by another form of notice consistent with this Section 12.3 and will be effective when such follow-up notice is deemed effective):

To Seller: Bloom Energy Corporation
4353 N. 1st Street
San Jose, CA 95134
Attention: [*]
Email: [*]

and to:

Bloom Energy Corporation
4353 N. 1st Street
San Jose, CA 95134
Attention: General Counsel

To Buyer: Diamond State Generation Partners, LLC
c/o SP Diamond State Class B Holdings, LLC
30 Ivan Allen Jr. Blvd.
Atlanta, GA 30308
Attention: General Counsel and Corporate Secretary

with a copy to (which copy shall not constitute notice):

Smith, Anderson, Blount, Dorsett, Mitchell & Jernigan, L.L.P.
150 Fayetteville Street, Suite 2300
Raleigh, NC 27601
Attention: [*]
Telephone: [*]
Email: [*]

Section 12.4 Assignment.

(a) This Agreement and all of the provisions hereof shall be binding upon and inure to the benefit of the Parties and their respective successors and permitted assigns (including by operation of law), but neither this Agreement nor any of the rights, interests or obligations hereunder shall be assigned by any Party without the prior written consent of the other Party (to be granted in the other Party's sole discretion), provided that (i) Buyer may assign its indemnification rights to Site Landlord as set forth in Section 11.3(c) upon notice to Seller, (ii) Buyer may assign all of its right, title and interest in and to this Agreement to an Affiliate wholly owned (directly or indirectly) by The Southern Company without the prior consent of Seller (provided that such assignee Affiliate shall assign this Agreement back to the Buyer at any future date that such assignee is no longer an Affiliate of the Buyer), (iii) Buyer may make such an assignment without Seller's consent to a successor to substantially all of Buyer's business, whether in a merger, sale of stock, sale of membership interests, sale of assets or other transaction (other than a transaction with an entity that is a competitor of Seller or its Affiliates, unless consented to under the provisions of Section 12.4(b)), and (iv) Seller shall be entitled to subcontract any of its obligations under this Agreement without consent (except as set forth in Section 12.14) or

to assign its obligations under this Agreement to an Affiliate under common ownership with Seller, provided further that (X) such assignment or subcontracting shall

not excuse Seller from the obligation to competently perform any subcontracted or assigned obligations or any of its other obligations under the Agreement and (Y) nothing in this Agreement shall be deemed to require the consent of any Party with respect to any change in control, merger or sale of all or substantially all of the assets of Southern Power Company or Seller. Any purported assignment or delegation in violation of this Section shall be null and void.

(b) In the event of an assignment by Buyer or other transaction described in clause (iii) of Section 12.4(a), Buyer shall notify Seller of the identity of the proposed assignee or successor in writing, and Seller shall have the right to consent to such assignment or transaction in the event that Seller reasonably believes such proposed assignee to be a competitor of Seller. Seller shall notify Buyer of its determination within ten (10) Business Days of receipt of notice from Buyer hereunder. If Seller notifies Buyer that it has determined that the proposed assignee is a competitor of Seller and that Seller is electing to withhold consent, then Buyer shall be prohibited from consummating the proposed transaction unless it has been finally determined that such proposed assignee is not a competitor of Seller.

(c) Any disputes regarding Seller's determination of a proposed assignee as a competitor to Seller shall be resolved as follows:

(i) Buyer will promptly provide written notification of the dispute to Seller within five (5) Business Days after notice by Seller that it has determined the proposed assignee to be a competitor and that it is withholding its consent. Thereafter, a meeting shall be held promptly between the Parties, attended by Seller's Chief Financial Officer and Buyer's Chief Financial Officer, to attempt in good faith to negotiate a resolution of the dispute, *provided,* that either Party may elect to escalate the dispute to the Parties' respective Chief Executive Officer at any time.

(ii) If the Parties are not successful in resolving a dispute within ten (10) Business Days of the meeting called for above, the dispute shall be submitted, within ten (10) Business Days thereafter, to a mediator with energy industry experience. The Parties shall cooperate with and provide such documents, information and other assistance as is requested by the mediator to assist in efforts to resolve the dispute. The costs of the mediator shall be borne equally by the Parties.

(iii) If efforts to mediate are not successful within thirty (30) days of submitting the dispute to the mediator, both Parties will retain all legal remedies available to them.

Section 12.5 Dispute Resolution; Service of Process.

(a) Except as provided in Section 12.4(c), in the event a dispute, controversy or claim arises hereunder, including any claim whether in contract, tort (including negligence), strict product liability or otherwise, the aggrieved Party will promptly provide written notification of the dispute to the other Party within ten (10) days after

such dispute arises. Thereafter, a meeting shall be held promptly between the Parties, attended by Representatives of the Parties with decision-making authority regarding the dispute, to attempt in good faith to negotiate a resolution of the dispute. If the Parties are not successful in resolving a dispute within twenty-one (21) days of such meeting, then, subject to the limitations on remedies set forth in Section 10.3 and Section 10.4 and ARTICLE XI, either Party may pursue whatever rights it has available under this Agreement, at law or in equity in accordance with Section 12.6 herein.

(b) In the event of any dispute arising out of or relating to this Agreement, each Party hereby consents to service of process made to the addressees set forth in Section 12.3 herein either by overnight delivery by a nationally recognized courier or by certified first class mail, return receipt requested, and hereby acknowledges that service by such means shall constitute valid and lawful service of process against the Party being served.

Section 12.6 Governing Law, Jurisdiction, Venue. THIS AGREEMENT SHALL BE GOVERNED BY AND INTERPRETED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK, WITHOUT GIVING EFFECT TO ANY CONFLICTS OF LAW OR OTHER PRINCIPLES THEREOF THAT WOULD RESULT IN THE APPLICATION OF THE LAWS OF ANOTHER JURISDICTION (OTHER THAN SECTION 5-1401 OF THE NEW YORK GENERAL OBLIGATIONS LAW). THE PARTIES HEREBY IRREVOCABLY SUBMIT TO THE NON-EXCLUSIVE JURISDICTION OF THE COURTS OF THE STATE OF NEW YORK AND OF THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF NEW YORK WITH RESPECT TO ANY DISPUTE ARISING OUT OF OR RELATING TO THIS AGREEMENT. EACH PARTY IRREVOCABLY AND UNCONDITIONALLY WAIVES TRIAL BY JURY IN ANY ACTION, SUIT OR PROCEEDING RELATING TO ANY SUCH DISPUTE AND FOR ANY COUNTERCLAIM WITH RESPECT THERETO.

Section 12.7 Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Signatures delivered by facsimile, portable document format or other electronic means (including services such as DocuSign) will be considered original signatures, and each Party shall thereafter promptly deliver original signatures to the other Party.

Section 12.8 Interpretation. The article, section and schedule headings contained in this Agreement are solely for the purpose of reference, are not part of the agreement of the Parties and shall not in any way affect the meaning or interpretation of this Agreement.

Section 12.9 Entire Agreement. This Agreement, the other Transaction Documents, the [*], and the exhibits, schedules, documents, certificates and instruments referred to therein, embody the entire agreement and understanding of the Parties in respect of the transactions contemplated by this Agreement. Each Party acknowledges that, in agreeing to enter into this Agreement, it has not relied on any representation, warranty, collateral contract or other assurance (except those in this Agreement or any other agreement entered into on the date of this Agreement between the Parties) made by or on behalf of any other Party at any time before the signature of this Agreement. Each Party waives all rights and remedies which, but for the immediately preceding sentence, might

otherwise be available to it in respect of any such representation, warranty, collateral contract or other assurance.

Section 12.10 Construction of Agreement. The terms and provisions of this Agreement represent the results of negotiations between Buyer and Seller, each of which has been represented by counsel of its own choosing, and neither of which has acted under duress or compulsion, whether legal, economic or otherwise. Accordingly, the terms and provisions of this Agreement shall be interpreted and construed in accordance with their usual and customary meanings, and Buyer and Seller hereby waive the application in connection with the interpretation and construction of this Agreement of any rule of law to the effect that ambiguous or conflicting terms or provisions contained in this Agreement shall be interpreted or construed against the Party whose attorney prepared the executed draft or any earlier draft of this Agreement.

Section 12.11 Severability. If any term or other provision of this Agreement is invalid, illegal or incapable of being enforced by any rule of law or public policy, all other conditions and provisions of this Agreement shall nevertheless remain in full force and effect so long as the economic or legal substance of the transactions contemplated hereby is not affected in any manner materially adverse to any Party.

Section 12.12 Further Assurances. Each Party agrees to execute and deliver such additional documents and instruments and to perform such additional acts as may be necessary or appropriate to effectuate, carry out and perform all of the terms, provisions, and conditions of this Agreement and the transactions contemplated by this Agreement.

Section 12.13 Independent Contractor. Seller shall perform the Installation Services and act at all times as an independent contractor, and shall be solely responsible for the means, methods, techniques, sequences, and procedures employed for execution and completion of the Installation Services. Nothing in this Agreement shall be interpreted or applied so as to make the relationship of any of the Parties that of partners, joint venturers or anything other than the relationship of customer and independent contractor. Notwithstanding anything to the contrary herein, including Seller's obligation to perform on behalf of Buyer certain of Buyer's obligations under the Tariff, Interconnection Agreements, and Site Leases, neither Seller nor any of its employees, agents, subcontractors or Representatives shall be considered an employee, agent, subcontractor or Representative of, nor under the control of, Buyer under this Agreement. Seller shall at all times maintain supervision, direction and control over its employees, agents, subcontractors and Representatives as is consistent with and necessary to preserve its independent contractor status, and Seller shall be responsible to Buyer for the acts and omissions of each such employee or subcontractor.

Section 12.14 Service Providers. Seller may appoint one or more unrelated third party(ies), who is appropriately qualified, licensed, and financially responsible, to perform Installations Services throughout the Term. Seller shall submit such appointment of any Major Service Provider to Buyer for its prior written approval, which approval shall not be unreasonably withheld or delayed. No such appointment nor the approval thereof by Buyer, however, shall relieve Seller of any liability, obligation, or responsibility resulting from a breach of this Agreement. "Major Service Provider" means any Service Provider that Seller proposes to engage to perform any Installations Services

for which the aggregate compensation to such Service Provider in respect of Installation Services is expected to be greater than ten percent (10%) of Seller's budgeted amounts for all Installation Services for all the New Systems pursuant to this Agreement. The Parties agree that each of the Major Service Providers set forth on Schedule 12.14 hereof are approved for all purposes by Buyer as of the Agreement Date. Each subcontractor (of any tier, Service Providers, Major Service Providers, and Service Technicians) must be a reputable, qualified firm with an established record of successful performance in its trade, and shall obtain and maintain such insurance coverages having such terms as set forth in Annex B to the extent applicable to the work to be performed by such subcontractor. Seller shall not be relieved from its obligation to provide any services hereunder if a subcontractor agrees to provide any or all of such services. No subcontractor is intended to be or will be deemed a third-party beneficiary of this Agreement. Nothing contained herein shall create any contractual relationship between any subcontractor and Buyer or obligate Buyer to pay or cause the payment of any amounts to any subcontractor, including any payment due to any third party. Seller shall not permit any subcontractor to assert any Lien against any New System or Bloom System, or attach any Lien other than a Permitted Lien. None of Seller's employees, subcontractors or any such subcontractor's employees will be or will be considered to be employees of Buyer. To the extent that any Site Landlord has the right to request removal of any Seller or subcontractor personnel under a Site Lease, Seller shall cooperate with Buyer in complying with the terms and conditions of such Site Lease including by, upon written notification by Buyer that the performance, conduct or behavior of any Person employed by Seller or one of its subcontractors is unacceptable to the applicable Site Landlord, promptly stopping such Person from performing any obligations hereunder and/or removing such Person from the applicable Site. Additionally, Buyer may bring to Seller's attention any concerns regarding the performance, conduct or behavior of any Person employed by Seller or one of its subcontractors, which concerns Seller shall consider in good faith and thereafter take such action as Seller deems appropriate under the circumstances. Seller will be fully responsible for the payment of all wages, salaries, benefits and other compensation to its employees and for payment of any Taxes due because of its work hereunder.

Section 12.15 Rights to Deliverables. Buyer agrees that Seller shall, except as expressly set forth herein, retain all rights, title and interest, including Intellectual Property rights, in any Training Materials provided to Buyer in connection with the services performed hereunder. "Training Materials" means any and all materials, documentation, notebooks, forms, diagrams, manuals and other written materials and tangible objects, describing how to operate and maintain the Facilities or perform any of the Installation Services and/or Facility Services (if applicable), including any corrections, improvements and enhancements which are delivered by Seller to Buyer, but excluding any Documentation or other data and reports delivered to Buyer in respect of any Facilities.

Section 12.16 Limitation on Export. Buyer agrees that it will not export, re-export, resell, ship or divert directly or indirectly any Facility or any part thereof in any form or technical data or Software furnished hereunder to any country prohibited by the United States Government or any other Governmental Authority, or for which an export license or other Governmental Approval is required, without first obtaining such license or approval.

Section 12.17 Time of Essence. Time is of the essence with respect to all matters contained in this Agreement.

Section 12.18 No Rights in Third Parties. Except as otherwise specified herein, (a) nothing in this Agreement nor any action taken hereunder shall be construed to create any duty, liability or standard of care to any Person that is not a Party, (b) no Person that is not a Party shall have any rights or interest, direct or indirect, in this Agreement or the services to be provided hereunder and (c) this Agreement is intended solely for the benefit of the Parties, and the Parties expressly disclaim any intent to create any rights in any third party as a third-party beneficiary to this Agreement or the services to be provided hereunder.

Section 12.19 No Modification or Alteration of DSGP Operating Agreement. Notwithstanding anything to the contrary herein and for the avoidance of doubt, (a) nothing in this Agreement shall affect or modify the rights or obligations of the members of Buyer under the DSGP Operating Agreement, and (b) no Buyer Manager shall have authority to take any action or agree to take any action that would violate the DSGP Operating Agreement or that would require the consent or approval of any member or the managing member of Buyer under the DSGP Operating Agreement (unless such consent or approval is first obtained).

[remainder of page intentionally left blank]

IN WITNESS WHEREOF, Buyer and Seller have caused this Fuel Cell System Supply and Installation Agreement to be signed by their respective duly authorized officers as of the Agreement Date.

BUYER:	**SELLER:**
DIAMOND STATE GENERATION PARTNERS, LLC a Delaware limited liability company	**BLOOM ENERGY CORPORATION** a Delaware corporation
By: _____	By: _____
Name:	Name:
Title:	Title:

Annex A

Conceptual Design

ANNEX A-1

Annex B

Insurance

Insurance. At all times during the Term, without cost to Buyer, Seller shall maintain in force and effect the following insurance, which insurance shall not be subject to cancellation, termination or other material adverse changes unless the insurer delivers to Buyer written notice of the cancellation, termination or change at least thirty (30) days in advance of the effective date of the cancellation, termination or material adverse change or if notice from the insurer to Buyer of material adverse change is not available on commercially reasonable terms then Seller shall provide Buyer with such notice as soon as reasonably possible after becoming aware of such change:

(a) Worker's Compensation Insurance as required by the laws of the state in which Operator's employees are manufacturing New Systems or performing Installation Services;

(b) Employer's liability insurance with limits at policy inception not less than One Million Dollars ($1,000,000.00) per occurrence;

(c) Commercial General Liability Insurance, including bodily injury and property damage liability (arising from premises, operations, contractual liability endorsements, products liability, or completed operations) with limits not less than One Million Dollars ($1,000,000.00) per occurrence and Two Million Dollars ($2,000,000.00) annual aggregate limit at policy inception;

(d) If there is exposure, automobile liability insurance in accordance with prudent industry practice with a limit of not less than One Million Dollars ($1,000,000.00), combined single limit per occurrence;

(e) Umbrella liability insurance acting in excess of underlying employer's liability, commercial general liability and automobile liability policies with limits not less than [*] per occurrence, except that any subcontractors shall be required to maintain such insurance with limits of not less than [*];

(f) Professional errors and omission insurance with a limit of not less than One Million Dollars ($1,000,000.00) per occurrence;

(g) Environmental/pollution liability insurance with a limit of not less than One Million Dollars ($1,000,000.00) per claim;

(h) Builder's Risk/Installation Coverage for each New System, with replacement costs and a delay in startup component (for avoidance of doubt, this requirement is only

applicable, with respect to each New System, until the date of Commissioning of such New System); and

(i) Marine Cargo - Transit coverage (including air, land and ocean cargo, as applicable) on an "all-risk" basis and a "warehouse to warehouse" basis with a per occurrence limit equal to not less than 110% of the value including transit and insurance of such shipment involving the Facility at all times for which the Seller bears or has accepted risk of loss or has responsibility for providing insurance. Coverage shall include loading, unloading and temporary storage (as applicable). Coverage shall be maintained in accordance with prudent industry practice in all regards with per occurrence deductibles of not more than $50,000 for physical damage and other terms and conditions acceptable to the Buyer. For avoidance of doubt, (i) this requirement is only applicable during installation and is not required to be maintained with respect to any New System after the date of Commissioning of such New System, and (ii) this requirement shall not apply to any subcontractor except those engaged to transport materials owned by Seller during such transit.

Seller shall cause Buyer to be included as additional insured to all insurance policies required in accordance with the provisions of this Agreement except for worker's compensation. The required insurance must be written as a primary policy not contributing to or in excess of any policies carried by Buyer, and each must contain a waiver of subrogation in favor of Buyer.

Additionally, Seller shall procure and maintain any insurance coverages (if any) with respect to commercial general liability and excess liability required to be carried by Buyer's contractors and service providers pursuant to a Site Lease pursuant to policies that comply with all requirements set forth in such Site Lease.

Additional Insurance. To the extent that a Material Contract (as defined in the ECCA) requires Seller to maintain additional insurance coverage, higher limits or any other insurance requirement because of Seller's undertakings pursuant to this Agreement ("Required Insurance"), Seller shall obtain and maintain the Required Insurance for as long as required under such Material Contract.

Seller shall provide Buyer with evidence of compliance with these insurance requirements when requested by Buyer from time to time on a reasonable basis.

Exhibit A

Specifications for New Systems

NEW SYSTEM SPECIFICATIONS

System Capacity: 200kW or 250kW
Electrical Connection: 480 V, 3-phase, 60 Hz

Fuels: Natural Gas
Input Fuel Pressure: 10-18 psig (15 psig nominal)
Water: None during normal operation following Commissioning

NOx: < 0.01 lbs/MWh
Sox: Negligible
CO: <0.05 lbs/MWh
VOCs: < 0.02 lbs/MWh

Weight: 14.3 tons
Dimensions (variable layouts): 14'9" x 8'9" x 7' or 29'6" x 4'5" x 7'5"

Temperature Range: -20° to 45° C
Humidity: 0% to 100%

Location: Outdoor
Noise: < 70 dBA @ 6 feet

BLOOM SYSTEM METER SPECIFICATIONS

Voltage: +/- 1.0%
Current: +/- 1.5%
Power: +/- 2.0%
Bloom System Meter specifications reflect nominal ratings and 25^{o} C ambient

MASS FLOW CONTROLLER SPECIFICATIONS

Fuel Scale Range (N_2): 250SLM
Accuracy: +/- 1.0% S.P (>/= 35% F.S.); +/- 0.35% (<35% F.S.)
Linearity: +/- 0.5% F.S.
Repeatability: +/- 0.2% F.S.
Response Time: </= 2sec
Temperature Range: -20° to 70° C

Exhibit B

Form of Bill of Sale

Bloomenergy

BILL OF SALE

This BILL OF SALE, dated as of _____ __, 20_ is made by BLOOM ENERGY CORPORATION, a Delaware corporation ("**Seller**"), to DIAMOND STATE GENERATION PARTNERS, LLC, a Delaware limited liability company ("**Buyer**"), and is delivered pursuant to the Fuel Cell System Supply and Installation Agreement, dated as of June 14, 2019 (as amended, amended and restated, supplemented or otherwise modified from time to time, the "**CapEx Agreement**"), between Seller and Buyer, in connection with the transfer of the assets described on Exhibit A attached hereto (the "**Purchased System**").

Seller hereby assigns, conveys, sells, delivers, sets over and transfers to Buyer, for the consideration, and on the terms and conditions, set forth in the CapEx Agreement, all of Seller's rights, title and interest in, under and to the Purchased System, and Buyer hereby accepts such assignment .

This Bill of Sale shall inure to the benefit of and be binding upon the parties hereto and their respective successors and assigns.

This Bill of Sale shall be governed by, and construed in accordance with, the laws of the State of New York.

This Bill of Sale may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Signatures delivered by facsimile, portable document format or other electronic means (including services such as DocuSign) will be considered original signatures.

[Signature Page Follows]

IN WITNESS WHEREOF, the parties hereto have caused this Bill of Sale to be signed by their respective duly authorized officers as of the date first written above.

SELLER:

BLOOM ENERGY CORPORATION

By: _____
Name:
Title:

BUYER:

DIAMOND STATE GENERATION PARTNERS, LLC

By: _____
Name:
Title:

Exhibit B-2

Attachment A to Bill of Sale

Purchased Systems

Exhibit B-3

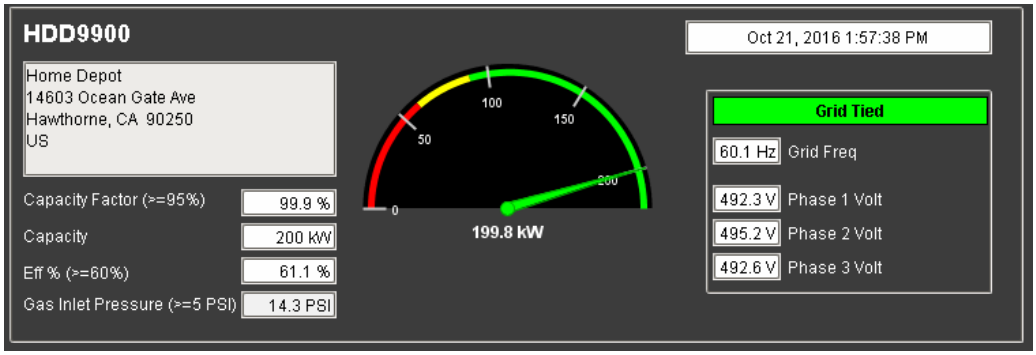
Exhibit C

Seller Deliverables

The Parties acknowledge that Seller has provided a detailed commissioning plan within the seven (7) days preceding the Agreement Date.

Seller shall submit the items listed below prior to and as a condition of the Commissioning of each New System, all in form and substance reasonably acceptable to Buyer:

1. Example screenshot to be delivered by Seller, with details on sample shown below:



2. Seller's properly completed Commissioning checklist in Excel format and in the form Seller previously delivered to Buyer via email.

3. Seller's current site plan and layout drawing showing the location and "Site ID" of each New System at its installed location within the Facility.

Seller shall submit the items listed below on or before sixty (60) days following the Commissioning of the final New System to achieve such milestone hereunder at each Facility, all in form and substance reasonably acceptable to Buyer:

1. Final OSHA 300Log (not required to be organized by Site)
2. Final Incident Reports (to include First Aid logs, Final Root Cause Analysis Reports, and Final Near Miss Reports)
3. Quality Documentation for Construction activities (if applicable)

Exhibit C-1

4. Permitting documentation (if applicable)
5. An as-built package reflecting all New System installation details in AutoCAD.

Exhibit C-2

Exhibit D

Form of Payment Notice

To: **DIAMOND STATE GENERATION PARTNERS, LLC ("Buyer")**

This Payment Notice, dated _____, 20_, is given pursuant to Section 2.4(c) of the Fuel Cell System Supply and Installation Agreement between the BLOOM ENERGY CORPORATION ("**Seller**") and Buyer dated June 14, 2019 (as amended, amended and restated, supplemented or otherwise modified from time to time, the "**CapEx Agreement**"). Terms defined in the CapEx Agreement have the same meaning where used in this Payment Notice.

Seller hereby notifies Buyer that, in connection with the Invoice Due Date occurring on _____, 20__, Buyer shall be obligated to make Purchase Price payments to Bloom for all invoices issued pursuant to Section 2.4(a)(ii) of the CapEx Agreement in the aggregate amount of $_____.

The Purchase Price to be paid by Buyer on the above-mentioned Invoice Due Date is comprised of the Purchase Price payments in connection with the Commissioning of New Systems with aggregate System Capacity of ___kW, which amount represents, the remainder of the Purchase Price for such New Systems not previously paid by Buyer, plus one hundred percent (100%) of the Taxes to be paid by Buyer pursuant to Section 2.4(c) of the CapEx Agreement for such New Systems.

Included with this Payment Notice is the applicable Seller's Certificate of Commissioning evidencing the achievement of all of the Commissioning Milestones achieved by the New Systems referenced above.

Seller hereby certifies that each of the representations and warranties of Seller in the CapEx Agreement is true and correct in all respects as of the date of this Payment Notice.

This Payment Notice may be relied upon by Buyer.

Signed for and on behalf of BLOOM ENERGY CORPORATION

By: _____

Name: _____

Title: _____

Exhibit E

Form of Purchase Order

Exhibit E-1

Exhibit F

Intentionally Omitted

Exhibit F-1

Exhibit G

Form of Seller's Certificate of Delivery Milestone Completion

To: **DIAMOND STATE GENERATION PARTNERS, LLC ("Buyer")**

This Certificate is given pursuant to paragraph (d) of the definition of Delivery Milestone in the Fuel Cell System Supply and Installation Agreement between the BLOOM ENERGY CORPORATION ("**Seller**") and Buyer dated June 14, 2019 (as amended, amended and restated, supplemented or otherwise modified from time to time, the "**CapEx Agreement**"). Terms defined in the CapEx Agreement have the same meaning where used in this Certificate.

This certificate is provided in respect of the New Systems set forth on Attachment 1 hereto.

Seller hereby certifies, in respect of each such New System:

(a) such New System has been Delivered; and

(b) such New System has been placed upon such concrete pad and is available for installation, startup, and commissioning.

Signed for and on behalf of BLOOM ENERGY CORPORATION

By: ……

Name:……..

Title:…….

Attachment 1 to Seller's Certificate of Delivery Milestone Completion

Serial Number	Project	System Capacity	Delivery Date

Exhibit G-2

Exhibit H

Form of Seller's Certificate of Commissioning

To: **DIAMOND STATE GENERATION PARTNERS, LLC ("Buyer")**

This Certificate is given pursuant to paragraph (d) of the definition of Commissioning in the Fuel Cell System Supply and Installation Agreement between the BLOOM ENERGY CORPORATION ("**Seller**") and Buyer dated June 14, 2019 (as amended, amended and restated, supplemented or otherwise modified from time to time, the "**CapEx Agreement**"). Terms defined in the CapEx Agreement have the same meaning where used in this Certificate.

This certificate is provided in respect of the New Systems set forth on Attachment 1 hereto.

Seller hereby certifies, in respect of each such New System:

(a) such New System has been installed at the applicable Facility specified in the Purchase Order, and has been Placed in Service; and

(b) such New System (A) has been installed in the applicable Facility, and (B) is producing power at one hundred percent (100%) of such New System's System Capacity.

Signed for and on behalf of BLOOM ENERGY CORPORATION

By: ……

Name:……..

Title:…….

Attachment 1 to Seller's Certificate of Commissioning

Serial Number	Project	System Capacity	Delivery Date	Commissioning Date

(i)

Exhibit H-2

Exhibit I

Forms of Conditional Lien Waiver and Final Lien Waiver

Exhibit I-1

Exhibit J

Seller Corporate Safety Plan

At all times during the Term, Seller shall maintain at Seller's corporate headquarters and adhere to Seller's written corporate safety programs, which shall include the following programs:

- Contractor Environmental Health & Safety Program
- Injury and Illness Prevention Program
- Heat Illness Prevention Program
- Emergency Action and Fire Prevention Plan
- Hazard Communication Program
- Corporate Electrical Standard – Specific Electrical Safe Work Practices
- Electrical Safety Awareness
- Lockout/Tagout
- Fall Protection Program (Working at Heights)
- Ladder Safety Program
- Powered Industrial Trucks (PIT)
- Hoist Safety Program
- Personal Protective Equipment (PPE)
- Respiratory Protection Program
- Hearing Conservation Program
- Hand and/or Powered Tools Safety Program
- Hot Work Process
- First Aid / CPR Program

(the foregoing, collectively, the "Seller Corporate Safety Plan").

Exhibit K

Subcontractor Quality Plan

Seller will adhere to the following standards and processes as applicable when engaging subcontractors for performance under this Agreement.

- General contractors will be subject to the terms and conditions set forth in The American Institute of Architects Document A107 – 2007 as amended in certain cases
- General contractors are required to complete a Bloom Energy Contractor Qualification Training Program
- General contractor superintendents and foremen must be certified and qualified by Seller to be on site
- Standard safety protocols will be observed at all times:
    - Site superintendents are OSHA30 certified
    - Seller superintendents ensure general contractors follow all local and state OSHA and owner requirements
    - Confirmation of "Injury and Illness Prevention Program"
    - Seller included in the ISN program – 3rd party safety evaluation
- A project superintendent assigned by Seller will review subcontractor work according to a standard site verification check list
- Contractors will submit Contractor Quality Guarantees for each site providing written verification of points of assurance including torques per site, Megger testing and line flushing
- Prestart verification conducted for all sites to review and confirm the quality of subcontractor work
- Prior to Commissioning, Seller conducts an "OK to Start" meeting during which subcontractor quality of work is reviewed and confirmed as resolved
- All incidents are logged in a database and reviewed on an ongoing basis by Seller quality management as well as at the OK to Start meeting
- Quarterly business reviews conducted with general contractors to formally review incident data and mitigate process and workmanship issues.

Exhibit L

Parties' Managers

Seller: [*]

Buyer: [*]

SCHEDULE 3.3(A)(II)

COMMISSIONING PROCEDURES

Seller will perform the following activities in connection with the commissioning of each New System, to the extent necessary to cause such New System to achieve Commissioning:

- [*]

SCHEDULE 5.2(B)

SECTION 5.2(B) KNOWLEDGE PARTIES

[*]

SCHEDULE 12.14

APPROVED MAJOR SERVICE PROVIDERS

[*]

[*]

[*]

REDACTED EXHIBIT: This Exhibit contains certain identified information that has been excluded because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed. Redacted information is identified by [*].

EXECUTION VERSION
[*]

AMENDED AND RESTATED

MASTER OPERATIONS AND MAINTENANCE AGREEMENT

between

BLOOM ENERGY CORPORATION,

as Operator

and

DIAMOND STATE GENERATION PARTNERS, LLC,

as Owner

dated as of June 14, 2019

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ANNEXES

EXHIBITS

SCHEDULES

AMENDED AND RESTATED

MASTER OPERATIONS AND MAINTENANCE AGREEMENT

This AMENDED AND RESTATED MASTER OPERATIONS AND MAINTENANCE AGREEMENT (this "Agreement"), dated as of April 13, 2012, and amended and restated as of June 14, 2019 (the "Agreement Date"), is entered into by and between BLOOM ENERGY CORPORATION, a Delaware corporation ("Operator"), and DIAMOND STATE GENERATION PARTNERS, LLC, a Delaware limited liability company ("Owner"). Operator and Owner are referred to in this Agreement individually, as a "Party" and, collectively, as the "Parties."

RECITALS

WHEREAS, Operator is in the business of designing, engineering, constructing, commissioning, operating, and maintaining on-site solid oxide fuel cell power generating Facilities comprised of Bloom Systems and BOF (as defined below);

WHEREAS, Owner is the owner of a thirty (30) MW fuel cell generation project composed of Bloom Systems purchased pursuant to that certain Master Energy Server Purchase Agreement, by and between Owner and Operator, dated April 13, 2012 (such Bloom Systems, the "Existing Systems" and such agreement, the "Existing System MESPA") and operated by Operator pursuant to that certain Master Operation and Maintenance Agreement, by and between Owner and Operator, dated April 13, 2012 (the "Original MOMA");

WHEREAS, on or about the Agreement Date hereof, Owner and Operator are entering into that certain Repurchase Agreement, by and between Operator (as "Buyer") and Owner (as "Seller) of even date herewith (the "Existing System Repurchase Agreement"), pursuant to which, among other things, (i) Operator (as "Buyer" under such Existing System Repurchase Agreement) will purchase from Owner (as "Seller" under such Existing System Repurchase Agreement) and Owner will sell to Operator, the Existing Systems, and (ii) Operator will decommission and remove each Existing System from the Project Sites;

WHEREAS, on or about the Agreement Date hereof, Owner and Operator are entering into that certain Fuel Cell System Supply and Installation Agreement (the "New System CapEx Agreement"), pursuant to which, among other things, (i) Operator (as "Seller" under such New System CapEx Agreement) will sell to Owner (as "Buyer" under such New System CapEx Agreement) and Owner will purchase from Operator, new Bloom Systems with aggregate System Capacity of up to 27.5 MW (such Bloom Systems, the "New Systems") and all shared infrastructure BOF not already existing at the Project Site, and (ii) Operator will design, engineer, procure, construct, and commission each of the New Systems and such shared infrastructure BOF at the Project Sites; and

WHEREAS, Owner and Operator now wish to amend and restate the Original MOMA in order to, among other things, update the terms and conditions of Operator's operations and maintenance services for the Existing Systems until such Existing Systems are decommissioned and removed from the Project Sites, provide for Operator to operate and maintain the New Systems

and shared infrastructure BOF following such New Systems' commissioning pursuant to the New System CapEx Agreement, and make certain other amendments to the Original MOMA, all in accordance with the terms and conditions of this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants, representations, warranties and agreements hereinafter set forth, and intending to be legally bound hereby, the Parties agree as follows:

AGREEMENT

ARTICLE I.
DEFINITIONS

Section 1.1 Definitions. As used in this Agreement, capitalized terms not otherwise defined shall have the meanings set forth below:

"A&R Administrative Services Agreement" means that certain First Amended and Restated Administrative Services Agreement, amended and restated as of even date herewith, by and between Operator, as "Administrator," and Owner, as "Project Company."

"Actual Gas Consumption" with respect to any measurement period, the fuel consumed by the Project, measured in BTUs on a higher heating value basis as determined by the Facility Gas Meters.

"Actual kWh" means the actual electricity output in kWh produced by a Facility and measured by the Facility Meter and, where appropriate in the context of this Agreement, aggregated together with the actual electricity output of the other Facility.

"Affiliate" of any Person means a Person that directly, or indirectly through one or more intermediaries, controls, or is controlled by, or is under common control with, the Person specified, provided that notwithstanding anything in this Agreement to the contrary, Operator is not an Affiliate of Owner. For purposes of this Agreement, the direct or indirect ownership of over fifty percent (50%) of the outstanding voting securities of an entity, or the right to receive over fifty percent (50%) of the profits or earnings of an entity shall be deemed to constitute control. Such other relationships as in fact results in actual control over the management, business and affairs of an entity, shall also be deemed to constitute control.

"Agreement" is defined in the preamble.

"Agreement Date" is defined in the preamble.

"Appraisal Procedure" means within fifteen (15) days of a Party invoking the procedure described in this definition Owner and Operator shall engage a Qualified Appraiser, mutually acceptable to them, to conclusively determine within fifteen (15) days after appointment the Fair Market Value of a Bloom System.

"Bankruptcy" as to any Person means (a) such Person admits in writing its inability to pay its debts generally as they become due; (b) such Person files a petition or answer seeking reorganization or arrangement under the federal bankruptcy laws or any other Legal Requirements of the United States of America or any State, district or territory thereof; (c) such Person makes an assignment for the benefit of creditors; (d) such Person consents to the appointment of a receiver of the whole or any substantial part of its assets; (e) such Person has a petition in bankruptcy filed against it, and such petition is not dismissed within sixty (60) days after the filing thereof; (f) a court of competent jurisdiction enters an order, judgment, or decree appointing a receiver of the whole or any substantial part of such Person's assets, and such order, judgment or decree is not vacated or set aside or stayed

within sixty (60) days from the date of entry thereof; or (g) under the provisions of any other law for the relief or aid of debtors, any court of competent jurisdiction shall assume custody or control of the whole or any substantial part of such Person's assets and such custody or control is not terminated or stayed within sixty (60) days from the date of assumption of such custody or control.

"Bloom System" means a solid oxide fuel cell power generating system, capable of being powered by natural gas, which is designed, constructed and installed by Bloom Energy Corporation (a/k/a, "Operator" hereunder). For the avoidance of doubt, each Existing System and each New System constitutes a "Bloom System" for purposes of this Agreement.

"Bloom System Meter" means, with respect to a Bloom System, the internal electricity generation meter located within such Bloom System, which is designed to measure the actual electricity output in kWh produced by such Bloom System.

"BOF" means, for each Site, the (a) existing balance of facility items included in each Facility as of the Agreement Date, including, as applicable, Electrical Interconnection Facilities, the natural gas supply facilities, the water supply facilities, the data communications facilities, the foundations for the Existing Systems and any other facilities and equipment ancillary to the Existing Systems and installed in connection with the Facility at each Site and all other things ancillary to the Facility and required on or in the vicinity of the Site which are necessary for operation of the Existing Systems or which are otherwise required by the Tariff or Site Lease for such Site ("Existing BOF"), and (b) any new balance of facility items installed in a Facility after the Agreement Date, including, as applicable, any new components in respect of Electrical Interconnection Facilities, the natural gas supply facilities, the water supply facilities, or the data communications facilities, the foundations for the New Systems and any other facilities and equipment ancillary to the New Systems and installed in connection with the Facility at each Site and all other things ancillary to the Facility and required on or in the vicinity of the Site which are necessary to achieve Commissioning with respect to any New System at each such Site or which are otherwise required by the Tariff or Site Lease for any New System or Site ("New BOF"). For clarity, "BOF" excludes any Existing BOF item that is removed from a Facility as part of the Installation Services as of the date of such removal.

"Brookside Facility" means all Bloom Systems and BOF located at 512 E. Chestnut Hill Road, Newark, DE 19713.

"BTUs" means British Thermal Units.

"Business Day" means a day other than a Saturday, Sunday or other day on which banks in New York, New York, or San Francisco, California, are authorized or required to close.

"Calendar Quarter" means each period of three calendar months ending on March 31, June 30, September 30 and December 31.

"Claiming Party" is defined in Section 11.6.

"Coastal Zone Permit" means [*].

"Code" means the Internal Revenue Code of 1986, as amended.

"Commissioned" and "Commissioning" shall have the meaning afforded to such terms in the New System CapEx Agreement.

"Commissioning Date" means, with respect to any New System, the date on which Commissioning of such New System has occurred under the New System CapEx Agreement.

"Confidential Information" is defined in Section 9.1.

"Documentation" means Bloom System documentation for a Facility, including testing, engineering, specifications, and operations and maintenance manuals, Training Materials, drawings, reports, standards, schematics, directions, samples and patterns, including any such Documentation required to be delivered prior to Commissioning a Bloom System pursuant to the New System CapEx Agreement.

"DPL" means Delmarva Power & Light Company, d/b/a Delmarva Power, an investor owned utility company regulated by the Delaware Public Service Commission.

"DPL Agreements" means the service applications between Owner and DPL with respect to the REPS Act, the Tariff and the Gas Tariff, whereby DPL shall (a) serve as the agent for collection of amounts due from Owner (if any) and for disbursement of amounts due to Owner under the Tariff and (b) sell to Owner natural gas under the Gas Tariff.

"DSGP Operating Agreement" means that certain Third Amended and Restated Limited Liability Company Agreement of Diamond State Generation Partners, LLC, as amended and restated as of even date herewith, among SP Diamond State Class B Holdings, LLC, and Diamond State Generation Holdings, LLC.

"ECCA" means that certain Equity Capital Contribution Agreement, dated as of the date hereof, among Owner, Diamond State Generation Holdings, LLC, SP Diamond State Class B Holdings, LLC, and Operator.

"Efficiency" means, with respect the Portfolio or a Facility, as applicable, the quotient of F/E, where (a) F = the fuel consumed by the Bloom System(s) comprising the Portfolio or such Facility, as the case may be, measured in BTUs on a higher heating value basis as determined by the Facility Gas Meter(s) included in the Portfolio or such Facility, as the case may be, and (b) E = the electricity produced by the Bloom System(s), comprising the Portfolio or such Facility, as the case may be, measured in kWh as determined by the Facility Meter(s) included in the Portfolio or such Facility, as the case may be.

"Efficiency Guaranty" is defined in Section 4.3(a).

"Efficiency Guaranty Bank" means the virtual bank maintained by Operator in accordance with Section 4.3, tracking the Project's aggregate Efficiency for purposes of the Efficiency Guaranty.

"Efficiency Guaranty Payment Cap" means (a) from the Agreement Date until the last date of the Transition Period, the product of (x) [*] per kW multiplied by (y) the System Capacity of all Bloom Systems (in kW) in the Project as of the date of determination, and (b) thereafter, (x) the aggregate Purchase Price of all New Systems constituting the Project as of the applicable date, less (y) any amounts paid hereunder pursuant to the Output Guaranty.

"Electrical Interconnection Facilities" means the equipment and facilities required to safely and reliably interconnect a Facility to the transmission system of DPL or distribution system of PJM pursuant to the Interconnection Agreement for such Facility, including the collection system between the applicable Bloom System, transformers and all switching, metering, communications, control and safety equipment, including the facilities described in any applicable Interconnection Agreement.

"Environmental Law" means any applicable federal, state, or local laws, ordinances, rules or regulations relating to (a) protection of the air, water, land, natural resources, biological resources, or (b) the exposure to, or generation, use, handling, release, treatment, storage, disposal and transportation of, Hazardous Materials, in each case, including (to the extent applicable) the Comprehensive Environmental Response, Compensation and Liability Act (42 U.S.C. §§ 9601 et seq.), as amended by the Superfund Amendments and Reauthorization Act of 1986, the Emergency Planning and Community Right to Know Act (42 U.S.C. §§ 11001 et seq.), the Resource Conservation and Recovery Act of 1976 (42 U.S.C. §§ 6901 et seq.), as amended by the Hazardous and Solid Waste Amendments Act of 1984, the Clean Air Act (42 U.S.C. §§ 7401 et seq.), the Clean Water Act (33 U.S.C. §§ 1251 et seq.), the Toxic Substances Control Act (15 U.S.C. §§ 2601 et seq.), the Safe Drinking Water Act (42 U.S.C. §§ 300f et seq.), the Oil Pollution Act of 1990 (33 U.S.C. §§ 2701 et seq.), the Hazardous Materials Transportation Act (49 U.S.C. §§ 5101 et seq.), and any other state or federal environmental statutes, and all rules, regulations, orders and decrees now or hereafter promulgated under any of the foregoing, as any of the foregoing now exist or may be changed or amended or come into effect in the future.

"Environmental Requirements" means any Environmental Law, agreement or restriction (including any condition or requirement imposed by any insurance or surety company), as the same now exists or may be changed or amended or come into effect in the future, which pertains to (a) the protection of air, water, land, natural resources, biological resources, or (b) the exposure to, or generation, use, handling, release, treatment, storage, disposal and transportation of, Hazardous Materials.

"Existing BOF" has the meaning set forth in the definition of "BOF."

"Existing Systems" is defined in the Recitals.

"Existing System MESPA" is defined in the Recitals.

"Existing System Operation Excuse" is defined in Section 3.3(c).

"Existing System Portfolio" means, as of any date of determination, collectively, the Existing Systems that have not, as of such date, had their respective title transferred to Operator pursuant to the Existing System Repurchase Agreement.

"Existing System Portfolio Output Warranty" is defined in Section 4.6.

"Existing System Repurchase Agreement" is defined in the Recitals.

"Extended Warranty Period" means, (A) with respect to each Bloom System, the period commencing on the Commissioning Date of such Bloom System and ending on the thirtieth (30^{th}) anniversary of such date, and (B) with respect to the BOF, the period commencing on the Agreement Date and ending on the thirtieth (30^{th}) anniversary of the Commissioning Date of the final New System to achieve such milestone.

"Facility" means, with respect to each of the Brookside Facility and the Red Lion Facility, the Existing Systems, the New Systems, and the BOF at such Site, as may at any point in time share a single Interconnection Point and be operated as a unified whole.

"Facility Meter" means the revenue quality electricity generation meter located at the metering point, which shall register all energy produced by a Facility and delivered to the Interconnection Point.

"Facility Services" is defined in Section 3.1.

"Facility Services Warranty" is defined in Section 4.1.

"Facility Gas Meter" means, with respect to a Facility, the gas meter at the applicable Site, measuring the gas supplied to the Bloom Systems operating at such Site pursuant to the applicable Gas Supply Agreement.

"Fair Market Value" means, with respect to any Bloom System, the price at which such asset would change hands between a willing buyer and a willing seller, neither being under any compulsion to buy or to sell, and both having reasonable knowledge of the relevant facts, and specifically with respect to a Bloom System or any portion thereof, as determined consistently with Section 4.05 of Revenue Procedure 2007-65.

"FERC" means the Federal Energy Regulatory Commission and any successor.

"Force Majeure Event" means any event or circumstance that (a) prevents a Party from performing its obligations under this Agreement; (b) was not reasonably foreseeable by such Party; (c) was not within the reasonable control of, or the result of the negligence of such Party or a breach of this Agreement by such Party; and (d) such Party is unable to reasonably mitigate, avoid or cause to be avoided with the exercise of due diligence. "Force Majeure Event" may include, provided that the conditions in (a) through (d) in the foregoing sentence are met, a failure or interruption of performance due to an act of God, civil or military

authority, war, civil disturbances, terrorist activities, fire, explosions, the external power delivery system (a/k/a the grid) being out of the required specifications or totally failing (a/k/a brownout or blackout), electric grid curtailment, or a change in Legal Requirements following the Agreement Date. Notwithstanding the foregoing, Force Majeure Event does not include the lack of economic resources of a Party or Operator's failure to design and construct the Facilities so as to meet the respective warranties hereunder.

"Fundamental Representation" means the representations provided in [*], [*] and [*].

"GAAP" means United States generally accepted accounting principles consistently applied.

"Gas Supply Agreement" means, with respect to (a) the Brookside Facility, that certain Large Volume Gas Qualified Fuel Cell Provider – Renewable Capable Service Agreement, dated as of June 19, 2012, by and between DPL and Owner; and (b) the Red Lion Facility, that certain Large Volume Gas Qualified Fuel Cell Provider – Renewable Capable Service Agreement, dated as of December 12, 2012, by and between DPL and Owner.

"Gas Tariff" means DPL's Service Classification "LVG-QFCP-RC" filed for gas service applicable to REPS Qualified Fuel Cell Provider Projects and approved by the DPSC in Order no. 8062 dated October 18, 2011, as adopted and supplemented by DPSC's Findings, Opinion and Order No. 8079, dated December 1, 2011.

"Governmental Approvals" means (a) any authorizations, consents, approvals, licenses, rulings, permits, tariffs, rates, certifications, variances, orders, judgments, decrees by or with a relevant Governmental Authority and (b) any required notice to, any declaration of, or with, or any registration or filing by, or with, any relevant Governmental Authority.

"Governmental Authority" means any foreign, federal, state, local or other governmental, regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, court, tribunal, arbitrating body or other governmental authority, or the applicable Regional Transmission Organization or Independent System Operator subject to the jurisdiction of FERC (i.e., PJM as of the Agreement Date).

"Guaranteed Gas Consumption" means, with respect to any measurement period, the greatest quantity of fuel that may be consumed by the Bloom System(s) constituting the Project during such period, measured in BTUs on a higher heating value basis as determined by the Facility Gas Meters, in order to maintain the Minimum Project Efficiency Level with respect to such Bloom Systems based on Actual kWh produced by such Bloom Systems during such measurement period.

"Hazardous Material" means any hazardous or toxic material, substance, waste, pollutant, or contaminant as defined, prohibited, controlled or regulated under any Environmental Law, including, explosive or radioactive substances or wastes, hazardous or toxic substances, wastes or other pollutants, petroleum or petroleum distillates, asbestos or asbestos-containing materials, polychlorinated biphenyl, or radon gas.

"Indemnifiable Loss" means any claim, demand, suit, loss, liability, damage (including any losses arising as a result of the loss or recapture of any ITC), obligation, payment, fine, cost or expense (including the cost and expense of any investigation, action, suit, proceeding, assessment, judgment, settlement or compromise relating thereto and reasonable attorneys' fees and reasonable disbursements in connection therewith).

"Indemnified Party" is defined in Section 12.4.

"Indemnifying Party" is defined in Section 12.4.

"Installation Services" shall have the meaning afforded to such term in the New System CapEx Agreement.

"Intellectual Property" shall mean any or all of the following and all rights therein, whether arising under the laws of the United States or any other jurisdiction (a) all patents and patent applications (and all reissues, divisions, re-examinations, renewals, extensions, provisionals, continuations and continuations-in-part thereof), patent disclosures and inventions (whether patentable or not); (b) all trade secrets, know-how and confidential and proprietary information; (c) all copyrights and copyrightable works (including computer programs) and registrations and applications therefor and any renewals, modifications and extensions thereof; (d) all moral and economic rights of authors and inventors, however denominated, throughout the world; (e) unregistered and registered design rights and any registrations and applications for registration thereof; (f) trademarks, service marks, trade names, service names, brand names, trade dress, logos, slogans, corporate names, trade styles, domain names and other source or business identifiers, whether registered or not, together with all applications therefor and all extensions and renewals thereof and all goodwill associated therewith; (g) semiconductor chip "mask" works, and registrations and applications for registration thereof; (h) database rights; (i) all other forms of intellectual property, including waivable or assignable rights of publicity or moral rights; and (j) any similar, corresponding or equivalent rights to any of the foregoing anywhere in the world.

"[*]".

"Interconnection Agreement" means, with respect to (a) the Brookside Facility, that certain Standard Agreement for Interconnection and Parallel Operation of Generation Facilities, dated as of March 27, 2012, by and between DPL and Owner, with respect to PJM Generation Interconnection Request Queue Position X2-083; and (b) the Red Lion Facility, that certain Interconnection Service Agreement, dated as of June 19, 2012, by and among PJM Interconnection, L.L.C., Owner, and DPL, with respect to PJM Generation Interconnection Request Queue Position X1-097.

"Interconnection Point" means, with respect to (a) the Brookside Facility, the "Point of Interconnection" specified in the Interconnection Agreement for such Facility; and (b) the Red Lion Facility, the "Point of Interconnection" specified in the Interconnection Agreement for such Facility.

"IP License" is defined in the New System CapEx Agreement.

"IRS" means the Internal Revenue Service.

"ITC" means an investment tax credit pursuant to Code Sections 38(b)(1), 46 and 48(a).

"Knowledge" means (a) as to any Person other than a natural person, the actual knowledge (including any knowledge which would reasonably have been obtained after due inquiry) of such Person and its managers, directors officers and employees who have responsibility for the transactions contemplated by this Agreement, and (b) in respect of any Person who is a natural Person, the actual knowledge (including any knowledge which would reasonably have been obtained after due inquiry) of such Person.

"kW" means kilowatt.

"kWh" means kilowatt-hour.

"Legal Requirement" means any law, statute, act, decree, ordinance, rule, directive (to the extent having the force of law), tariff, order, treaty, code or regulation or any interpretation of any of the foregoing, as enacted, issued or promulgated by any Governmental Authority, NERC, any Person that NERC has delegated its authority to under the Federal Power Act or any Person that operates an interstate electric transmission system, including all amendments, modifications, extensions, replacements or re-enactments thereof, in each case applicable to or binding upon such Person or any of its properties or to which such Person or any of its property is subject.

"Liens" means any lien, security interest, mortgage, hypothecation, encumbrance or other restriction on title or property interest.

"Maintenance Specification Log" is defined in Section 5.1(a)(ii).

"Major Service Provider" is defined in Section 13.14.

"Managers" means Operations Manager and Owner Manager.

"Manufacturer's Warranty Period" means, for (a) each New System, the period beginning on the Commissioning Date of such New System and ending on the first (1st) anniversary thereof, and (b) the New BOF at a Facility, the period beginning on the date that installation and commissioning of such BOF has been completed and ending on the first (1st) anniversary of the Commissioning Date of last New System Commissioned at such Facility.

"Material Adverse Effect" means, for any Person, any change, effect or occurrence that, individually or in the aggregate, is or could reasonably be expected to be materially adverse to (a) the business, earnings, assets, results of operations, property or condition (financial or otherwise) of such Person, (b) the validity or enforceability of this Agreement, any Site Lease or the transactions contemplated by this Agreement, or (c) any Person's ability to perform its obligations under this Agreement or any applicable Site Lease.

"Maximum Liability" means, with respect to (a) claims of one Party against the other Party arising with respect to any Existing System(s), [*]per kilowatt ($[*]/kW), calculated on the aggregate System Capacity of such Existing System(s), and (b) claims of one Party against the other Party arising with respect to any New System(s), [*].

"Minimum Project Efficiency Level" means, with respect to the Project and any measurement period, an Efficiency equal to 7,550 BTU/kWh.

"Minimum kWh" means the product of (x) (A) the number of hours in the applicable period, *minus* (B) the number of hours the applicable Bloom System(s) (or the Facility such Bloom System is incorporated into) was subject to any of the exclusions set forth in Section 4.8 (including any periods during which the applicable Bloom System(s) are ramping up or down in connection with suspended operations resulting from any such event), multiplied by (y) the applicable Minimum Power Product. An example of a calculation of the Minimum kWh is set forth in Annex A.

"Minimum Power Product" means (1) when this term is used for the Existing System Portfolio Output Warranty, the aggregate System Capacity of the Bloom Systems in the Existing System Portfolio in kW for the applicable Calendar Quarter multiplied by [*] %, (2) when this term is used for the New System Portfolio Output Warranty, the aggregate System Capacity of the Bloom Systems in the New System Portfolio in kW for the applicable calendar month multiplied by [*]%, and (3) when this term is used for the Output Guaranty, the aggregate System Capacity of the Bloom Systems in the New System Portfolio in kW for the applicable calendar month multiplied by [*]%. An example of a calculation of the Minimum Power Product is set forth in Annex A.

"Monthly Report" is defined in Section 5.1(a)(iv).

"MW" means megawatt.

"NERC" means the North American Electric Reliability Corporation or any successor.

"New BOF" has the meaning set forth in the definition of "BOF."

"New Systems" is defined in the Recitals.

"New System CapEx Agreement" is defined in the Recitals.

"New System Operation Excuse" is defined in Section 3.3(c).

"New System Portfolio" means, as of any date of determination, collectively, the New Systems that have, as of such date, been "Commissioned" pursuant to the New System CapEx Agreement.

"New System Portfolio Output Warranty" is defined in Section 4.5(a).

"New System Portfolio Output Warranty Bank" means the virtual bank maintained by Operator pursuant to Section 4.5, tracking the New System Portfolio's aggregate surplus or deficit of electricity deliveries for purposes of the New System Portfolio Output Warranty.

"Operations Manager" is defined in Section 3.6(a).

"Operator" is defined in the preamble.

"Operator Default" is defined in Section 11.1.

"Operator Indemnitee" is defined in Section 12.2.

"Operator Personnel" means any Person who is performing any Facility Services at the direction (or on behalf) of Operator, including the Operations Manager, any Service Technicians, subcontractors (at any tier), Service Providers (including Major Service Providers), Representatives, or agents (irrespective if such Person is employed or engaged by Owner, Operator, an Affiliate of Operator or any other Person).

"Original MOMA" is defined in the Recitals.

"Output Guaranty" is defined in Section 4.2(a).

"Output Guaranty Bank" means the virtual bank maintained by Operator in accordance with Section 4.3, tracking the Project's aggregate output for purposed of the Output Guaranty.

"Output Guaranty Payment Cap" means, as of any date of determination, the product of (x) [*]% and (y) the aggregate Purchase Price of all New Systems (in kW) included in the New System Portfolio as of such date.

"Output Guaranty Payment Rate" means the "Disbursement Rate" in effect pursuant to the Tariff as of the applicable date divided by [*] so that such rate is stated on a dollar-per-kWh ($/kWh) basis.

"Owner" is defined in the preamble.

"Owner Default" is defined in Section 11.2.

"Owner Indemnitee" is defined in Section 12.3(a).

"Owner Manager" is defined in Section 3.6(b).

"Party" and "Parties" have the meanings set forth in the preamble.

"Payment Date Amount" is defined in the Existing System Repurchase Agreement.

"Performance Standards" is defined in Section 2.3.

"Permits" means all Governmental Approvals that are necessary under applicable Legal Requirements or this Agreement to have been obtained at such time in light of the stage of development of the Project to construct, maintain, and operate the Facilities, to perform the Installation Services for the New Systems as contemplated by the New System CapEx Agreement or to sell electricity from the Portfolio (other than the Tariff) or for a Party to enter into this Agreement or to consummate any transaction contemplated hereby, in each case in accordance with all applicable Legal Requirements.

"Permitted Liens" means any (a) obligations or duties to any Governmental Authority arising in the ordinary course of business (including under licenses and Permits held by Owner and under all Legal Requirements); (b) obligations or duties under easements, leases or other property rights; and (c) any other Liens agreed to in writing by Operator and Owner.

"Person" means any individual, partnership, limited liability company, joint venture, corporation, trust, unincorporated organization, or governmental entity or any department or agency thereof.

"PJM" means PJM Interconnection, LLC.

"PJM Agreements" is defined in the Tariff.

"PJM Market Rules" means (a) the rules and obligations set forth in Section C (*Sales of Energy, Capacity, Other Available Product*) of the Tariff, and (b) the provisions of all applicable PJM rules and procedures pertaining to generation and transmission, including the rules and procedures concerning the dispatch of generation or scheduling transmission set forth in the applicable PJM tariff, the PJM operating agreement, and applicable PJM manuals.

"Portfolio(s)" means each of (a) the Existing System Portfolio, and (b) the New System Portfolio.

"Portfolio Output Warranty" means each of the Existing System Portfolio Output Warranty and the New System Portfolio Output Warranty.

"Portfolio Output Warranty Testing Period" is defined in Section 4.9(e).

"Project" means as to any time of determination (a) all Existing Systems purchased and owned by Owner pursuant to the Existing System MESPA, (b) all New Systems purchased and owned by Owner pursuant to the New System CapEx Agreement, and (c) all BOF associated with all such Bloom Systems owned by Owner at such time.

"Project Warranty" is defined in Section 4.7(a).

"Prudent Electrical Practices" means those practices, methods, equipment, specifications and standards of safety and performance, as the same may change from time to time, as are commonly used by a significant portion of the grid-tied fuel cell electrical generation industry operating in the United States and/or approved or recommended by the NERC as good, safe

and prudent engineering practices in connection with the design, construction, operation, maintenance, repair and use of electrical and other equipment, facilities and improvements of electrical generating facilities, including any applicable practices, methods, acts, guidelines, standards and criteria of FERC and all applicable Legal Requirements.

"Purchase Price" means, with respect to a New System, the dollar-per-kilowatt ($/kW) purchase price paid for such New System pursuant to the New System CapEx Agreement (calculated on the basis of such New System's rated System Capacity), plus any taxes paid by Owner to Operator for such New System pursuant to the New System CapEx Agreement.

"Qualified Appraiser" means a nationally recognized third-party appraiser reasonably acceptable to Owner and Operator which shall (a) be qualified to appraise power systems similar to the Bloom Systems, and experienced in such businesses in the general geographic region of the relevant Facility, and (b) not be associated with either Owner or Operator or any Affiliate thereof. If the Parties cannot agree on a third-party appraiser within fifteen (15) days of a Party invoking the Appraisal Procedure, then Marshall & Stevens Incorporated shall act as the Qualified Appraiser.

"Qualified Fuel Cell Provider" shall have the meaning afforded such term in Section 352(16) of the Renewable Energy Portfolio Standards Act, as amended by S.B. 124, enacted July 10, 2011 (Title 26, Chap. 1, section 351 et seq. of the Code of the State of Delaware).

"Qualified Fuel Cell Provider Project" shall have the meaning afforded such term in Section 352(17) of the Renewable Energy Portfolio Standards Act, as amended by S.B. 124, enacted July 10, 2011 (Title 26, Chap. 1, section 351 et seq. of the Code of the State of Delaware).

"Red Lion Facility" means all Bloom Systems and BOF located at 1493 River Road, New Castle, DE 19720.

"Remaining Existing Systems" is defined in Section 3.3(a).

"Representatives" of a Party means such Party's authorized representatives, including its professional and financial advisors.

"REPS Act" means the Renewable Energy Portfolio Standards Act, as amended by S.B.124, enacted July 10, 2011 (Title 26, Chap. 1, section 351 et seq. of the Code of the State of Delaware).

"Repurchase Amount" means, (1) with respect to any Existing System, the sum of (a) $[*]/kW based on the System Capacity of such Existing System, and (b) one hundred percent (100%) of any Taxes, if any, that are required to be paid by Operator in connection with the return and repurchase of such Existing System, and (2) with respect to any New System, the sum of (a) the applicable Repurchase Value, (b) one hundred percent (100%) of the Taxes, if any, which were paid by or on behalf of Owner pursuant to Section 2.4(d) of the New System CapEx Agreement for such New System, and (c) one hundred percent (100%)

of any Taxes, if any, that are required to be paid by Operator in connection with the return and repurchase of such New System.

"Repurchase Value" means, with respect to any New System, the greater of (a) the Fair Market Value of such New System (as determined under the Appraisal Procedure if Owner and Operator cannot agree as to that Fair Market Value within ten (10) days)), and (b) 100% of the Purchase Price for such New System until the first anniversary of Commissioning, declining by [*]% on such first anniversary and on each anniversary of such date thereafter (for example, on the fourth anniversary of Commissioning, the Repurchase Value will decline to [*]% of the Purchase Price), in each case as calculated as of the date that Operator becomes obligated to pay such amount to Owner.

"Service Fees" is defined in Section 3.3(a).

"Service Provider" means an operation and maintenance contractor appointed by Operator and, if required, approved by Owner pursuant to Section 13.14.

"Service Technicians" is defined in Section 3.2(d).

"Site" means, with respect to the Brookside Facility and the Red Lion Facility, the real property leased to Owner for the use of such Facility pursuant to the Site Lease for such Facility.

"Site Landlord" means the applicable landlord under a Site Lease.

"Site Lease" means, with respect to (a) the Brookside Facility, that certain Lease Agreement, dated as of April 19, 2012, by and between the Delaware Department of Transportation and Owner; and (b) the Red Lion Facility, that certain Amended and Restated Lease Agreement, dated as of June 26, 2012, by and between DPL and Owner.

"Software" shall mean all computer software that is necessary for Owner to own and operate the Facilities in compliance with the terms of this Agreement, the New System CapEx Agreement, the Tariff, PJM Market Rules, the PJM Agreements, the DPL Agreements, the DSGP Operating Agreement, and the Site Leases.

"Software License" is defined in the New System CapEx Agreement.

"Specifications" means the specifications for the Bloom Systems, as applicable, as set forth in Exhibit A.

"System Capacity" means, with respect to any Bloom System, the "System Capacity" set forth on the applicable specification sheet provided by the manufacturer of such Bloom System.

"Tariff" means Service Classification "QFCP-RC" as administered by DPL, as approved by the DPSC in Order no. 8062 dated October 18, 2011, as adopted and supplemented by DPSC's Findings, Opinion and Order No. 8079, dated December 1, 2011.

"Tax" (and, with correlative meaning, "Taxes" and "Taxable") means:

(a) any taxes, customs, duties, charges, fees, levies, penalties or other assessments imposed by any federal, state, local or foreign taxing authority, including income, gross receipts, windfall profit, severance, property, production, sales, use, license, excise, franchise, net worth, employment, occupation, payroll, withholding, social security, alternative or add-on minimum, ad valorem, transfer, stamp, or environmental tax, or any other tax, custom, duty, fee, levy or other like assessment or charge of any kind whatsoever, together with any interest, penalty, addition to tax, or additional amount attributable thereto; and

(b) any liability for the payment of amounts with respect to payment of a type described in clause (a), including as a result of being a member of an affiliated, consolidated, combined or unitary group, as a result of succeeding to such liability as a result of merger, conversion or asset transfer or as a result of any obligation under any tax sharing arrangement or tax indemnity agreement.

"Term" means the period which (a) shall commence on the Agreement Date and (b) shall, unless terminated earlier under ARTICLE XI of this Agreement or unless extended by mutual agreement of the Parties, terminate on the date that is the last day of the Warranty Period for the last Bloom System subject to the Warranty Period.

"Third Party Claim" means any claim, action, or proceeding made or brought by any Person who is not (a) a Party to this Agreement, or (b) an Affiliate of a Party to this Agreement.

"Third Party Operator" is defined in Section 11.7.

"Third Party Warranty" is defined in Section 2.6.

"Training Materials" is defined in Section 13.15.

"Transaction Documents" means the ECCA, DSGP Operating Agreement, the New System CapEx Agreement, this Agreement, the A&R Administrative Services Agreement, and the Existing System Repurchase Agreement.

"Transition Period" means the period beginning on the Agreement Date and ending on the date that title to all Existing Systems has passed to Operator pursuant to the Existing System Repurchase Agreement.

"Transmitting Utility" means, with respect to a Facility, the counterparty to the applicable Interconnection Agreement.

"Underperforming Bloom System" means any Bloom System that fails to deliver, in any Calendar Quarter or calendar month (as applicable) during which a Portfolio fails to satisfy a Portfolio Output Warranty, a number of kWh greater than or equal to such Bloom System's *pro rata* portion of the applicable Portfolio's Minimum kWh.

"Warranty Correction Date" means the date on which Operator has completed the repair or replacement of Bloom Systems following a valid claim under a Portfolio Output Warranty, as notified to Owner in writing.

"Warranty Period" means, (a) for each Existing System that is repurchased pursuant to the Existing System Repurchase Agreement and Existing BOF that is removed and disposed of in connection with Installation Services, the period between the Agreement Date and the date on which title to such Existing System or Existing BOF, as applicable, has passed to Operator (as "Buyer") pursuant to the Existing System Repurchase Agreement, (b) for each Existing System that is not repurchased pursuant to the Existing System Repurchase Agreement, the period beginning on the date of Commencement of Operations (as defined in the Original MOMA) of such Existing System and ending on the twenty-first (21st) anniversary of such Commencement of Operations (as defined in the Original MOMA) date for such Existing System, (c) for each Existing BOF item that is necessary for the operation of an Existing System that is not repurchased pursuant to the Existing System Repurchase Agreement, the period beginning on the latest date of Commencement of Operations (as defined in the Original MOMA) of an Existing System that requires such Existing BOF to operate and ending on the twenty-first (21st) anniversary of such Commencement of Operations (as defined in the Original MOMA) date for such Existing System, and (d) for each New System and New BOF, the Manufacturer's Warranty Period, as extended or renewed by Owner pursuant to Section 3.1(b), *provided*, that the Warranty Period for each New System and New BOF shall in all events end on the expiration of the applicable Extended Warranty Period for such New System or New BOF.

"Warranty Specifications" means the Portfolio Output Warranties, the Output Guaranty, and the Efficiency Guaranty.

Section 1.2 Other Definitional Provisions.

(a) All exhibits, annexes, and schedules attached to this Agreement are incorporated herein by this reference and made a part hereof for all purposes. References to sections, exhibits, annexes and schedules are, unless otherwise indicated, references to sections, exhibits, annexes and schedules to this Agreement. References to a section shall mean the referenced section and all sub-sections thereof.

(b) As used in this Agreement and in any certificate or other documents made or delivered pursuant hereto or thereto, financial and accounting terms not defined in this Agreement or in any such certificate or other document, and financial and accounting terms partly defined in this Agreement or in any such certificate or other document to the extent not defined, will have the respective meanings given to them under GAAP. To the extent that the definitions of financial and accounting terms in this Agreement or in any such certificate or other document are inconsistent with the meanings of such terms under GAAP, the definitions contained in this Agreement or in any such certificate or other document will control.

(c) The words "hereof," "herein," "hereunder," and words of similar import when used in this Agreement will refer to this Agreement as a whole and not to any particular provision of this Agreement. The terms "including" and "includes" mean "including without limitation" and "includes without limitation," respectively.

(d) The definitions contained in this Agreement are applicable to the singular as well as the plural forms of such terms and to the masculine as well as to the feminine and neuter genders of such terms.

(e) Any agreement or instrument defined or referred to herein or in any instrument or certificate delivered in connection herewith means (unless otherwise indicated herein) such agreement or instrument as from time to time amended, amended and restated, modified or supplemented and includes (in the case of agreements or instruments) references to all attachments thereto and instruments incorporated therein.

(f) Any references to a Person are also to its permitted successors and assigns.

(g) References to any statute, code or statutory provision are to be construed as a reference to the same as it exists as of the Agreement Date, or date a Party performed or was required to perform an obligation hereunder (as applicable), and include references to all bylaws, instruments, orders and regulations for the time being made thereunder or deriving validity therefrom unless the context otherwise requires.

ARTICLE II.
APPOINTMENT OF OPERATOR AS SERVICE PROVIDER

Section 2.1 Appointment of Operator. Subject to Section 13.13, Owner hereby appoints Operator to act as Owner's provider of Facility Services, and Operator hereby accepts such appointment and agrees to provide all such Facility Services, inclusive of all labor, equipment, materials, supplies, and tests therefor, in accordance with the terms and conditions set forth in this Agreement. Operator shall be entitled to Services Fees in respect of Facility Services rendered with respect to such Facility as described in Section 3.3.

Section 2.2 Access to Sites. Owner shall provide Operator with access to the Sites in a manner consistent with the Site Leases to permit Operator to perform the Facility Services.

Section 2.3 Performance Standards. For the purpose of this Agreement, Operator shall perform under this Agreement in accordance and consistent with each of the following (unless the context requires otherwise), in each case to the extent applicable to the Facility Services: (A) plans and specifications subject to Permits under Legal Requirements and applicable to each New System; (B) the

manufacturer's recommendations with respect to all equipment and all maintenance and operating manuals or service agreements, whenever furnished or entered into, including any subsequent amendments or replacements thereof, issued by the manufacturer, provided they are consistent with generally accepted practices in the fuel cell industry; (C) the requirements of all applicable insurance policies; (D) preserving all rights to any incentive payments, warranties, indemnities or other rights or remedies, and enforcing or assisting with the enforcement of the applicable warranties, making or assisting in making all claims with respect to all insurance policies; (E) the Tariff, the PJM Market Rules, the DPL Agreements and the PJM Agreements; (F) all Legal Requirements and Permits/Governmental Approvals; (G) any applicable provisions of the Site Leases; (H) Prudent Electrical Practices; (I) the relevant provisions of each Interconnection Agreement; (J) the Operator Corporate Safety Plan provided in Exhibit C (as updated by Operator from time to time, with a copy provided promptly to Owner); (K) the Operator Subcontractor Quality Plan provided in Exhibit D (as updated by Operator from time to time, with a copy provided promptly to Owner) (L) all Environmental Requirements; and (M) the environmental compliance duties provided in Exhibit E (collectively, the "Performance Standards"); provided, however, that meeting the Performance Standards shall not relieve Operator of its other obligations under this Agreement.

Section 2.4 Disposal; Right of First Refusal.

(a) Except as set forth in Section 11.9, Section 13.4 or in connection with a repurchase of an Existing System pursuant to the Existing System Repurchase Agreement, in the event that Owner decides to scrap, abandon or otherwise dispose of any Bloom System, Owner shall notify Operator and Operator shall have the right but not the obligation to obtain title to the Bloom System and remove the Bloom System at Operator's cost; provided, however, that Operator will not be responsible for remediation of the Site in which the Bloom System was located.

(b) Except as set forth in Section 13.4 or in connection with a repurchase of an Existing System pursuant to the Existing System Repurchase Agreement, in the event that Owner or its Affiliates desire to sell or otherwise transfer title to any Bloom System to a transferee other than an Affiliate of Owner, Owner shall notify Operator and Operator shall have the right of first refusal to purchase or acquire the Bloom System on the same terms and conditions of such sale. In the event that Operator exercises such right of first refusal, Operator shall, promptly following payment of the purchase price of such Bloom System, remove the Bloom System at Operator's cost, including the remediation of the Site in which the Bloom System was located in accordance with the terms of the applicable Site Lease.

Section 2.5 Insurance. Operator shall maintain the insurance described in Annex B.

Section 2.6 Third Party Warranties. If any express or implied warranties, indemnities, guaranties, remedies, covenants and other rights which any

subcontractor or supplier has made to Operator with respect to any good, service, or other deliverable furnished under this Agreement in respect of a Facility (each a "Third Party Warranty") would provide an additional rights to Owner beyond the warranties under ARTICLE IV, then (a) such Third Party Warranty providing additional rights will be for the benefit of and passed through to Owner to the fullest extent possible, (b) Operator transfers and assigns to Owner all of Operator's right, title and interest under such Third Party Warranty to exercise such additional rights, and (c) Operator hereby appoints Owner as attorney-in-fact coupled with an interest to exercise and enforce all such additional rights in the name of either Owner or Operator. Nothing in this Section 2.6 will limit Operator's obligations to Owner under ARTICLE IV.

Section 2.7 Access; Cooperation. Operator shall provide to Owner such other information that is in the possession of Operator or its Affiliates or is reasonably available to Operator regarding the permitting, engineering, construction, or operations of Operator, its subcontractors or the Facilities, and other data concerning Operator, its subcontractors or the Facilities that Owner may, from time to time, reasonably request in writing, subject to Operator's obligations of confidentiality to third parties with respect to such information and Operator's reasonable concerns regarding protection of highly confidential information and/or trade secrets. Operator shall not knowingly take any action or omit to take any action as would cause Owner in any material respect to violate any Legal Requirements, and to the extent that Operator has knowledge of any such existing or prospective violation, shall take, or cause to be taken, commercially reasonable actions, to redress or mitigate any such violation, which action shall be at Operator's sole expense if Operator is obligated to perform such action as part of the Facility Services, and otherwise shall be at Owner's sole expense. For the avoidance of doubt, Operator shall not be excused from any indemnification obligations, claims for damages or Indemnifiable Losses suffered by Owner to the extent caused by Operator's violation of Legal Requirements or Owner's violation of Legal Requirements to the extent relating to, resulting from or arising out of or in connection with any act or omission by Operator, any Affiliate of Operator, or any Operator Personnel. Operator shall give to Owner prompt written notice of any disputes with Governmental Authorities. Operator shall furnish, or cause to be furnished, to Owner copies of all material documents furnished to Operator by any Governmental Authority in respect of Owner or any Facility.

ARTICLE I.

FACILITY SERVICES

Section 1.1 In General.

(a) During the Warranty Period, in consideration of the Service Fees, Operator shall service each Bloom System and all associated BOF (including, for clarity, all New BOF) so that each Bloom System, each Portfolio and the Project

performs in accordance with the Warranty Specifications and so that the BOF will not cause the Portfolio to fail to perform in accordance with the Warranty Specifications (as applicable), as more fully set forth in ARTICLE IV. Without limiting the foregoing, Operator agrees to perform on behalf of Owner all operations and maintenance obligations in respect of each Facility under the Tariff, PJM Market Rules, and Site Lease in a manner fully consistent with the terms and conditions of such documents. The services set forth in this Section 3.1, as more fully described in this ARTICLE III, are collectively referred to herein as the "Facility Services." For clarity, but without in any way excusing Operator from its obligations hereunder or under any other Transaction Document or Owner's remedies for breach thereof, Operator shall have no liability, authority or responsibility with respect to the payment or receipt of monies from PJM or DPL or with respect to serving or receiving formal notices to or from PJM, DPL, and Site Landlords; provided, however, that Operator may informally communicate with PJM, DPL, and Site Landlords regarding routine, day-to-day Facility Services matters. For so long as Operator is performing Facility Services in respect of a Facility (or any portion thereof), the Parties intend that Operator shall be responsible for all operational and scheduled preventative maintenance (including all of the Operator's obligations under the Interconnection Agreement), and unscheduled corrective maintenance activities in respect of such Facility that are required to be performed physically at the Site. If a Party has any uncertainty regarding which Party is responsible for particular obligations, the Party's Manager shall discuss such matter with the other Party's Manager to implement the allocation of responsibility intended by this Agreement and the Parties thereafter shall, if necessary, amend this Agreement to clarify the Parties' agreement regarding such allocation of responsibility.

(b) Upon the expiration of the Manufacturer's Warranty Period with respect to any New System(s) and New BOF, Owner may, at its option, elect to renew the Warranty Period with respect to such New System(s) and New BOF for a period of one (1) additional year, *provided*, that the Warranty Period for such New System and New BOF shall in all events end on the expiration of applicable Extended Warranty Period for such New System and New BOF. The Warranty Period for each New System and New BOF shall be automatically renewed for a period of one (1) additional year at the termination of the existing Warranty Period if Owner has not informed Operator in writing of its election to terminate the Warranty Period at the end of such existing Warranty Period at least thirty (30) days prior to the final date of such existing Warranty Period.

Section 1.2 Operation and Maintenance Services. Without limiting, and in furtherance of, Section 3.1, for the duration of the Warranty Period of the final Bloom System, Operator is hereby granted the right and authority (and, to the extent necessary to carry out its functions hereunder, a limited power of attorney) and agrees, for the benefit of Owner, to safely and reliably operate, maintain and repair each Bloom System and all related items of BOF (including, for clarity, all New BOF) in accordance with the terms of this Agreement and keep each such Bloom

System and BOF items in good condition and repair in accordance with the Warranty Specifications, Performance Standards and Prudent Electrical Practices. During the Warranty Period, the specific responsibilities of Operator under this Agreement shall include the following:

(a) Facility Operations. Operator shall ensure that all Bloom Systems and each item of BOF are operated and maintained safely and in a manner designed to meet the Warranty Specifications and Performance Standards and as otherwise required under this Agreement.

(b) Facility Maintenance, Repair and Replacement. Operator shall perform, or cause to be performed, all scheduled and unscheduled maintenance, repair and replacement required so that each Bloom System and the Portfolio (as applicable) performs in accordance with the Warranty Specifications and Performance Standards. In that regard, Operator's responsibilities hereunder shall include promptly correcting any Bloom System or BOF malfunctions, either by (i) recalibrating or resetting the malfunctioning Bloom System or BOF or New BOF, or (ii) subject to Section 4.9(b), repairing or replacing Bloom System or BOF components which are defective, damaged, worn or otherwise in need of repair or replacement. Operator agrees to respond in a timely manner to any Facility outage or other casualty that materially reduces power output by (A) promptly diagnosing the source of such issue and (B) if on-Site Facility Services are required, using commercially reasonable efforts to (1) dispatch field service personnel to the Site within six (6) hours of Operator's Knowledge that such on-Site Facility Services are required, and (2) cause its field service personnel to arrive at the applicable Site in order to commence diagnosis and/or repair services at the applicable Facility no later than the next Business Day. Without in any way limiting the foregoing, Operator shall in any event comply with any and all response time(s) and/or corrective activity(ies) required by the applicable Site Lease or Interconnection Agreement. Operator shall calibrate, or cause to be calibrated, not less than once per year all measurement tooling used for Facility Services as well as Bloom System and BOF measurement equipment and components, including the Facility Meter, the Facility Gas Meter, and the Bloom System Meters for all Bloom Systems. Any of costs associated with services performed by third parties with respect to the calibration of the Facility Meters and Facility Gas Meters shall be paid by Owner to such third party(ies) directly or subject to reimbursement by Owner if Operator pays such costs for Owner's convenience.

(c) Repair and Replacement of Power Modules. Owner agrees that Operator may replace the power modules included in each Bloom System with power modules of a different model provided that such replacement model has been subjected to inspections and tests performed by Operator which indicate that such replacement power module model is reasonably expected to perform at least as well as the model it replaces; provided, however, that, upon Owner's request, Operator agrees to promptly provide Owner with copies of such inspection and test results.

Notwithstanding the foregoing, Operator represents to Owner that it reasonably expects that any repair or replacement of power modules to be made within five (5) years of the date the applicable Bloom System was Placed in Service will have an aggregate value of replaced parts that is less than eighty percent (80%) of the Bloom System's total value (the cost of the new parts plus the value of the remaining Bloom System originally Placed in Service).

(d) Personnel. Operator shall ensure that all operations and maintenance functions contemplated by this Section are performed by technically competent and qualified personnel (the "Service Technicians"). Operator shall ensure that all Service Technicians: (i) participate in a maintenance training program and receive confirmation of having achieved the requisite level of proficiency for the tasks they are assigned to perform, and (ii) attend periodic "refresher" training programs to the extent Operator deems necessary, in its reasonable judgment.

(e) Spare Parts. Operator shall establish and maintain an adequate inventory of spare parts in one or more locations to facilitate scheduled and unscheduled maintenance required on the Facilities.

(f) Programs and Procedures. Operator represents and warrants to Owner that, as of the Agreement Date, Operator has adopted and implemented (and until the end of the Warranty Period Operator shall maintain) programs and procedures, consistent with Prudent Electrical Practices, intended to ensure safe and reliable operation of the Facilities. Operator may update such programs and procedures from time-to-time during the Term as it may determine appropriate, in its reasonable judgment and in accordance with Prudent Electrical Practices. Owner may, not more than once per calendar year and at Owner's sole cost and expense, review such programs and procedures from time to time to confirm compliance with Prudent Electrical Practices. Owner may from time to time provide comments on any such Operator programs and procedures and Operator agrees to consider any such comments in good faith; provided that Owner's review and comment on any such program or procedure will not relieve Operator of any of its obligations under this Agreement.

(g) Operational Complaints. Operator will promptly provide notice to Owner if Operator has received any written communication from any Site Landlord, PJM, DPL or any other Person suggesting that such Person is dissatisfied with the operational performance of any Facility or with the manner in which Installation Services or Facility Services have been provided by Owner, Operator or any other Service Provider in respect of any Facility. If any Site Landlord, PJM, or DPL misdirects any written notice to Operator that should have been delivered to Owner under the applicable contract between Owner and such Person related to the applicable Facility, Operator shall promptly deliver such written notice to Owner.

(h) Operations, Maintenance, Repairs and Replacements Procedures. Without in any way limiting Operator's obligations pursuant to this Section 3.2,

Operator shall perform all operations, maintenance, repairs and replacement work in accordance with the provisions of Schedule 3.2.

(i) Title. Title to all replacement items, parts, materials and equipment supplied under or pursuant to this Agreement to Owner shall transfer to Owner upon installation or inclusion and commissioning in a Facility. Notwithstanding the foregoing, Operator shall be solely responsible for the management of and take title to any materials or waste generated as a result of the Facility Services, will be considered the "generator" of any wastes and the "arranger" of the disposal of any such materials or waste as those terms are defined under Environmental Laws, and shall have the right and obligation to dispose of any such materials or waste in any lawful manner that it chooses in its sole discretion at the Operator's cost. Upon replacement of an item or part as part of the Facility Services provided hereunder, Operator shall promptly remove such item or part and shall have the right and obligation to dispose of such replaced property in any lawful manner that it chooses in its sole discretion at the Operator's cost.Liens. Operator shall not directly or indirectly cause, create, incur, assume or suffer to exist any Lien on or with respect to any Site, Bloom System or Facility, and shall, within ten (10) Business Days after Operator becomes aware of the filing or creation of such Lien and at Operator's sole cost and expense, take such action as may be required to cause any Lien filed against the Site or Facility for work claimed to have been done for, or materials claimed to have been furnished to, Owner or its Affiliates to be discharged by bond or otherwise.Service Fees.

(j) Owner shall compensate Operator for the Facility Services, on a monthly basis in advance, by paying Operator the "Service Fees" equal to the sum of:

(i) For each Existing System as to which the Payment Date Amount has not yet been paid pursuant to the Existing System Repurchase Agreement as of the invoice date (the "Remaining Existing Systems"), (A) the rate (in $/kW) specified in Exhibit B hereto for the applicable calendar month, multiplied by (B) the aggregate System Capacity (in kW) of the Remaining Existing Systems; *provided*, that Operator acknowledges that Owner previously paid Service Fees under the Original MOMA on an annual basis in advance and therefore no Services Fee shall be due with respect to any Existing System until the calendar month immediately following the month in which the anniversary of the date on such Existing System achieved "Commencement of Operations" pursuant to the Existing System MESPA occurs; plus

(ii) For each New System, beginning on the first day following the expiration of the Manufacturer's Warranty Period for such New System, (A) the rate (in $/kW) specified in Exhibit B hereto for the applicable calendar month, multiplied by (B) the aggregate System Capacity (in kW) of such New System.

(k) If Facility Services are provided by Operator for a particular Bloom System for only a portion of any calendar month, the Service Fees due with respect to such Bloom System shall be pro-rated based on the number of days such Facility Services were provided in respect of such Bloom System during the calendar month.

(l) Service Fees shall be invoiced not later than five (5) Business Days prior to the first day of the applicable calendar month, and, subject to Section 3.3(f), shall be payable no later than the thirty (30) calendar days following such proper delivery of such invoice; provided, that the *pro rata* Service Fees for the calendar month in which a New System is Commissioned shall be invoiced and paid with the Service Fees for the subsequent calendar month. Interest shall accrue, unless being contested in good faith, daily on the Service Fees not paid when due, at the lesser of the monthly rate of (i) one and five-tenths percent (1.5%) and (ii) the highest rate permissible by law on such unpaid balance. Operator shall be under no obligation to provide or perform services hereunder for any Existing System (other than, during the Transition Period, with respect to the applicable BOFs) if any invoiced Service Fees under Section 3.3(a)(i) (other than Service Fees disputed in good faith) have not been paid in full when due until such date upon which such Service Fee has been paid ("Existing System Operation Excuse"). Operator shall be under no obligation to provide or perform services hereunder for any New System (other than, during the Transition Period, with respect to the applicable BOFs) if any invoiced Service Fees under Section 3.3(a)(ii) (other than Service Fees disputed in good faith or offset pursuant to Section 3.3(f)) have not been paid in full within thirty (30) days of invoice until such date upon which such Service Fee has been paid ("New System Operation Excuse"). For the avoidance of doubt, under no circumstances shall an Existing System Operation Excuse constitute a New System Operation Excuse or vice versa, such that Operator shall continue to provide services for all Existing Systems if Owner has paid all Service Fees for the Existing Systems hereunder even if Owner has failed to pay Service Fees for one or more New Systems, and vice versa.

(m) If Owner disputes any amount shown in an invoice issued by Operator in accordance with Section 3.3(a): (i) Owner must pay the undisputed portion of the invoice amount within the time prescribed by Section 3.3(a), and (ii) liability for the disputed portion of that invoice will be determined in accordance with the dispute resolution procedure set out in Section 13.5.

(n) Any disputed portion of an invoiced amount which was not paid under Section 3.3(d) and is determined as being due to Operator in accordance with the dispute resolution procedure set out in Section 13.5 must be paid by Owner within ten (10) days of the determination of the dispute in accordance with the procedure set out in Section 13.5 plus, if it is determined in accordance with the dispute resolution procedures that the disputed portion was not disputed in good faith, interest calculated in accordance with Section 3.3(c).

(o) Owner shall have the sole and absolute right to set off any undisputed amounts to which it is entitled to under this Agreement and which are past due, including under Section 4.9, against any amounts owed by Owner to Operator under this Agreement. The deduction of any such amounts shall operate for all purposes as a complete discharge (to the extent of such deduction) of the obligation of Owner to pay the amount from which such deduction was withheld and made. Neither the exercise of, nor the failure to exercise, such right of setoff will constitute an election of remedies or limit Owner in any manner in the enforcement of any other remedies that may be available to it.

(p) Owner at its sole option is hereby authorized to setoff any undisputed amounts owed Owner under the New System CapEx Agreement or this Agreement, as applicable, and which are past due against any amounts owed by Owner to Operator under the New System CapEx Agreement or this Agreement. The rights provided by this paragraph are in addition to and not in limitation of any other right or remedy (including any right to set-off, counterclaim, or otherwise withhold payment) to which Owner may be entitled (whether by operation of law, contract or otherwise).

(q) Owner acknowledges that the Service Fees set forth as of the Agreement Date reflect the Parties' agreement regarding such amounts based on the Operator's costs of performing the Facility Services in accordance with the terms of this Agreement, including all applicable Legal Requirements as of the Agreement Date. In the event of any change in Legal Requirements following the Agreement Date that results in a material increase in Operator's costs of performing the Facility Services following the Agreement Date, the Parties agree to negotiate in good faith regarding an appropriate adjustment to the Service Fees to reflect such increased costs.

Section 1.3 Remote Monitoring; BloomConnect. For purposes of monitoring the operational performance and determining when repair services are necessary, Operator shall monitor and evaluate the information gathered through remote monitoring of each Facility as well as the maintenance and inspection Site visits. For so long as Operator is responsible for the Facility Services in respect of any Facility, Operator shall provide Owner with access to the "BloomConnect" portal so that Owner may access to applicable information gathered through remote monitoring of such Facility. Such access shall be provided in real time or as close to real time as practicable.

Section 1.4 Permits; Tariff.

(a) Operator shall be responsible, at its sole cost and expense, for obtaining, maintaining and complying with all Permits required to perform the Facility Services under this Agreement, and shall promptly notify Owner of any written communications from Governmental Authorities or third parties with regard to Permits or compliance with Legal Requirements, or challenges to the status of a Permit for a Facility, or any other material issues or anticipated material issues

relating to obtaining or maintaining a Permit for a Facility. Owner shall cooperate with and assist Operator in obtaining all such Permits at Operator's sole cost and expense.

(b) Operator agrees to assist with the Owner's preparation and submission of all filings and notices of any nature which are required to be made by Owner under the terms of any Permit held by Owner or any Legal Requirements applicable to the Facilities or to Owner on account of the Facilities.

(c) Each of Owner and Operator shall, in connection with the matters referenced in Section 3.5(a) and Section 3.5(b), consult with each other in advance of any meeting or conference with any such Governmental Authorities or, in connection with any proceeding by any other Person, and to the extent permitted by the applicable Governmental Authority or other Person, give the other Party the opportunity to attend and participate in such meetings and conferences.

(d) If any Governmental Authority shall take any action which requires a response or action by Operator with respect to any Permits required to perform the Facility Services or related to compliance with Legal Requirements applicable to the Facility Services, Operator agrees immediately to notify Owner of the required response or action and shall proceed only with the prior advice of Owner, which shall not be unreasonably withheld, conditioned or delayed. Owner has the right to review and comment on Operator's draft responses to any Governmental Authorities regarding Permits required to perform the Facility Services or related to compliance with Legal Requirements applicable to the Facility Services prior to Operator's issuance of such response. Operator agrees to consider any comments or suggestions from Owner in good faith.

(e) Without limiting the foregoing, promptly following the Agreement Date, the Parties shall meet to discuss the applicability, desirability and timing for pursuing the "ingredient" exclusion contemplated by 40 CFR 261.2(e)(1)(i) in respect of desulfurization canisters removed from the Facilities in connection with the Facilities Services.

Section 1.5 Coordination of Relationship.

(a) Operator's Operations Manager. Operator shall at all times retain an operations manager (the "Operations Manager") who shall be dedicated to the overall supervision and management of performance of Operator's Facility Services obligations under this Agreement. Operator's initial Operations Manager is set forth on Exhibit K. Operator may, from time to time, designate another individual as a proposed replacement for the Operations Manager by notice to Owner. Operator's suggested replacement Operations Manager shall be subject to Owner's approval, which may not be unreasonably withheld or delayed in all instances. Where feasible, Owner shall have the opportunity to meet the replacement Operations Manager in person or telephonically prior to assignment. Such meeting will take place

telephonically except as otherwise agreed upon by the Parties. Nothing in this paragraph shall prevent Operator from assigning interim replacements on a temporary basis to enable it to continue to timely perform its obligations while assignment of a permanent replacement is pending. During the Term, Operator shall not assign the Operations Manager duties that are inconsistent or that conflict with the obligations of the Operations Manager in respect of his or her Facility Services duties.

(b) Owner Manager. Owner will appoint an individual to serve as its primary contact person with regard to this Agreement (the "Owner Manager"). Owner's initial Owner Manager is set forth on Exhibit K. Owner may, from time to time, designate another individual as a proposed replacement for the Owner Manager by notice to Operator.

(c) Manager Meetings. The Owner Manager and the Operations Manager will serve as each Party's main contact to, and for, the other Party with regard to day-to-day matters affecting the Parties' relationship in relation to Installation Services and Facility Services. The Owner Manager and the Operations Manager (or their designees) will meet, by phone or in person, as often as they feel necessary to monitor and manage such day-to-day activities. Such managers shall operate by consensus to the extent practicable but shall have no authority to amend or waive compliance with the terms and conditions of this Agreement, or to approve actions of the Parties that are inconsistent with this Agreement. Any such waivers or amendments shall be implemented only as described in Section 13.1 or Section 13.2, as the case may be.

ARTICLE II.
WARRANTIES

Section 2.1 Facility Services Warranty. Without limiting Operator's obligations under ARTICLE III, during the Warranty Period, Operator shall perform, or cause to be performed, all such Facility Services in respect of the Bloom Systems and the BOF and the New BOF necessary for the Project to perform in accordance with the Warranty Specifications (the "Facility Services Warranty").

Section 2.2 New System Portfolio Output Guaranty.

(a) During the Warranty Period, Operator shall determine within thirty (30) days after the end of each calendar month, whether the New System Portfolio has delivered the Minimum kWh to the applicable Interconnection Points during such calendar month ("Output Guaranty").

(b) If such calculation indicates that the Actual kWh delivered by the New System Portfolio was greater than the Minimum kWh during such calendar month, then the difference (in kWh) between Actual kWh less Minimum kWh shall be recorded as a positive balance in the Output Guaranty Bank.

(c) If such calculation indicates that the Actual kWh delivered by the New System Portfolio was less than the Minimum kWh during such calendar month, then the difference (in kWh) between Minimum kWh less Actual kWh shall be recorded as a negative balance in the Output Guaranty Bank.

(d) Operator shall report the balance of the Output Guaranty Bank to Owner within thirty (30) days of the end of each calendar month. At any time the Output Guaranty Bank has a negative balance, Owner may make a claim under Section 4.9. If Operator fails to report the results of any Output Guaranty calculation within the period required by this Section 4.2(d), Owner may perform its own calculations, notify Operator of the results of such calculation and, if applicable, make a claim under Section 4.9. An example of an Output Guaranty calculation is attached as Annex C.

Section 2.3 Project Efficiency Guaranty.

(a) During the Warranty Period, Operator shall determine within twenty (20) days after the end of each calendar month, whether the Project has performed at the Minimum Project Efficiency Level during such calendar month ("Efficiency Guaranty").

(b) If such calculation indicates that the Actual Gas Consumption of the Project was less than the Guaranteed Gas Consumption of the Project for a calendar month, then the difference (in MMBtu) between Guaranteed Gas Consumption and Actual Gas Consumption shall be recorded as a positive balance in the Efficiency Guaranty Bank.

(c) If such calculation indicates that the Actual Gas Consumption of the Project was greater than the Guaranteed Gas Consumption for a calendar month, then the difference (in MMBtu) between Actual Gas Consumption less Guaranteed Gas Consumption shall be recorded as a negative balance in the Efficiency Guaranty Bank.

(d) Operator shall report the balance of the Efficiency Guaranty Bank to Owner within thirty (30) days of the end of each calendar month. If Operator fails to perform any Efficiency Guaranty calculation within the periods required by this Section 4.3, Owner may perform its own calculations and notify Operator of the results of such calculation and, if applicable, make a claim under Section 4.9.

(e) The Parties acknowledge and agree that the balance of Efficiency Guaranty Bank as of the Agreement Date (as updated to reflect the Portfolio's operations through April 30, 2019) equals [*] MMBtu.

Section 2.4 [Reserved].

Section 2.5 New System Portfolio Output Warranty.

(a) During the Warranty Period, Operator shall determine within thirty (30) days after the end of each calendar month, whether the New System Portfolio has delivered to the applicable Interconnection Points the Minimum kWh ("New System Portfolio Output Warranty").

(b) If such calculation indicates that the Actual kWh delivered by the New System Portfolio was greater than the Minimum kWh during such calendar month, then the difference (in kWh) between Actual kWh and the Minimum kWh shall be recorded as a positive balance in the New System Portfolio Output Warranty Bank.

(c) If such calculation indicates that the Actual kWh delivered by the New System Portfolio was less than the Minimum kWh during such calendar month, then the difference (in kWh) between Minimum kWh and the Actual kWh shall be recorded as a negative balance in the New System Portfolio Output Warranty Bank.

(d) Operator shall report the balance of the New System Portfolio Output Warranty Bank to Owner within thirty (30) days of the end of each calendar month. At any time the New System Portfolio Output Warranty Bank has a negative balance, Owner may make a claim under Section 4.9. If Operator fails to perform any New System Portfolio Output Warranty calculation within the periods required by this Section 4.5, Owner may perform its own calculations, notify Operator of the results of such calculation and, if applicable, make a claim under Section 4.9. An example of a New System Portfolio Output Warranty calculation is attached as Annex D.

Section 2.6 Existing System Portfolio Output Warranty. During the Warranty Period, Operator shall determine within thirty (30) days after the end of each Calendar Quarter, whether the Existing System Portfolio has delivered to the applicable Interconnection Points the Minimum kWh during such Calendar Quarter ("Existing System Portfolio Output Warranty"). If the Existing System Portfolio failed to deliver at least the Minimum kWh during such Calendar Quarter, then Operator shall so notify Owner in writing of the basis of its determination and Owner may make a claim under Section 4.9. If Operator fails to perform any Existing System Portfolio Output Warranty calculation within the period required by this Section 4.6, Owner may perform its own calculations, notify Operator of the results of such calculation and, if applicable, make a claim under Section 4.9.

Section 2.7 Project Warranty.

(a) Subject to Section 4.8 and Section 12.5(a), Operator warrants to Owner that the Portfolio and each Bloom System shall perform in accordance with the Warranty Specifications applicable to the Project or such Bloom System, as the case may be, during the Warranty Period (collectively, the "Project Warranty").

(b) The Project Warranty is not transferable to any third person, including any Person who buys the Project, a Facility, or a Bloom System from Owner, without Operator's prior written consent (which shall not unreasonably be withheld).

(c) Any period of time in which the Warranty Specifications are not met shall not extend the Warranty Period.

Section 2.8 Exclusions. Operator shall have no obligations or liabilities under the Project Warranty to the extent caused by or arising from (a) the Bloom Systems or BOF being affected by vandalism or other third-party's actions or omissions occurring after Commissioning (other than to the extent that Operator, Operator Affiliate, the Service Provider or a subcontractor thereof fails to properly protect the Bloom Systems or BOF and Operator was required to do so under this Agreement); (b) any interruption in the supply of natural gas or interconnection services, or a failure of the natural gas or interconnection services supplied to the applicable Facility to comply with Operator's specifications (unless caused by Operator, Operator Affiliate, the Service Provider or a subcontractor thereof); (c) the removal of any safety device by Owner or its Representatives (as opposed to removal by Operator, Operator Affiliate, the Service Provider or a subcontractor thereof); (d) any conditions caused by unforeseeable movement in the environment in which the Bloom Systems are installed (provided that normal soil settlement, shifting, subsidence or cracking will not constitute 'unforeseeable movement'); (e) accidents, abuse, improper third party testing (unless caused by Operator, Operator Affiliate, the Service Provider or a subcontractor thereof); (f) Force Majeure Events; or (g) installation, operation, repair or modification of the Bloom Systems or BOF by anyone other than Operator, Operator's Affiliate, a Service Provider or other Operator subcontractor, or any of such Person's authorized agents. OPERATOR SHALL HAVE NO OBLIGATION UNDER THE PROJECT WARRANTY AND MAKES NO REPRESENTATION AS TO BLOOM SYSTEMS OR BOF WHICH HAVE BEEN OPENED OR MODIFIED BY ANYONE OTHER THAN OPERATOR, OPERATOR'S AFFILIATE, A SERVICE PROVIDER OR A SUBCONTRACTOR THEREOF, OR ANY OF SUCH PERSON'S REPRESENTATIVES, IN EACH CASE TO THE EXTENT OF ANY DAMAGE OR OTHER NEGATIVE CONSEQUENCE OF SUCH OPENING OR MODIFICATION.

Section 2.9 Warranty and Guaranty Claims.

(a) Subject to the provisions of Section 12.5(a), if Owner desires to make a Project Warranty claim during the Warranty Period, Owner must notify Operator of the defect or other basis for the claim in writing.

(b) If, on the last day of each calendar month, the Output Guaranty Bank has a negative balance, then Owner may make a claim under the Output Guaranty. Upon verification of such claim Operator shall make a payment to Owner within ten (10) days of receipt of such claim equal to (x) the absolute value of the balance of

the Output Guaranty Bank, multiplied by (y) the Output Guaranty Payment Rate. Upon payment of such amount, the Output Guaranty Bank shall be reset to zero. Notwithstanding anything to the contrary set forth in this Agreement, Operator's cumulative aggregate liability for all claims related to the Output Guaranty shall not exceed the Output Guaranty Payment Cap.

(c) If at any time (i) the Efficiency Guaranty Bank has a negative balance and (ii) Owner suffers a reduction in payments under the Tariff for gas usage above the Minimum Project Efficiency Level pursuant to section C.(5) of the Tariff, Owner may file a claim with Operator for the amount of such reduction and Operator shall, within thirty (30) days of such claim, make a payment to Owner in the amount of such reduction in payments. If any subsequent audit or revision of Owner's records results in payments to Owner as reimbursement of unwarranted reductions for which Operator has made a payment to Owner under this Section 4.9(c), Operator shall be owed a reimbursement of its payments to Owner hereunder to the extent of the reimbursement actually paid to Owner. Notwithstanding anything to the contrary set forth in this Agreement, Operator's cumulative aggregate liability for all claims related to the Efficiency Guaranty shall not exceed the Efficiency Guaranty Payment Cap.

(d) [Reserved].

(e) In the event of a claim relating to a Portfolio Output Warranty, upon receipt of such notice and verification by Operator of such warranty claim, Operator will promptly, and in all cases within ninety (90) days of the final day of the applicable Calendar Quarter or calendar month (as applicable) giving rise to such Portfolio Output Warranty claim, repair or replace, at Operator's sole option and discretion, a sufficient number of Underperforming Bloom Systems in order for the applicable Portfolio to perform consistent with the applicable Portfolio Output Warranty and will notify Owner of the Warranty Correction Date. The applicable Portfolio shall thereafter perform in accordance with the applicable Portfolio Output Warranty in the period commencing on the final day of the applicable Calendar Quarter or calendar month (as applicable) giving rise to such Portfolio Output Warranty claim and ending [*] days following the Warranty Correction Date (the "Portfolio Output Warranty Testing Period"). If Operator is obligated to perform any repair or replacement pursuant to this Section 4.9 and either (i) Operator has failed to notify Owner of the occurrence of the Warranty Correction Date within ninety (90) days of the final day of the applicable Calendar Quarter or calendar month (as applicable) giving rise to such Portfolio Output Warranty claim, or (ii) the applicable Portfolio fails to perform in accordance with the applicable Portfolio Output Warranty during the Portfolio Output Warranty Testing Period, then, in each case, Operator will, within thirty (30) days, pay to Owner the Repurchase Amount of such number of Underperforming Bloom Systems (calculated as of the date of such payment) as will cause the remainder of the applicable Portfolio to comply with the applicable Portfolio Output Warranty calculated through the final day of the applicable Calendar

Quarter, in which case Operator shall be deemed to have taken title to such Underperforming Bloom Systems, such Underperforming Bloom Systems shall be deemed to no longer constitute a portion of the Project or the applicable Portfolio and Operator shall remove such Bloom System from the Project at its sole cost and expense. In the event that Operator is obligated to repurchase any Underperforming Bloom Systems pursuant to this Section 4.9(e) in connection with a Portfolio Output Warranty claim, the first Underperforming Bloom System repurchased shall be the Bloom System in the applicable Portfolio with the lowest output as a factor of its System Capacity in the prior Calendar Quarter, followed by the next lowest, and so on until Operator's repurchase obligations are satisfied. Owner acknowledges and agrees that Operator's obligations to make Repurchase Amount payments to Owner with respect to any failure to cure a failure of the Existing System Portfolio Output Warranty may be satisfied through the repurchase of Existing Systems constituting Underperforming Bloom Systems pursuant to the terms of the Existing System Repurchase Agreement.

(f) Owner is hereby notified that refurbished parts may be used in repair or replacement activities, provided that (i) any such refurbished parts will have passed the same inspections and tests performed by Operator on its new parts of the same type before such refurbished parts are used in any repair or replacement, and (ii) Operator shall within thirty (30) days of a written request therefor by Owner, provide a report for any or all Bloom Systems included in the Project that lists all components that have been replaced in any individual Bloom System. If it is determined that a Bloom System will be removed pursuant to Section 4.9(e), Operator shall at its sole cost and expense remove the Bloom System and all ancillary equipment (including the concrete pad and any other improvements to the applicable portion of the Site to the extent required under the applicable Site Lease) from the applicable Site, restoring such portion of the Site to its condition before the installation, including closing all utility connections and properly sealing any penetrations in the manner required by all Legal Requirements and the applicable Site Lease.

(g) WITHOUT IN ANY WAY LIMITING (I) OPERATOR'S OBLIGATIONS IN RESPECT OF THE MANUFACTURER'S WARRANTY UNDER THE NEW SYSTEM CAPEX AGREEMENT, (II) OPERATOR'S OBLIGATION TO INDEMNIFY OWNER PURSUANT TO ARTICLE XII, OR (III) ANY SETOFF OR EQUITABLE REMEDIES NECESSARY TO ENFORCE OPERATOR'S EXPRESS OBLIGATIONS PURSUANT TO THIS SECTION 4.9, THE REMEDIES SET FORTH IN THIS SECTION 4.9 ARE OWNER'S SOLE AND EXCLUSIVE REMEDY, AND OPERATOR'S SOLE AND EXCLUSIVE LIABILITY, FOR THE FAILURE OF ANY BLOOM SYSTEM OR PORTFOLIO, AS APPLICABLE, TO PERFORM IN ACCORDANCE WITH THE WARRANTY SPECIFICATIONS.

Section 2.10 Disclaimers. EXCEPT FOR THE REPRESENTATIONS AND WARRANTIES SET FORTH IN ARTICLE VII AND THIS ARTICLE IV,

THE FACILITY SERVICES ARE PROVIDED "AS IS, WHERE IS," AND OPERATOR EXPRESSLY DISCLAIMS ANY REPRESENTATIONS OR WARRANTIES OF ANY KIND OR NATURE, EXPRESS OR IMPLIED, AS TO LIABILITIES, OPERATIONS OF THE FACILITIES, VALUE OR QUALITY OF THE FACILITIES OR THE PROSPECTS (FINANCIAL AND OTHERWISE), RISKS AND OTHER INCIDENTS OF THE FACILITIES (PROVIDED, THAT THE FOREGOING DISCLAIMER SHALL NOT NEGATE OR DISCLAIM ANY REPRESENTATIONS OR WARRANTIES PROVIDED UNDER ANY OF THE OTHER TRANSACTION DOCUMENTS). EXCEPT FOR THE REPRESENTATIONS AND WARRANTIES SET FORTH IN ARTICLE VII, THIS ARTICLE IV, AND THE NEW SYSTEM CAPEX AGREEMENT, OPERATOR SPECIFICALLY DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY, USAGE, SUITABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE WITH RESPECT TO THE FACILITIES, OR ANY PART THEREOF. NO PERSON IS AUTHORIZED TO MAKE ANY OTHER WARRANTY OR REPRESENTATION CONCERNING THE PERFORMANCE OF THE FACILITIES. FOR THE AVOIDANCE OF DOUBT, NOTHING CONTAINED IN THIS SECTION 4.10 SHALL EXCUSE OPERATOR FROM ITS OBLIGATION TO INDEMNIFY OWNER PURSUANT TO ARTICLE XII.

Section 2.11 Calculation Procedures. Calculation of a Portfolio's output for purposes of the Output Guaranty, Existing System Portfolio Warranty and New System Portfolio Warranty shall be performed as follows:

(a) The Existing System Portfolio's Actual kWh produced in any period shall be equal to the product of (x) the Actual kWh produced by the Project in the aggregate during such period, as measured by the Facility Meters, multiplied by (y) a fraction, the numerator of which is the Actual kWh produced by the Existing Systems in the aggregate during such period, as measured by the Bloom System Meters installed in connection with such Existing Systems, and the denominator of which is the Actual kWh produced by all Bloom Systems constituting the Project in the aggregate during such period as measured by the Bloom System Meters installed in connection with such Bloom Systems.

(b) The New System Portfolio's Actual kWh produced in any period shall be equal to the product of (x) the Actual kWh produced by the Project in the aggregate during such period, as measured by the Facility Meters, multiplied by (y) a fraction, the numerator of which is the Actual kWh produced by the New Systems in the aggregate during such period, as measured by the Bloom System Meters installed in connection with such New Systems, and the denominator of which is the Actual kWh produced by all Bloom Systems constituting the Project in the aggregate during such period as measured by the Bloom System Meters installed in connection with such Bloom Systems.

(c) Operator hereby represents and warrants to Owner that each Bloom System Meter (including the Bloom System Meter in each Existing System and each New System) was designed to satisfy the same specifications, including accuracy of measurement of the Actual kWh produced by the applicable Bloom System.

ARTICLE III.
RECORDS AND AUDITS

Section 3.1 Record-Keeping Documentation; Audit Rights.

(a) Operator shall ensure that records concerning the Facility Services activities hereunder are properly created and maintained at all times in accordance with all Legal Requirements, including FERC requirements regarding record retention for Holding Companies in 18 C.F.R. Part 368 and any successor regulations to the extent applicable to Operator. Such records shall include the following:

(i) any records, reports, or other documentation reasonably requested by Owner to support an ITC eligibility determination with respect to a Facility. Operator agrees to use commercially reasonable efforts to promptly provide such documentation to Owner, and shall provide a reasonable explanation for any inability to provide such documentation;

(ii) a separate "Maintenance Specification Log" for each Facility in a paper or electronic format (with entries made for each inspection (including any discrepancies found during such inspection), repair, replacement or servicing of components, and reportable observations made by Operator's Service Technicians); subject to Operator's reasonable concerns regarding protection of highly confidential information and/or trade secrets, a copy of the Maintenance Specification Log shall be made available for audit by Owner not more than once per calendar quarter and Operator shall make its Representatives reasonably available to answer any questions Owner may have regarding any entry(ies) therein;

(iii) a monthly report submitted to Owner within twenty (20) days after the end of each month ("Monthly Report") detailing and documenting, on a monthly basis, the (A) Efficiency and total output (in kWh) of the Portfolio and each Facility, and (B) total output (in kWh) of the Portfolio and each Facility, in each case for each calendar month in the preceding month;

(iv) records and documentation shall be maintained by Operator in respect of the Project, each Facility, or a Portfolio, as applicable, regarding compliance with the Warranty Specifications during the Warranty Period;

(v) any other records, reports, or other documentation related to the production and sale of energy from the Facilities that Owner is required to maintain in respect of any Facility under the Tariff and PJM Market Rules;

(vi) subject to Operator's reasonable concerns regarding protection of highly confidential information and/or trade secrets, records documenting the calibration of tooling, equipment and components consistent with the requirements of Section 3.2(b), including data used for calibration;

(vii) records and data in the form and type listed on Schedule 5.1(a)(vii);

(viii) records and documentation required to be maintained under Legal Requirements applicable to the Facility Services, and all records and data that must be timely produced and turned over to (A) DPL pursuant the Tariff (including without limitation, the Heat Rate calculations as set forth in Tariff Section C., and monthly documentation of PJM Revenues as set forth in Tariff Section H.) and the DPL Agreements; and

(ix) any other records, reports, or other documentation reasonably requested by Owner. Operator agrees to use commercially reasonable efforts to promptly provide such documentation to Owner, and shall provide a reasonable explanation for any inability to provide such documentation.

(b) All such records required to be created and maintained pursuant to Section 5.1(a) shall (i) be kept available at Operator's office and made available for Owner's inspection upon request at all reasonable times, and (ii) be retained for the relevant retention period provided under Legal Requirements, including in 18 C.F.R. § 368.3 or any successor regulation as amended from time, to the extent applicable to Operator, or any longer period required under the Tariff, or by DPL or PJM. Any documentation prepared by Operator during the Term for the purposes of this Agreement shall be directly prepared for Owner's benefit and immediately become Owner's property. Any such documentation shall be stored by Operator on behalf of Owner until its final delivery to Owner. Operator may retain a copy of all records related to each Facility for future analysis.

(c) Owner shall have the right no more than once during any calendar year and going back no more than two (2) calendar years preceding the calendar year in which an audit takes place, upon reasonable prior written notice, including using an independent public accounting firm reasonably acceptable to Operator, to examine such records during regular business hours in the location(s) where such records are maintained by Operator for the purposes of verifying Operator's compliance with its obligations hereunder, including the accuracy of Monthly Reports and Operator's calculations in respect of Warranty Specifications; provided, however, that such records may be audited only once under this Section 5.1(c). Owner shall pay the cost of the audit unless the results of the audit reveal that the Minimum kWh or Actual kWh reported by Owner in respect of the Portfolio or any Facility during any calendar year that is audited exceeds by five percent (5%) or more the true Minimum kWh or Actual kWh, as the case may be, in which case Operator shall pay the audit costs.

Section 3.2 Reports; Other Information. Without in any way limiting Operator's other reporting, notification, and other similar obligations under this Agreement, during the Warranty Period, Operator shall furnish to Owner the following reports, notices, and other information regarding the Facility Services activities (which may be effected by e-mail communication to the Owner Manager or other appropriate Owner Representative):

(a) Promptly upon Operator's knowledge of the occurrence of any damage to any Facility or Site, notice of such damage in reasonable detail;

(b) Promptly (and in any case within three (3) Business Days) following Operator's final determination of the applicability thereof, notice that the operation of a Facility is subject to any of the exclusions described in Section 4.8;

(c) Any information Owner may reasonably request in connection with any claim filed by Owner under any insurance maintained with respect to the Facilities, and any information such insurance providers may reasonably request in connection with such claim; and

(d) Operator shall, upon Owner's reasonable request, make available to Owner appropriate members of Operator's senior technical personnel to discuss any performance issues relating to any Facility that experienced a reduction in average output in any calendar month as compared to the immediately preceding calendar month exceeding five percent (5%).

ARTICLE IV.
DATA ACCESS

Section 4.1 Access to Data and Meters. Throughout the Term, and thereafter to the extent relevant to calculations necessary for periods prior to the end of the Term and subject to any confidentiality obligation owed to any third party, any limitations under Legal Requirements as determined by Owner in its reasonable discretion, and/or any restrictions on the disclosure of information which may be subject to Intellectual Property rights restricting disclosure, at the sole cost of Operator:

(a) Owner shall grant Operator access to all data relating to the electricity production of each Facility, it being understood that it is Operator's responsibility to determine the performance of the Facility, and any other calculations as required under this Agreement, and that it is Owner's responsibility to handle all accounting and invoicing activities;

(b) Owner shall allow Operator access to all data from all Facility Meters; and

(c) Owner shall allow Operator access to Facility performance data delivered to third parties pursuant to obligations set forth in the Tariff.

(d) Operator shall be entitled to use the foregoing data for its internal business purposes, in all cases unless and to the extent such uses of or disclosures by Operator are restricted under the Tariff or Legal Requirements, including those related to privacy.

ARTICLE V.
REPRESENTATIONS AND WARRANTIES OF OPERATOR

Section 5.1 Representations and Warranties of Operator. Operator represents and warrants to Owner as of the Agreement Date, as of each Commissioning Date, and, solely with respect to any representation that expressly sets forth a different date, as of such different date, as follows:

(a) Incorporation; Qualification. Operator is a corporation duly incorporated, validly existing and in good standing under the laws of the State of Delaware and has all requisite corporate power and authority to own, lease, and operate its business as currently conducted. Operator is duly qualified to do business as a foreign corporation and is in good standing under the laws of each jurisdiction that its business, as currently being conducted, shall require it to be so qualified, except where the failure to be so qualified would not have a Material Adverse Effect on Operator or its ability to perform its obligations hereunder.

(b) Authority. Operator has full corporate power and authority to execute and deliver this Agreement and the other Transaction Documents to which it is a party and to consummate the transactions contemplated hereby and thereby. The execution and delivery by Operator of the Transaction Documents to which it is a party and the consummation by Operator of the transactions contemplated thereby have been duly and validly authorized by all necessary corporate action required on the part of Operator and the Transaction Documents to which it is a party have been duly and validly executed and delivered by Operator. Each of the Transaction Documents to which Operator is a party constitutes the legal, valid and binding agreement of Operator, enforceable against Operator in accordance with its terms, except as enforcement may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting creditors' rights generally and by general principles of equity (regardless of whether considered in a proceeding in equity or at law).

(c) Consents and Approvals; No Violation. Neither the execution, delivery and performance of this Agreement nor the other Transaction Documents to which Operator is a party nor the consummation by Operator of the transactions contemplated hereby and thereby will (i) conflict with or result in any breach of any provision of the certificate of incorporation or bylaws of Operator, (ii) with or without the giving of notice or lapse of time or both, conflict with, result in any violation or

breach of, constitute a default under, result in any right to accelerate, result in the creation of any Lien (other than Permitted Liens) on Operator's assets, or create any right of termination under the conditions or provisions of any note, bond, mortgage, indenture, any material agreement or other instrument or obligation to which Operator is a party or by which it, or any material part of its assets may be bound, in each case that would individually or in the aggregate result in a Material Adverse Effect on Operator or its ability to perform its obligations hereunder or (iii) constitute violations of any law, regulation, order, judgment or decree applicable to Operator, which violations, individually or in the aggregate, would result in a Material Adverse Effect on Operator or its ability to perform its obligations hereunder.

(d) Legal Proceedings. There are no pending or, to Operator's Knowledge, threatened claims, disputes, governmental investigations, suits, actions (including non-judicial real or personal property foreclosure actions), arbitrations, legal, administrative or other proceedings of any nature, domestic or foreign, criminal or civil, at law or in equity, against Operator that challenge the enforceability of this Agreement or the other Transaction Documents to which Operator is a party or the ability of Operator to consummate the transactions contemplated hereby or thereby, in each case, that could reasonably be expected to result in a Material Adverse Effect on Operator or its ability to perform its obligations hereunder.

(e) U.S. Person. Operator is not a "foreign person" within the meaning of Section 1445(b)(2) of the Code and has provided a Certificate of Non-Foreign Status in the form and substance required by Section 1445 of the Code and the regulations thereunder.

(f) Insurance. Operator has obtained the insurance described in Annex B, all such policies remain in full force and effect, and all insurance premiums that are due and payable have been paid in full with no premium overdue.

(g) Title; Liens. As of each date title is required to pass to Owner hereunder with respect to any assets comprising a Facility, Operator has and will convey good and marketable title to such assets to be sold to Owner on such date and all such assets are free and clear of all Liens other than Permitted Liens. Except to the extent arising by law, neither Operator nor any of its subcontractors have placed any Liens on the Sites or the Facilities other than Permitted Liens. To the extent that Operator has actual Knowledge that any of its subcontractors has placed any Lien on a Facility or Site, then Operator shall cause such Liens to be discharged, or shall provide a bond in an amount and from a surety acceptable to Owner to protect against such Lien, in each case, within thirty (30) days after Operator is aware of the existence thereof. Operator shall indemnify Owner against any such lien claim, provided that if the applicable Site Lease requires additional or more stringent action, Operator shall also indemnify Owner for the costs and expenses of such actions.

(h) Intellectual Property. To Operator's Knowledge, no Bloom System and no other product or service marketed or sold (or proposed to be marketed or

sold) that is provided by Operator in connection with the Facility Services violates or will violate any license or infringes or will infringe any Intellectual Property rights of any other Person. Operator has received no written communications alleging that such Operator has violated, or by conducting its business, would violate any of the patents, trademarks, service marks, tradenames, copyrights, trade secrets, mask works or other proprietary rights or processes of any other Person.

(i) Consents and Approvals. As of any date Operator is required to perform an obligation hereunder, Operator has received all material third party consents which are required as of such date for the consummation and performance of the transactions contemplated hereunder.

(j) Bankruptcy. No event of Bankruptcy has occurred with respect to Operator.

(k) Material Adverse Effect.

(i) As of the Agreement Date, no Material Adverse Effect has occurred with respect to Operator or, to the Knowledge of Operator, PJM, DPL, or any Site Landlord.

(ii) As of each Commissioning Date, no Material Adverse Effect has occurred between the Agreement Date and the applicable Commissioning Date with respect to Operator or, to the Knowledge of Operator, with respect to PJM, DPL, or the Site Landlord relating to any of the New Systems Commissioned on such date.

(l) Governmental Approvals. As of each of the dates each New System is Commissioned, Operator, as applicable on behalf of Owner, has obtained all Governmental Approvals required for construction and operation of such Facility and each of the Governmental Approvals obtained as of such date is validly issued, final and in full force and effect and is not subject to any current legal proceeding or to any unsatisfied condition, and any applicable appeal period has expired. On each of such dates, Operator, as applicable on behalf of Owner, is in compliance in all material respects with all applicable Governmental Approvals and has not received any written notice from a Governmental Authority of an actual or potential violation of any such Governmental Approval, and none of the persons referenced in Section 5.2(b)(ii) of the New System CapEx Agreement has received any other communication from a Governmental Authority of an actual or potential violation of any such Governmental Approval.

(m) Compliance. Operator has performed in all respects all obligations, and complied in all material respects with the agreements and covenants, required to be performed by or complied with by Operator hereunder.

(n) No Breaches. As of the Agreement Date, each Interconnection Agreement, Gas Supply Agreement, and Site Lease is a legal, valid, binding and

enforceable obligation of Owner and, to Operator's Knowledge, of each other party thereto, and each Interconnection Agreement, Gas Supply Agreement, and Site Lease is in full force and effect. To Operator's Knowledge, neither Owner nor any other Person party thereto is in material breach or violation of any Interconnection Agreement, Gas Supply Agreement, or Site Lease, and no event has occurred, is pending or is threatened, which, after the giving of notice, with lapse of time, or otherwise, would constitute any such breach or default by Owner or any other party thereto.

(o) QFCP-RC Tariff. During the term of this Agreement, the Portfolio shall not fail to receive full payment and service under the Tariff for either of the following reasons:

(i) Operator shall not be a Qualified Fuel Cell Provider throughout the original term of the Tariff due to any action or inaction of Operator in violation of this Agreement; or

(ii) Operator shall take any action in violation of the New System CapEx Agreement or this Agreement which causes: (A) Owner not to qualify (or lose qualification) for service under the Tariff or (B) the Portfolio not to qualify (or lose qualification) as a Qualified Fuel Cell Provider Project.

ARTICLE VI.
REPRESENTATIONS AND WARRANTIES OF OWNER

Section 6.1 Representations and Warranties of Owner. Owner represents and warrants to Operator as of the Agreement Date and as of each Commissioning Date, as follows.

(a) Organization. Owner is a limited liability company duly formed, validly existing and in good standing under the laws of the State of Delaware and has all requisite limited liability company power and authority to own, lease, and operate its business as currently conducted.

(b) Authority. Owner has full limited liability company power and authority to execute and deliver this Agreement and the other Transaction Documents to which it is a party and to consummate the transactions contemplated hereby and thereby. The execution and delivery by Owner of this Agreement and the other Transaction Documents to which it is a party and the consummation by Owner of the transactions contemplated hereby and thereby have been duly and validly authorized by all necessary corporate action required on the part of Owner and the Transaction Documents to which Owner is a party have been duly and validly executed and delivered by Owner. Each of the Transaction Documents to which Owner is a party constitutes the legal, valid and binding agreement of Owner, enforceable against Owner in accordance with its terms, except as enforcement may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or

similar laws affecting creditors' rights generally and by general principles of equity (regardless of whether considered in a proceeding in equity or at law).

(c) Consents and Approvals; No Violation. Neither the execution, delivery and performance of this Agreement nor the other Transaction Documents to which Owner is a party nor the consummation by Owner of the transactions contemplated hereby and thereby will (i) conflict with or result in any breach of any provision of the articles of formation of Owner nor Owner's limited liability company agreement, (ii) with or without the giving of notice or lapse of time or both, conflict with, result in any violation or breach of, constitute a default under, result in any right to accelerate, result in the creation of any Lien on Owner's assets, or create any right of termination under the conditions or provisions of any note, bond, mortgage, indenture, material agreement or other instrument or obligation to which Owner is a party or by which it, or any material part of its assets may be bound, in each case that would individually or in the aggregate result in a Material Adverse Effect on Owner or its ability to perform its obligations hereunder or (iii) constitute violations of any law, regulation, order, judgment or decree applicable to Owner, which violations, individually or in the aggregate, would result in a Material Adverse Effect on Owner or its ability to perform its obligations hereunder.

(d) Legal Proceedings. There are no pending or, to Owner's Knowledge, threatened claims, disputes, governmental investigations, suits, actions (including non-judicial real or personal property foreclosure actions), arbitrations, legal, administrative or other proceedings of any nature, domestic or foreign, criminal or civil, at law or in equity, by or against Owner that challenge the enforceability of this Agreement or the other Transaction Documents to which Owner is a party or the ability of Owner to consummate the transactions contemplated hereby or thereby, in each case, that could reasonably be expected to result in a Material Adverse Effect on Owner or its ability to perform its obligations hereunder.

ARTICLE VII.
CONFIDENTIALITY

Section 7.1 Confidential Information. Subject to the other terms of this ARTICLE IX each Party shall, and shall cause its Affiliates and its respective stockholders, members, subsidiaries and Representatives to, hold confidential the terms of this Agreement and all information it has obtained or obtains from the other Party in connection with this Agreement concerning Operator and Owner and their respective assets, business, operations or prospects (the "Confidential Information"), including all materials and information furnished by Operator in performance of this Agreement, regardless of form conveyed or whether financial or technical in nature, including any trade secrets and proprietary know how and Software whether such information bears a marking indicating that they are proprietary or confidential or not; provided, however, that Confidential Information shall not include (a) the fact that the Parties have entered into this Agreement, (b)

the nature of the transactions contemplated by this Agreement, (c) the Owner's capital expenditures or financing plans related to the transactions contemplated by this Agreement, or (d) information that (i) is or becomes generally available to the public other than as a result of any fault, act or omission by a Party or any of its Representatives, (ii) is or becomes available to a Party or any of its Representatives on a non-confidential basis from a source other than the other Party or its Representatives, provided that such source was not and is not bound by any contractual, legal or fiduciary obligation of confidentiality with respect to such information or (iii) was or is independently developed or conceived by a Party or its Representatives without use of or reliance upon the Confidential Information of the other Party, as evidenced by sufficient written record.

Section 7.2 Restricted Access. Subject to Section 11.8:

(a) Owner agrees that the Bloom Systems themselves contain Operator's valuable trade secrets. Owner agrees (i) to restrict the use of such information to matters relating to the Facilities, and such other purposes, if any, expressly provided herein, and (ii) to restrict access to such information as provided in Section 9.3(b).

(b) Operator's Confidential Information will not be reproduced without Operator's prior written consent, and following termination of this Agreement all copies of such written information will be returned to Operator upon written request (not to be made while materials are still of use to the operation of a Bloom System and no Owner Default has occurred and is continuing) or shall be certified by Owner as having been destroyed, unless otherwise agreed by the Parties. Owner's Confidential Information will not be reproduced by Operator without Owner's prior written consent, and following termination of this Agreement all copies of such written information will be returned to Owner upon written request or shall be certified by Operator as having been destroyed. Notwithstanding the foregoing, each Party and its Representatives may each retain archival copies of any Confidential Information to the extent required by law, regulation or professional standards or copies of Confidential Information created pursuant to the automatic backing-up of electronic files where the delivery or destruction of such files would cause undue hardship to the receiving Party, so long as any such archival or electronic file back-up copies are accessible only to legal or information technology personnel, provided that such Confidential Information will continue to be subject to the terms of this Agreement.

(c) Subject to ARTICLE X and Section 9.2(a) and Section 9.2(b), the Facility Services are provided by Operator subject to the condition that such performance does not convey any license, expressly or by implication, to manufacture, reverse engineer, duplicate or otherwise copy or reproduce any part of the Facilities, documentation or Software without Operator's express advance written permission. Subject to ARTICLE X hereof, Owner agrees not to remove the covering of any Bloom System, not to access the interior or to reverse engineer, or

cause or knowingly allow any third party to open, access the interior or reverse engineer any Bloom System, BOF, or Software provided by Operator. Subject to ARTICLE X hereof, and anything to the contrary contemplated pursuant to this Agreement, only Operator or its Representatives may open or access the interior of a Facility.

Section 7.3 Permitted Disclosures.

(a) Legally Compelled Disclosure. Confidential Information may be disclosed (i) as required or requested to be disclosed by a Party or any of its Affiliates or their respective stockholders, members, subsidiaries or Representatives as a result of any applicable Legal Requirement or rule or regulation of any stock exchange, the Financial Industry Regulatory Authority, Inc. or other regulatory authority or self-regulatory authority having jurisdiction over such Party, (ii) as required or requested by the IRS, the Department of Justice or the Office of the Inspector General in connection with a Facility, cash grant, or tax credits relating thereto, including in connection with a request for any private letter ruling, any determination letter or any audit or (iii) as required under any Interconnection Agreement or any of the other Transaction Documents. If a Party becomes compelled by legal or administrative process to disclose any Confidential Information, such Party shall, to the extent permitted by Legal Requirements, provide the other Party with prompt notice so that the other Party may seek a protective order or other appropriate remedy or waive compliance with the non-disclosure provisions of this Section 9.3 with respect to the information required to be disclosed. If such protective order or other remedy is not obtained, or such other Party waives compliance with the non-disclosure provisions of this Section 9.3 with respect to the information required to be disclosed, the first Party shall furnish only that portion of such information that it is advised by counsel is legally required to be furnished and shall exercise reasonable efforts, at the expense of the Party whose Confidential Information is being disclosed, to obtain reliable assurance that confidential treatment will be accorded such information, including, in the case of disclosures to the IRS described in clause (ii) above, to obtain reliable assurance that, to the maximum extent permitted by applicable Legal Requirements, such information will not be made available for public inspection pursuant to Section 6110 of the Code.

(b) Disclosure to Representatives. Notwithstanding the foregoing, and subject always to the restrictions in Section 9.2, a Party may disclose Confidential Information received by it to its and its Affiliates' actual or potential investors or financing parties and its and their employees, consultants, legal counsel or agents who have a need to know such information; provided that such Party informs each such Person who has access to the Confidential Information of the confidential nature of such Confidential Information, the terms of this Agreement, and that such terms apply to them. The Parties shall use commercially reasonable efforts to ensure that each such Person complies with the terms of this Agreement and that any Confidential Information received by such Person is kept confidential.

(c) Securities Filings. A Party may file this Agreement as an exhibit to any relevant filing with the Securities Exchange Commission (or equivalent foreign agency) in accordance with Legal Requirements only after complying with the procedure set forth in this Section 9.3(c). In such event, the Party seeking such disclosure shall prepare a draft confidential treatment request and proposed redacted version of this Agreement to request confidential treatment for this Agreement, and the other Party agrees to promptly (and in any event, no less than fourteen (14) days after receipt of such confidential treatment request and proposed redactions) give its input in a reasonable manner in order to allow the Party seeking disclosure to file its request within the time lines prescribed by Legal Requirements. The Party seeking such disclosure shall exercise commercially reasonable efforts to obtain confidential treatment of the Agreement from the Securities Exchange Commission (or equivalent foreign agency) as represented by the redacted version reviewed by the other Party. Each Party shall bear its own costs in connection with such efforts.

(d) Other Permitted Disclosures. Nothing herein shall be construed as prohibiting a Party hereunder from using such Confidential Information in connection with (i) any claim against the other Party, (ii) any exercise by a Party hereunder of any of its rights hereunder, (iii) a financing or proposed financing by Operator or Owner or their respective Affiliates, (iv) a disposition or proposed disposition by any direct or indirect Affiliate of Owner of all or a portion of such Person's equity interests in Owner, (v) a disposition or proposed disposition by Owner of any Bloom System or Facility, or (vi) any disclosure required to be made pursuant to the Tariff, an Interconnection Agreement, a Gas Supply Agreement, or a Site Lease, provided that, in the case of items (iii), (iv) and (v), the potential financing party or purchaser has entered into a confidentiality agreement with respect to Confidential Information on customary terms used in confidentiality agreements in connection with corporate financings or acquisitions before any such information may be disclosed and a copy of such confidentiality agreement has been provided to the non-disclosing party for informational purposes, which copy of such confidentiality agreement may contain redactions of confidential information relating to the potential financing party or purchaser. No disclosures of Confidential Information shall be made by Owner in exercise of its rights under this Section 9.3(d) until Operator has first had the opportunity to exercise its right to take or purchase the Bloom System in question, if applicable (including pursuant to the terms of the Repurchase Agreement, if applicable).

ARTICLE VIII.
INTELLECTUAL PROPERTY

Section 8.1 No Software Warranty. Owner acknowledges and agrees that the use of the Software is at Owner's sole risk. The Software and related documentation are provided "AS IS" and without any warranty of any kind and Operator EXPRESSLY DISCLAIMS ALL WARRANTIES, EXPRESS OR

IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Section 8.2 Representations and Warranties. Operator represents and warrants to Owner as of the Agreement Date and as of each Commissioning Date as follows with respect to all Intellectual Property that is required (i) for Operator or its Affiliates to perform their respective obligations under this Agreement and each other Transaction Document, and (ii) for the continued operation of the Facilities in accordance with the Tariff and the Interconnection Agreements without a material decrease in performance of the Facilities:

(a) Operator owns or has the right to use and to authorize Owner to use all such Intellectual Property and Software; and

(b) Operator and its Affiliates are not infringing on any Intellectual Property of any third party with respect to the actions described in subsection (i) and (ii) of Section 11.6 and the Facilities do not infringe on any Intellectual Property of any third party.

ARTICLE IX.
EVENTS OF DEFAULT AND TERMINATION

Section 9.1 Operator Default. The occurrence at any time of any of the following events shall constitute an "Operator Default":

(a) Failure to Pay. The failure of Operator to pay any undisputed amounts owing to Owner on or before the day following the date on which such amounts are due and payable under the terms of this Agreement and Operator's failure to cure each such failure within ten (10) Business Days after Operator receives written notice from Owner of each such failure;

(b) Failure to Perform Other Obligations. Unless due to a Force Majeure Event, the failure of Operator to perform or cause to be performed any other material obligation required to be performed by Operator under this Agreement, or the failure of any representation and warranty set forth herein to be true and correct as and when made; provided, however, that if such failure by its nature can be cured, then Operator shall have a period of thirty (30) days after receipt of written notice of such failure to cure the same and an Operator Default shall not be deemed to exist during such period; provided, further, that if Operator commences to cure such failure during such period and is diligently and in good faith attempting to effect such cure, said period shall be extended for sixty (60) additional days; notwithstanding the foregoing, the cure period set forth above will in no event exceed (and will be deemed modified as necessary to match) the cure period applicable to any particular failure or breach under the Tariff or the applicable Interconnection Agreement, if any;

(c) Failure to Remedy Injunction. The failure of Operator to remedy any injunction that prohibits Owner's use of any Facility as contemplated by Section 12.1 within sixty (60) days of Operator's receipt of written notice of Owner being enjoined therefrom; or

(d) Bankruptcy. If Operator is subject to a Bankruptcy.

Section 9.2 Owner Default. The occurrence at any time of the following events with respect to Owner shall constitute an "Owner Default":

(a) Failure to Pay. The failure of Owner to pay any undisputed amounts owing to Operator on or before the day following the date on which such amounts are due and payable under the terms of this Agreement and Owner's failure to cure each such failure within ten (10) Business Days after Owner receives written notice of each such failure;

(b) Failure to Perform Other Obligations. Unless due to a Force Majeure Event, the failure of Owner to perform or cause to be performed any material obligation required to be performed by Owner under this Agreement or the failure of any representation and warranty set forth herein to be true and correct as and when made; provided, however, that if such failure by its nature can be cured, then Owner shall have a period of thirty (30) days after receipt of written notice of such failure to cure the same and an Owner Default shall not be deemed to exist during such period; provided, further, that if Owner commences to cure such failure during such period and is diligently and in good faith attempting to effect such cure, said period shall be extended for sixty (60) additional days; or

(c) Bankruptcy. If Owner is subject to a Bankruptcy.

Section 9.3 Owner's Remedies Upon Occurrence of an Operator Default. If an Operator Default has occurred under Section 11.1(d), Owner may terminate this Agreement by written notice, and assert all rights and remedies available to Owner under Legal Requirements subject to the limitations of liability set forth in Section 12.5. If an Operator Default has occurred under Section 11.1(a), Section 11.1(b) or Section 11.1(c), Owner may terminate this Agreement only with respect to the Bloom System(s) for which such Operator Default has occurred by written notice, and (i) assert all rights and remedies available to Owner under Legal Requirements subject to the limitations of liability set forth in Section 12.5, or (ii) require Operator and, if so required, Operator shall repurchase the relevant Bloom System(s) in respect of which this Agreement is being terminated from Owner on an AS IS basis by paying the Repurchase Amount of any such Bloom System(s), calculated as of the date of such payment, in which case Operator shall take title to such Bloom System(s) upon paying the Repurchase Amount, and such Bloom System(s) shall no longer constitute a portion of the Project or the applicable Portfolio. If a Bloom System will be removed pursuant to this Section 11.3, Operator shall at its sole cost and expense remove the Bloom System and any other ancillary

equipment (including the concrete pad and any other improvements to the applicable Site to the extent required under the applicable Site Lease) from the applicable Site, restoring the relevant portion of the Site to its condition before the installation, including closing all utility connections and properly sealing any Site penetrations in the manner required by all Legal Requirements and the applicable Site Lease.

Section 9.4 Operator's Remedies Upon Occurrence of an Owner Default. If an Owner Default has occurred, Operator may terminate this Agreement and assert all rights and remedies available to Operator under Legal Requirements, subject to the limitations of liability set forth in Section 12.5.

Section 9.5 Preservation of Rights. Termination of this Agreement shall not affect any rights or obligations as between the Parties which may have accrued prior to such termination or which expressly or by implication are intended to survive termination whether resulting from the event giving rise to termination or otherwise, including ARTICLE IX, ARTICLE X, and ARTICLE XII.

Section 9.6 Force Majeure. Force Majeure Events. Except as otherwise set forth in Section 11.6(b), if either Party is rendered wholly or partially unable to perform any of its obligations under this Agreement by reason of a Force Majeure Event, that Party (the "Claiming Party") will be excused from whatever performance is affected by the Force Majeure Event to the extent so affected; provided, however, that (i) the Claiming Party, within a reasonable time after the occurrence of such Force Majeure Event gives the other Party notice describing the particulars of the occurrence; (ii) the suspension of performance shall be of no greater scope and of no longer duration than is reasonably required by the Force Majeure Event; (iii) no liability of either Party for an event that arose before the occurrence of the Force Majeure Event shall be excused as a result of the Force Majeure Event; (iv) the Claiming Party shall exercise commercially reasonable efforts to (A) correct or cure the event or condition excusing performance, (B) mitigate the effects of such Force Majeure Event pending any correction or cure of the event or condition that renders it wholly or partially unable to perform any of its obligations hereunder, including as appropriate by subcontracting to Third Parties the performance of one or more of such obligations, and (C) provide the non-Claiming Party with regular reports (no less than weekly) as to its efforts to correct, cure, and mitigate the Force Majeure Event and its estimate regarding when it expects correction or cure of the event or condition excusing performance; and (v) when the Claiming Party is able to resume performance of its obligations under this Agreement, the Claiming Party shall promptly give the other Party notice to that effect and shall promptly resume performance.

(a) Termination for Extended Force Majeure Event. Owner may terminate this Agreement by written notice in the event of a Force Majeure Event which prevents Operator from performing its material obligations under this Agreement for a continuous period of at least one hundred eighty (180) days and

which Owner reasonably concludes is not reasonably likely to be remedied within a further period of one hundred eighty (180) days.

Section 9.7 No Duplication of Claims; Cumulative Limitation of Liability Caps. Notwithstanding anything to the contrary in this Agreement, (a) the Parties acknowledge and agree that no claiming or indemnified party shall be entitled to a double recovery for the same monetary loss or damage under the provisions of this Agreement and the provisions of any other Transaction Document, (b) to the extent that all or any portion of the Warranty Specifications or any other warranty, guarantee or indemnification provision set forth herein is duplicative of any warranty, guarantee or indemnification coverage provided under the New System CapEx Agreement, the Parties acknowledge and agree that Owner shall be entitled to pursue recovery for money damages in respect of a single event or circumstance, at its sole option, under either this Agreement or the New System CapEx Agreement, as applicable, and that limitation of liability caps set forth in each such agreement are to be calculated on an aggregate basis taking into account all claims for indemnification, warranty or otherwise (if any) made under this Agreement or the New System CapEx Agreement, and (c) if an "Indemnifiable Loss" or other amount paid for any event(s) or circumstance(s) under this Agreement or the New System CapEx Agreement, as the case may be, would be taken into account for purposes of calculating the "Maximum Liability" under such agreement, then such amount will also be taken into account for purposes of calculating the "Maximum Liability" under the other such agreement. For the avoidance of doubt, the provisions of subsections (b) and (c) of this Section 11.7 shall not limit Operator's liability under this Agreement with respect to any Existing System.

Section 9.8 Actions to Facilitate Continued Operations After an Owner Termination. Notwithstanding anything herein to the contrary, and without limitation of the rights set forth in this ARTICLE XI hereof, if any Facility is no longer covered by this Agreement or another agreement between Owner and Operator (or any Affiliate of Operator) regarding the operation and maintenance of such Facility as a result of the termination of this Agreement with respect to such Facility (A) in connection with an Operator Default or (B) in connection with the expiration of the Extended Warranty Period with respect to all Bloom Systems at such Facility, Owner shall be entitled to maintain, or cause a third party to maintain, such Facility (each such maintainer party, a "Third Party Operator"), including replacing consumables and components as needed or desired, including, if applicable, electricity sales pursuant to the Tariff; provided that:

(a) No less than thirty (30) calendar days prior to the event of such termination pursuant to subsection (B) above, to the extent Owner requires any maintenance services for such Facility following such termination, Owner shall notify Operator of such requirements in writing. If Operator desires to perform such maintenance services, Operator shall provide within five (5) Business Days to Owner the material terms and conditions (including the scope of services offered, the price(s)

quoted for such services, and the terms of any performance warranties to be provided in connection with such services) pursuant to which it is willing to provide such maintenance services for such Facility, which shall be no less favorable to Owner than Operator's standard rates, terms and warranties as of such date. If Owner declines to engage Operator to perform such services, or the Parties are unable to execute appropriate documentation to reflect such services, Owner may (subject to Section 11.9(b)) seek to engage a Third Party Operator to perform such services, provided that, prior to engaging any such Third Party Operator to maintain such Facility, Owner shall provide written notice to Operator of the material terms and conditions on which such third party has offered to provide such service (including (X) the scope of services offered, (Y) the price(s) quoted for such services, and (Z) the terms of any performance warranties to be provided in connection with such services). Operator shall have ten (10) Business Days to notify Owner if Operator will agree to perform the applicable services for a price not to exceed the quoted amount and otherwise on terms no less favorable to Owner than those included in the notice required hereunder. If Operator agrees to provide such services, the Parties will negotiate in good faith regarding appropriate documentation to reflect such services. If Operator declines to provide such services, Owner may engage the applicable third party on terms no more favorable to such third party than those provided in the notice to Operator.

(b) Without in any way limiting the provisions of the foregoing Section 11.9(a), Owner shall in all events use commercially reasonable efforts to engage a Third Party Operator to provide such maintenance that is not a competitor of Operator or its Affiliates and is not in litigation or other material dispute with Operator.

Section 9.9 Termination at Expiration of Tariff; Removal of Facilities by Operator.

(a) Notwithstanding anything to the contrary set forth in Section 2.4(a), Owner may, by written notice to Operator delivered not less than one hundred eighty (180) days prior to the expiration of the Tariff with respect to the final Bloom System eligible for service under such Tariff, elect to abandon the Project. If Owner notified Operator of its intent to abandon the Project in connection with the expiration of the Tariff, then (i) Operator, at its sole cost, shall assume all of Owner's obligations to remove the Bloom Systems and all BOF from each Site and to restore each Site in accordance with the Performance Standards (including all requirements of each Site Lease), (ii) title to each Bloom System, item of BOF and each other Project asset shall pass from Owner to Operator as of the day the Operator removes such item from the applicable Site, and (iii) Operator shall indemnify Owner from any and all Indemnifiable Losses related to the removal and restoration of each Site in accordance with the terms of Section 12.3.

(b) In the event that Owner elects to abandon the Project pursuant to Section 11.9(a), Owner agrees to cooperate with Operator as Operator may

reasonably request (and at Operator's sole cost and expense) so that Operator may satisfy its obligations pursuant to such Section 11.9(a), including assisting Operator in seeking an extension of the period to complete the removal of the Project and restoration of the Sites afforded by the Site Leases if necessary.

ARTICLE X.
INDEMNIFICATION

Section 10.1 IP Indemnity.

(a) Except as expressly limited below, Operator agrees to indemnify, defend and hold Owner, its members, and their Affiliates and their respective managers, officers, directors, employees and agents harmless from and against any and all Third Party Claims and Indemnifiable Losses (including in connection with obtaining any Intellectual Property necessary for continuation of completion, operation and maintenance, and performance of the Facility Services for the Bloom Systems purchased by Owner from Operator), arising from or in connection with any alleged infringement, conflict, violation or misuse of any patents, copyrights, trade secrets or other third party Intellectual Property rights by the Bloom Systems purchased by Owner from Operator (or the use, operation or maintenance thereof) or the exercise of the IP License or the Software License granted pursuant to the Existing System MESPA or New System CapEx Agreement, as applicable. Owner shall give Operator prompt notice of any such claims. Operator shall be entitled to participate in, and, unless in the opinion of counsel for Operator a conflict of interest between the Parties may exist with respect to such claim, assume control of the defense of such claim with counsel reasonably acceptable to Owner. Owner authorizes Operator to settle or defend such claims in its sole discretion on Owner's behalf, without imposing any monetary or other obligation or liability on Owner and subject to Owner's participation rights set forth in this Section 12.1. Owner shall assist Operator upon reasonable request by Operator and, at Operator's reasonable expense, in defending any such claim. If Operator does not assume the defense of such claim, or if a conflict precludes Operator from assuming the defense, then Operator shall reimburse Owner on a monthly basis for Owner's reasonable defense expenses of such claim through separate counsel of Owner's choice reasonably acceptable to Operator. Even if Operator assumes the defense of such claim, Owner may, at its sole option, participate in the defense, at Owner's expense, without relieving Operator of any of its obligations hereunder. Should Owner be enjoined from selling or using any Bloom System as a result of such claim, Operator will, at its sole option and discretion, either (i) procure or otherwise obtain for Owner the right to use or sell the Bloom System; (ii) modify the Bloom System so that it becomes non-infringing but still substantially meets the original functional specifications of the Bloom System (in which event, for the avoidance of doubt, all warranties hereunder shall continue to apply unmodified); (iii) upon return of the Bloom System to Operator, as directed by Operator, provide to Owner a non-infringing Bloom System meeting the functional specifications of the Bloom System, or (iv) when and

if none of the first three options is reasonably available to Operator, authorize the return of the Bloom System to Operator and, upon receipt thereof, return to Owner all monies paid by Owner to Operator for the cost of the Bloom System and BOF, net of any monies paid by Operator to Owner pursuant to the Portfolio Output Warranty, Efficiency Guaranty and/or Output Guaranty to the extent such Operator payments are allocable to such Bloom System; provided that Operator shall not elect the option in the preceding clause (i) without Owner's written consent if such election could reasonably be expected to materially decrease Owner's revenues or materially increase Owner's operating expenses.

(b) THIS INDEMNITY SHALL NOT COVER ANY CLAIM:

(i) for Intellectual Property infringement, conflict, violation or misuse arising from or in connection with any combination made by Owner of any Bloom System with any other product or products or modifications made by or on behalf of Owner to any part of the Bloom System, unless (A) such combination or modification is in accordance with Operator's specifications for the Bloom System, (B) such combination or modification is made by or on behalf of or at the written request of Operator where Operator has requested the specific combination or modification giving rise to the claim by Owner, or (C) such other product or products would not infringe the Intellectual Property rights of a third party but for the combination with any part of the Bloom System; or

(ii) for infringement of any Intellectual Property rights arising in whole or in part from any aspect of the New System which was designed by or requested by Owner on a custom basis.

Section 10.2 Indemnification of Operator by Owner. Owner shall indemnify, defend and hold harmless Operator, its officers, directors, employees, shareholders, Affiliates and agents (each, an "Operator Indemnitee") from and against any and all Indemnifiable Losses asserted against or suffered by any Operator Indemnitee arising out of a Third Party Claim (other than a claim for an Operator Indemnitee's breach of any contract to which such Operator Indemnitee is a party), and in any way relating to, resulting from or arising out of or in connection with any Third Party Claims against an Operator Indemnitee to the extent arising out of or in connection with (a)(1) the negligent or intentional acts or omissions of Owner or its subcontractors, agents or employees or others under Owner's control (excluding any act or omission by any Operator Indemnitee, or any Operator Personnel), (2) a breach by Owner of its representations, warranties or obligations under this Agreement (except to the extent caused by any Operator Indemnitee or any Operator Personnel), or (3) any breach of a Site Lease or Interconnection Agreement, except to the extent relating to, resulting from or arising out of or in connection with any act or omission by Operator, any Operator Indemnitee or any Operator Personnel, or (b) the operation of any Bloom System by any Person other than Operator or an Affiliate or subcontractor of Operator (but subject to Operator's

warranties, covenants and indemnities under this Agreement and any other Transaction Document to which Operator is a party); provided that Owner shall have no obligation to indemnify Operator to the extent caused by or arising out of any (i) negligence, fraud or willful misconduct of any Operator Indemnitee or the breach by Operator or any Operator Indemnitee of its covenants, representations and warranties under this Agreement, or (ii) operation of Bloom Systems by a party outside of Owner's control or direction (including any Operator Personnel) or by a party taking such action despite Owner's reasonable efforts to prevent the same.

Section 10.3 Indemnification of Owner by Operator. Operator shall indemnify, defend and hold harmless Owner, its members, managers, officers, directors, employees, Affiliates and agents (each, a "Owner Indemnitee") from and against any and all Indemnifiable Losses (other than Indemnifiable Losses addressed in Section 12.1) asserted against or suffered by any Owner Indemnitee arising out of a Third Party Claim, and in any way relating to, resulting from or arising out of or in connection with any Third Party Claims against an Owner Indemnitee to the extent arising out of or in connection with (i) the negligent or intentional acts or omissions of Operator or any Operator Personnel (other than matters addressed separately in Section 12.1, which shall be governed by the terms thereof), (ii) a breach by Operator of its representations, warranties or obligations under this Agreement, including any breach of a Site Lease or Interconnection Agreement to the extent relating to, resulting from or arising out of or in connection with any act or omission by Operator or any Operator Personnel, (iii) any injury, death, or damage to property caused by a defect in any Bloom System, BOF, or New BOF, or (iv) [*]; provided that, Operator shall have no obligation to indemnify Owner to the extent caused by or arising out of (x) any negligence, fraud or willful misconduct of an Owner Indemnitee, except to the extent caused by any Operator Personnel, (y), the breach by Owner or any Owner Indemnitee of its covenants, representations and warranties under this Agreement or any Site Lease or Interconnection Agreement, except to the extent such breach is caused by Operator's (or any Operator Personnel's) breach of this Agreement (including any failure to perform obligations on behalf of Owner in accordance with the terms of this Agreement), or (z) the inability of Owner to ultimately utilize any tax benefits.

(a) Except as otherwise set forth in this Agreement, in the event that Owner incurs any liability, cost, loss or expense to a Site Landlord (including relating to a breach of a Site Lease) in relation to the repurchase by or return to Operator of any Bloom System under this Agreement or the Existing System Repurchase Agreement, Operator shall indemnify and hold Owner harmless for any such liability, cost, loss or expense incurred by Owner.

(b) Operator acknowledges and agrees that each Site Landlord is an intended third party beneficiary of Operator's indemnification obligations in favor of the Owner Indemnitees and that Owner may, with Operator's reasonable consent following cooperative discussions between the Parties regarding the least disruptive

manner of resolving the applicable Site Landlord claim, elect to assign to a Site Landlord the right to seek indemnification directly from Operator in the event that Owner owes to such Site Landlord any indemnification obligations arising out of or in connection with any breach of a Site Lease or arising out of any actions or inactions of Operator under this Agreement that give rise to an indemnification obligation of Operator in favor of any Owner Indemnitee.

Section 10.4 Indemnity Claims Procedure. Except as otherwise provided in Section 12.1, if any indemnifiable claim is brought against a Party (the "Indemnified Party"), then the other Party (the "Indemnifying Party") shall be entitled to participate in, and, unless in the reasonable opinion of counsel for the Indemnifying Party a conflict of interest between the Parties may exist with respect to such claim, assume the defense of such claim, with counsel reasonably acceptable to the Indemnifying Party. If the Indemnifying Party does not assume the defense of the Indemnified Party or if a conflict precludes the Indemnifying Party from assuming the defense, then the Indemnifying Party shall reimburse the Indemnified Party on a monthly basis for the Indemnified Party's reasonable defense expenses through separate counsel of the Indemnified Party's choice. Even if the Indemnifying Party assumes the defense of the Indemnified Party with acceptable counsel, the Indemnifying Party, at its sole option, may participate in the defense, at its own expense, with counsel of its own choice without relieving the Indemnifying Party of any of its obligations hereunder.

Section 10.5 Limitation of Liability; Waiver.

(a) Notwithstanding anything to the contrary in this Agreement, in no event shall a Party be liable to the other Party for an amount in excess of the Maximum Liability unless and to the extent such liability is the result of (A) fraud, willful default, willful misconduct, or gross negligence of a Party or that Party's employees, agents, subcontractors (except that for the purposes of this provision, Operator and any applicable Operator Personnel and their respective employees, agents and subcontractors will not be deemed to be employees, agents, or Representatives or subcontractors of Owner), (B) a Third Party Claim, (C) a claim of Operator against Owner for Owner's failure to pay the Service Fees for any Facility (which amounts shall not be included in calculating Owner's Maximum Liability), (D) a claim with respect to injury to or death of any individual, (E) Operator's abandonment to the extent constituting a repudiation of this Agreement in respect of all or any part of the Facilities, (F) events or circumstances in respect of which insurance proceeds are available or that would have been available but for a failure by Operator to maintain, or comply with the terms of, insurance that it is required to obtain and maintain under this Agreement, and any amounts so received will not be included when calculating Operator's Maximum Liability, or (G) a claim of Owner against Operator for Operator's breach of a Fundamental Representation. Subject always to the Maximum Liability limitations set forth in the preceding sentence, except for damages or amounts specifically provided for in this Agreement or in connection

with the indemnification for damages awarded to a third party under a Third Party Claim, damages hereunder are limited to direct damages, and in no event shall a Party be liable to the other Party, and the Parties hereby waive claims, for indirect, punitive, special or consequential damages or loss of profits; provided, however, that the loss of profits language set forth in this Section 12.5(a) shall not be interpreted to exclude from Indemnifiable Losses any losses arising as a result of the loss or recapture of any ITC or recovery for any losses merely because such losses would result in a reduction in the profits of Owner, Diamond State Generation Holdings, LLC, SP Diamond State Class B Holdings, LLC, or any or all of such Persons. Notwithstanding anything to the contrary set forth herein, in no event shall the limitation of liability set forth above as it pertains to Operator limit Operator's obligations to Owner for any payments owed by Operator to Owner regarding (i) the Repurchase Amount in respect of any Bloom Systems, (ii) Output Guaranty and/or Efficiency Guaranty payments, or (iii) Indemnifiable Losses arising from the loss or recapture of any ITC. Any amounts paid or payable by Operator to Owner as described in the preceding sentence will not be included when calculating Operator's Maximum Liability.

(b) Each Party hereby agrees that any claim for damages against the other Party under this ARTICLE XII shall be reduced to the extent of any insurance proceeds actually received by such claiming Party.

(c) Operator, on behalf of itself and each Operator Indemnitee hereby waives and releases Owner and each Owner Indemnitee of any and all Indemnifiable Losses arising out of or relating to any violation of Environmental Law at a Facility other than any such violation directly resulting from physical actions of Owner's subcontractors, agents or employees or others under Owner's control (excluding Operator, any Operator Affiliate or any Operator Personnel) performed at such Facility.

Section 10.6 Liquidated Damages; Estoppel. The Parties acknowledge and agree that it would be impracticable or impossible to determine with precision the amount of damages that would or may be incurred by Owner as a result of the Portfolio's failure to satisfy any Portfolio Output Warranty. It is therefore understood and agreed by the Parties that: (a) Owner may be damaged by Operator's failure to satisfy either Portfolio Output Warranty; (b) it would be impractical or impossible to fix the actual damages to Owner resulting therefrom; and (c) any cash payments in respect of a claim under the Output Guaranty and any Repurchase Amounts payable to Owner under Section 4.9 for failure to meet such obligations are in the nature of liquidated damages, and not a penalty, and are fair and reasonable estimate of compensation for the losses that Owner may reasonably be anticipated to incur by such failure. Operator hereby (i) waives any argument that its failure to comply with its obligations set forth in Section 4.9 would not cause Owner irreparable harm, (ii) agrees that it shall be estopped from arguing the invalidity, or otherwise questioning the reasonableness, of the liquidated damages provided for herein, and

(iii) agrees that it will consent to the entry of judgment ordering payment of such liquidated damages in any court of competent jurisdiction. Operator and Owner each agree that Owner shall be under no obligation to submit any dispute regarding the payment of any Repurchase Amount when due to the dispute resolution mechanism set forth in Section 13.5, but may rather immediately pursue whatever rights it has available under this Agreement, at law or in equity in accordance with Section 13.6 herein.

Section 10.7 Survival. The Parties' respective rights and obligations under this ARTICLE XII shall survive any total or partial termination of this Agreement.

ARTICLE XI.
MISCELLANEOUS PROVISIONS

Section 11.1 Amendment and Modification. This Agreement may be amended, modified or supplemented only by written agreement of Owner and Operator.

Section 11.2 Waiver of Compliance; Consents. Except as otherwise provided in this Agreement, any failure of any of the Parties to comply with any obligation, covenant, agreement or condition herein may be waived by the Party entitled to the benefits thereof only by a written instrument signed by the Party granting such waiver, but any such waiver of such obligation, covenant, agreement or condition shall not operate as a waiver of, or estoppel with respect to, any subsequent failure to comply therewith.

Section 11.3 Notices. All notices, provisions of Documentation, reports, certifications, or other documentation, and other communications hereunder shall be in writing and shall be deemed given when received if delivered personally or by facsimile transmission with completed transmission acknowledgment or by electronic mail, or when delivered if mailed by overnight delivery via a nationally recognized courier or registered or certified first class mail (return receipt requested), postage prepaid, to the recipient Party at its below address (or at such other address or facsimile number for a Party as shall be specified by like notice; provided, however, that notices of a change of address shall be effective only upon receipt thereof and that any notice provided by electronic mail will be followed promptly by another form of notice consistent with this Section 13.3 and will be effective when such follow-up notice is deemed effective):

To Operator: Bloom Energy Corporation
4353 N. 1st Street, San Jose CA 95134
Attention: [*]
Email: [*]

and to:

Bloom Energy Corporation
4353 N. 1st Street, San Jose CA 95134
Attention: General Counsel

To Owner: Diamond State Generation Partners, LLC
c/o SP Diamond State Class B Holdings, LLC
30 Ivan Allen Jr. Blvd.
Atlanta, GA 30308
Attention: General Counsel and Corporate Secretary

with copies to (which copies shall not constitute notice):

Smith, Anderson, Blount, Dorsett, Mitchell & Jernigan, L.L.P.
150 Fayetteville Street, Suite 2300
Raleigh, NC 27601
Attention: [*]
Telephone: [*]
Email: [*]

and,

McDermott Will & Emery LLP
340 Madison Avenue
New York, NY 10173
Attention: [*]
Email: [*]

Section 11.4 Assignment. This Agreement and all of the provisions hereof shall be binding upon and inure to the benefit of the Parties and their respective successors and permitted assigns (including by operation of law), but neither this Agreement nor any of the rights, interests or obligations hereunder shall be assigned by any Party without the prior written consent of the other Party (to be granted in the other Party's sole discretion), provided that (i) Owner may assign its indemnification rights to Site Landlords as set forth in Section 12.3 upon notice to Operator, (ii) Owner may assign all of its right, title and interest in and to this Agreement to an Affiliate wholly owned (directly or indirectly) by The Southern Company without the prior consent of Operator (provided that such assignee Affiliate shall assign this Agreement back to Owner at any future date that such assignee is no longer an Affiliate of Owner), (iii) Owner may make such an assignment without Operator's consent to a successor to substantially all of Owner's business, whether in a

merger, sale of stock, sale of membership interests, sale of assets or other transaction (other than a transaction with an entity that is a competitor

of Operator or its Affiliates, unless consented to under the provisions of Section 13.4(b)), and (iv) Operator shall be entitled to subcontract any of its obligations under this Agreement without consent (except as set forth in Section 13.14) or to assign its obligations under this Agreement to an Affiliate under common ownership with Operator, provided further that (X) such assignment or subcontracting shall not excuse Operator from the obligation to competently perform any subcontracted or assigned obligations or any of its other obligations under the Agreement and (Y) nothing in this Agreement shall be deemed to require the consent of any Party with respect to any change in control, merger or sale of all or substantially all of the assets of Southern Power Company or Operator. Any purported assignment or delegation in violation of this Section shall be null and void.

(a) In the event of an assignment by Owner or other transaction described in clause (iii) of Section 13.4(a), Owner shall notify Operator of the identity of the proposed assignee or successor in writing, and Operator shall have the right to consent to such assignment or transaction in the event that Operator reasonably believes such proposed assignee to be a competitor of Operator. Operator shall notify Owner of its determination within ten (10) Business Days of receipt of notice from Owner hereunder. If Operator notifies Owner that it has determined that the proposed assignee is a competitor of Operator and that Operator is electing to withhold consent, then Owner shall be prohibited from consummating the proposed transaction unless it has been finally determined that such proposed assignee is not a competitor of Operator.

(b) Any disputes regarding Operator's determination of a proposed assignee as a competitor to Operator shall be resolved as follows:

(i) Owner will promptly provide written notification of the dispute to Operator within five (5) Business Days after notice by Operator that it has determined the proposed assignee to be a competitor and that it is withholding its consent. Thereafter, a meeting shall be held promptly between the Parties, attended by Operator's Chief Financial Officer and Owner's Chief Financial Officer or President, to attempt in good faith to negotiate a resolution of the dispute, *provided,* that either Party may elect to escalate the dispute to the Parties' respective Chief Executive Officer at any time.

(ii) If the Parties are not successful in resolving a dispute within ten (10) Business Days of the meeting called for above, the dispute shall be submitted, within ten (10) Business Days thereafter, to a mediator with energy industry experience. The Parties shall cooperate with and provide such documents, information and other assistance as is requested by the mediator to assist in efforts to resolve the dispute. The costs of the mediator shall be borne equally by the Parties.

(iii) If efforts to mediate are not successful within thirty (30) days of submitting the dispute to the mediator, both Parties will retain all legal remedies available to them.

Section 11.5 Dispute Resolution; Service of Process.

(a) Except as provided in Section 12.6 and Section 13.4(c), in the event a dispute, controversy or claim arises hereunder, including any claim whether in contract, tort (including negligence), strict product liability or otherwise, the aggrieved Party will promptly provide written notification of the dispute to the other Party within ten (10) days after such dispute arises. Thereafter, a meeting shall be held promptly between the Parties, attended by Representatives of the Parties with decision-making authority regarding the dispute, to attempt in good faith to negotiate a resolution of the dispute. If the Parties are not successful in resolving a dispute within twenty-one (21) days of such meeting, then, subject to the limitations on remedies set forth in Section 11.3 and Section 11.4 and ARTICLE XII, either Party may pursue whatever rights it has available under this Agreement, at law or in equity in accordance with Section 13.6 herein.

(b) In the event of any dispute arising out of or relating to this Agreement, each Party hereby consents to service of process made to the addressees set forth in Section 13.3 herein either by overnight delivery by a nationally recognized courier or by certified first class mail, return receipt requested, and hereby acknowledges that service by such means shall constitute valid and lawful service of process against the Party being served.

Section 11.6 Governing Law, Jurisdiction, Venue. THIS AGREEMENT SHALL BE GOVERNED BY AND INTERPRETED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK, WITHOUT GIVING EFFECT TO ANY CONFLICTS OF LAW OR OTHER PRINCIPLES THEREOF THAT WOULD RESULT IN THE APPLICATION OF THE LAWS OF ANOTHER JURISDICTION (OTHER THAN SECTION 5-1401 OF THE NEW YORK GENERAL OBLIGATIONS LAW). THE PARTIES HEREBY IRREVOCABLY SUBMIT TO THE NON-EXCLUSIVE JURISDICTION OF THE COURTS OF THE STATE OF NEW YORK AND OF THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF NEW YORK WITH RESPECT TO ANY DISPUTE ARISING OUT OF OR RELATING TO THIS AGREEMENT. EACH PARTY IRREVOCABLY AND UNCONDITIONALLY WAIVES TRIAL BY JURY IN ANY ACTION, SUIT OR PROCEEDING RELATING TO ANY SUCH DISPUTE AND FOR ANY COUNTERCLAIM WITH RESPECT THERETO.

Section 11.7 Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Signatures delivered by facsimile, portable document format or other electronic means (including services such as DocuSign) will be considered original signatures, and each Party shall thereafter promptly deliver original signatures to the other Party.

Section 11.8 Interpretation. The article, section and schedule headings contained in this Agreement are solely for the purpose of reference, are not part of the agreement of the Parties and shall not in any way affect the meaning or interpretation of this Agreement.

Section 11.9 Entire Agreement. This Agreement, the other Transaction Documents, the [*], and the exhibits, schedules, documents, certificates and instruments referred to therein, embody the entire agreement and understanding of the Parties in respect of the transactions contemplated by this Agreement. Each Party acknowledges that, in agreeing to enter into this Agreement, it has not relied on any representation, warranty, collateral contract or other assurance (except those in this Agreement or any other agreement entered into on the date of this Agreement between the Parties) made by or on behalf of any other Party at any time before the signature of this Agreement. Each Party waives all rights and remedies which, but for the immediately preceding sentence, might otherwise be available to it in respect of any such representation, warranty, collateral contract or other assurance.

Section 11.10 Construction of Agreement. The terms and provisions of this Agreement represent the results of negotiations between Owner and Operator, each of which has been represented by counsel of its own choosing, and neither of which has acted under duress or compulsion, whether legal, economic or otherwise. Accordingly, the terms and provisions of this Agreement shall be interpreted and construed in accordance with their usual and customary meanings, and Owner and Operator hereby waive the application in connection with the interpretation and construction of this Agreement of any rule of law to the effect that ambiguous or conflicting terms or provisions contained in this Agreement shall be interpreted or construed against the Party whose attorney prepared the executed draft or any earlier draft of this Agreement.

Section 11.11 Severability. If any term or other provision of this Agreement is invalid, illegal or incapable of being enforced by any rule of law or public policy, all other conditions and provisions of this Agreement shall nevertheless remain in full force and effect so long as the economic or legal substance of the transactions contemplated hereby is not affected in any manner materially adverse to any Party.

Section 11.12 Further Assurances. Each Party agrees to execute and deliver such additional documents and instruments and to perform such additional acts as may be necessary or appropriate to effectuate, carry out and perform all of the terms, provisions, and conditions of this Agreement and the transactions contemplated by this Agreement.

Section 11.13 Independent Contractor. Operator shall perform the Facility Services and act at all times as an independent contractor, and shall be solely responsible for the means, methods, techniques, sequences, and procedures employed for execution and completion of the Facility Services. Nothing in this

Agreement shall be interpreted or applied so as to make the relationship of any of the Parties that of partners, joint venturers or anything other than the relationship of customer and independent contractor. Notwithstanding anything to the contrary herein, including Operator's obligation to perform on behalf of Owner certain of Owner's obligations under the Tariff, Interconnection Agreements, and Site Leases, neither Operator nor any of its employees, agents, subcontractors or Representatives shall be considered an employee, agent, subcontractor or Representative of, nor under the control of, Owner under this Agreement. Operator shall at all times maintain supervision, direction and control over its employees, agents, subcontractors and Representatives as is consistent with and necessary to preserve its independent contractor status, and Operator shall be responsible to Owner for the acts and omissions of each such employee or subcontractor.

Section 11.14 Service Providers. Operator may appoint one or more unrelated third party(ies), who is appropriately qualified, licensed, and financially responsible, to perform Facility Services throughout the Term. Operator shall submit such appointment of any Major Service Provider to Owner for its prior written approval, which approval shall not be unreasonably withheld or delayed. No such appointment nor the approval thereof by Owner, however, shall relieve Operator of any liability, obligation, or responsibility resulting from a breach of this Agreement. "Major Service Provider" means any Service Provider that Operator proposes to engage to perform any Facility Services for which the aggregate compensation to such Service Provider in any calendar year is expected to be greater than ten percent (10%) of the aggregate amount paid to Operator as Service Fees pursuant to this Agreement in the applicable calendar year. The Parties agree that each of the Major Service Providers set forth on Schedule 13.14 hereof are approved for all purposes by Owner as of the Agreement Date. Each subcontractor (of any tier, Service Providers, Major Service Providers, and Service Technicians) must be a reputable, qualified firm with an established record of successful performance in its trade, and shall obtain and maintain such insurance coverages having such terms as set forth in Annex B to the extent applicable to the work to be performed by such subcontractor. Operator shall not be relieved from its obligation to provide any services hereunder if a subcontractor agrees to provide any or all of such services. No subcontractor is intended to be or will be deemed a third-party beneficiary of this Agreement. Nothing contained herein shall create any contractual relationship between any subcontractor and Owner or obligate Owner to pay or cause the payment of any amounts to any subcontractor, including any payment due to any third party. Operator shall not permit any subcontractor to assert any Lien against any Bloom System, or attach any Lien other than a Permitted Lien. None of Operator's employees, subcontractors or any such subcontractor's employees will be or will be considered to be employees of Owner. To the extent that any Site Landlord has the right to request removal of any Operator or subcontractor personnel under a Site Lease, Operator shall cooperate with Owner in complying with the terms and conditions of such Site Lease including by, upon written notification by Owner that the performance, conduct or behavior of any

Person employed by Operator or one of its subcontractors is unacceptable to the applicable Site Landlord, promptly stopping such Person from performing any obligations hereunder and/or removing such Person from the applicable Site. Additionally, Owner may bring to Operator's attention any concerns regarding the performance, conduct or behavior of any Person employed by Operator or one of its subcontractors, which concerns Operator shall consider in good faith and thereafter take such action as Operator deems appropriate under the circumstances. Operator will be fully responsible for the payment of all wages, salaries, benefits and other compensation to its employees and for payment of any Taxes due because of its work hereunder.

Section 11.15 Rights to Deliverables. Owner agrees that Operator shall, except as expressly set forth herein, retain all rights, title and interest, including Intellectual Property rights, in any Training Materials provided to Owner in connection with the services performed hereunder. "Training Materials" means any and all materials, documentation, notebooks, forms, diagrams, manuals and other written materials and tangible objects, describing how to operate and maintain the Facilities or perform any of the Installation Services and/or Facility Services (if applicable), including any corrections, improvements and enhancements which are delivered by Operator to Owner, but excluding any Documentation or other data and reports delivered to Owner in respect of any Facilities.

Section 11.16 Limitation on Export. Owner agrees that it will not export, re-export, resell, ship or divert directly or indirectly any Facility or any part thereof in any form or technical data or Software furnished hereunder to any country prohibited by the United States Government or any other Governmental Authority, or for which an export license or other Governmental Approval is required, without first obtaining such license or approval.

Section 11.17 Time of Essence. Time is of the essence with respect to all matters contained in this Agreement.

Section 11.18 No Rights in Third Parties. Except as otherwise specified herein, (a) nothing in this Agreement nor any action taken hereunder shall be construed to create any duty, liability or standard of care to any Person that is not a Party, (b) no Person that is not a Party shall have any rights or interest, direct or indirect, in this Agreement or the services to be provided hereunder and (c) this Agreement is intended solely for the benefit of the Parties, and the Parties expressly disclaim any intent to create any rights in any third party as a third-party beneficiary to this Agreement or the services to be provided hereunder.

Section 11.19 No Modification or Alteration of DSGP Operating Agreement. Notwithstanding anything to the contrary herein and for the avoidance of doubt, (a) nothing in this Agreement shall affect or modify the rights or obligations of the members of Owner under the DSGP Operating Agreement, and (b) no Owner Manager shall have authority to take any action or agree to take any action that

would violate the DSGP Operating Agreement or that would require the consent or approval of any member or the managing member of Owner under the DSGP Operating Agreement (unless such consent or approval is first obtained).

Section 11.20 Amendment and Restatement of Original MOMA. By their execution and delivery of this Agreement, the Parties hereby amend and restate in its entirety the Original MOMA. From and after the date hereof, (a) the Parties' mutual understanding of each of the matters set forth herein shall be governed by the terms of this Agreement, and (b) any reference to the Original MOMA in any other agreement(s) shall be understood to refer to this Agreement.

[remainder of page intentionally left blank]

IN WITNESS WHEREOF, Owner and Operator have caused this Amended and Restated Master Operations and Maintenance Agreement to be signed by their respective duly authorized officers as of the Agreement Date.

OWNER:	**OPERATOR:**
DIAMOND STATE GENERATION PARTNERS, LLC a Delaware limited liability company	**BLOOM ENERGY CORPORATION** a Delaware corporation
By: /s/ Tim Gray Name: Tim Gray Title: Vice President	By: /s/ Deon Boles Name: Deon Boles Title: Corporate Controller

Annex A

Minimum Power Product and Minimum kWh Example Calculations

Existing System Portfolio Output Warranty

Assumptions

- Aggregate System Capacity of Bloom Systems in Existing System Portfolio: 15,000 kW
- Hours in applicable Calendar Quarter: (90 days) * (24 hours/day) = 2,160 hours
- Hours subject to Exclusion under Section 4.8: 100

Calculations

- *Minimum Power Product* = (15,000kW) * ([*]% = [*]kW
  Minimum kWh = ([*]kW) * (2,160 - 100) = [*] kWh

Annex B

Insurance

Insurance. At all times during the Term, without cost to Owner, Operator shall maintain in force and effect the following insurance, which insurance shall not be subject to cancellation, termination or other material adverse changes unless the insurer delivers to Owner written notice of the cancellation, termination or change at least thirty (30) days in advance of the effective date of the cancellation, termination or material adverse change or if notice from the insurer to Owner of material adverse change is not available on commercially reasonable terms then Operator shall provide Owner with such notice as soon as reasonably possible after becoming aware of such change. For the avoidance of doubt, the insurance required hereunder shall only pertain to Operator's Facility Services (including, for clarity, any removal or restoration services provided by Operator):

(a) Worker's Compensation Insurance as required by the laws of the state in which Operator's employees are performing Facility Services;

(b) Employer's liability insurance with limits at policy inception not less than One Million Dollars ($1,000,000.00) per occurrence;

(c) Commercial General Liability Insurance, including bodily injury and property damage liability (arising from premises, operations, contractual liability endorsements, products liability, or completed operations) with limits not less than One Million Dollars ($1,000,000.00) per occurrence and Two Million Dollars ($2,000,000.00) annual aggregate limit at policy inception;

(d) If there is exposure, automobile liability insurance in accordance with prudent industry practice with a limit of not less than One Million Dollars ($1,000,000.00), combined single limit per occurrence;

(e) Umbrella liability insurance acting in excess of underlying employer's liability, commercial general liability and automobile liability policies with limits not less than Fifteen Million Dollars ($15,000,000.00) per occurrence, except that any subcontractors shall be required to maintain such insurance with limits of not less than Three Million Dollars ($3,000,000.00);

(f) Professional errors and omission insurance with a limit of not less than One Million Dollars ($1,000,000.00) per occurrence; and

(g) Environmental/pollution liability insurance with a limit of not less than One Million Dollars ($1,000,000.00) per claim.

Operator shall cause Owner to be included as additional insured to all insurance policies required in accordance with the provisions of this Agreement except for worker's compensation. The required insurance must be written as a primary policy not contributing to or in excess of any policies carried by Owner, and each must contain a waiver of subrogation in favor of Owner.

Additionally, Operator shall procure and maintain any insurance coverages (if any) with respect to commercial general liability and excess liability required to be carried by Owner's contractors and service providers pursuant to a Site Lease pursuant to policies that comply with all requirements set forth in such Site Lease.

Additional Insurance. To the extent that a Material Contract (as defined in the ECCA) requires Operator to maintain additional insurance coverage, higher limits or any other insurance requirement because of Operator's undertakings pursuant to this Agreement ("Required Insurance"), Operator shall obtain and maintain the Required Insurance for as long as required under such Material Contract.

Operator shall provide Owner with evidence of compliance with these insurance requirements when requested by Owner from time to time on a reasonable basis.

ANNEX B-2

Annex C

Sample Output Guaranty Calculation

Sample New System Portfolio Output Guaranty Calculation

Assumptions		
Number of New Systems in New System Portfolio	50	
System Capacity	250	kW
Output Guaranty	[*]%	
Days in Month	30	
Exclusion Hours	0	
Monthly Minimum kWh		
= 50*250*[*]30*24	[*]	kWh

ANNEX C-1

Annex D

Sample New System Portfolio Output Warranty Calculation

Sample New System Portfolio Output Warranty Calculation

Assumptions		
Number of New Systems in New System Portfolio	50	
System Capacity	250	kW
Output Guaranty	[*]%	
Days in Month	30	
Exclusion Hours	0	
Monthly Minimum kWh		
= 50*250*[*]*30*24	[*]	kWh

ANNEX D-1

Exhibit A

Parties' Managers

Operator: [*]

Owner: [*]

Exhibit B

Service Fees

Existing Systems: $[*]/kW per month, commencing on the first day of the calendar month immediately following the month in which such Existing System achieved "Commencement of Operations" under the Existing System MESPA.

New Systems:

Year	Service Fees ($/kW/month)
Manufacturer's Warranty Period	$[*]
2	$[*]
3	$[*]
4	$[*]
5	$[*]
6	$[*]
7	$[*]
8	$[*]
9	$[*]
10	$[*]
11	$[*]
12	$[*]
13	$[*]
14	$[*]
15	$[*]
16	$[*]
17	$[*]
18	$[*]
19	$[*]
20	$[*]
21	$[*]
22	$[*]
23	$[*]
24	$[*]
25	$[*]
26	$[*]
27	$[*]

28	$[*]
29	$[*]
30	$[*]

Exhibit B-1

Exhibit B-2

Exhibit C

Operator Corporate Safety Plan

At all times during the Term, Operator shall maintain at Operator's corporate headquarters and adhere to Operator's written corporate safety programs, which shall include the following programs:

- Contractor Environmental Health & Safety Program
- Injury and Illness Prevention Program
- Heat Illness Prevention Program
- RCRA Contingency Plan and Emergency Procedures
- SPCC Plan
- Emergency Action and Fire Prevention Plan
- Hazard Communication Program
- Corporate Electrical Standard – Specific Electrical Safe Work Practices
- Electrical Safety Awareness
- Lockout/Tagout
- Fall Protection Program (Working at Heights)
- Ladder Safety Program
- Powered Industrial Trucks (PIT)
- Hoist Safety Program
- Personal Protective Equipment (PPE)
- Respiratory Protection Program
- Hearing Conservation Program
- Hand and/or Powered Tools Safety Program
- Hot Work Process
- First Aid / CPR Program

(the foregoing, collectively, the "Operator Corporate Safety Plan").

Exhibit C-1

Exhibit D

Operator Subcontractor Quality Plan

Operator will adhere to the following standards and processes as applicable when engaging subcontractors for performance under this Agreement.

- General contractors will be subject to the terms and conditions set forth in The American Institute of Architects Document A107 – 2007 as amended in certain cases
- General contractors are required to complete a Bloom Energy Contractor Qualification Training Program
- General contractor superintendents and foremen must be certified and qualified by Operator to be on site
- Standard safety protocols will be observed at all times:
  - Site superintendents are OSHA30 certified
  - Operator superintendents ensure general contractors follow all local and state OSHA and owner requirements
  - Confirmation of "Injury and Illness Prevention Program"
  - Operator included in the ISN program – 3rd party safety evaluation
- A project superintendent assigned by Operator will review subcontractor work according to a standard site verification check list
- Contractors will submit Contractor Quality Guarantees for each site providing written verification of points of assurance including torques per site, Megger testing and line flushing
- Prestart verification conducted for all sites to review and confirm the quality of subcontractor work
- All incidents are logged in a database and reviewed on an ongoing basis by Operator quality management
- Quarterly business reviews conducted with general contractors to formally review incident data and mitigate process and workmanship issues

Exhibit E

Environmental Compliance Duties

Without limiting any other obligations of Operator in respect of Environmental Requirements, Operator shall perform under this Agreement in compliance with the following:

- Comply with all terms, conditions and limitations of the Air Permits including the following:
  - Records of daily, monthly and annual natural gas fuel consumption by the fuel cells
  - Records of the sulfur content of the natural gas utilized to operate the fuel cells
  - Documentation that the desulfurization canisters are operated and maintained according to manufacturer's recommendations and good engineering practices
  - Records of all routine and non-routine maintenance at the Facility relating to environmental health and safety
  - Calculate and record monthly the 12-month rolling total emissions for nitrogen oxide, carbon monoxide, volatile organic compounds and sulfur dioxide
- Comply with the Spill Prevention Control and Countermeasure (SPCC) regulations including the following:
  - Maintain an accurate and current SPCC Plan
  - Compliance with the spill response procedure
  - Maintain accurate records of spill logs
  - Conducting routine inspections and maintaining accurate records of the inspections
- Comply with the Resource Conservation and Recovery Act (RCRA) regulations and any applicable State laws and regulations.
- Sites classified as a Large Quantity Generator shall comply with the RCRA regulations and any applicable State laws and regulations including the following:
  - Accurate account of quantity limits of hazardous waste generated per month
  - EPA ID Number
  - Ensure hazardous waste is removed within the appropriate time limits
  - Compliance of storage and management of containers, tanks, drip pads or containment buildings
  - Conduct hazardous waste management and emergency procedures training for appropriate personnel

- Maintain the Contingency Plan and Emergency Procedures plan
- Hazardous waste should be packaged and labeled properly for shipment off site to an approved RCRA facility for treatment, storage, and disposal
- Maintain accurate tracking of hazardous waste transportation
- Preparation and submittal of Biennial Reports
- Reporting of required signed manifests not received back
- Maintain accurate records of waste testing, manifests, biennial reports and exception reports

Exhibit E-2

SCHEDULE 3.2

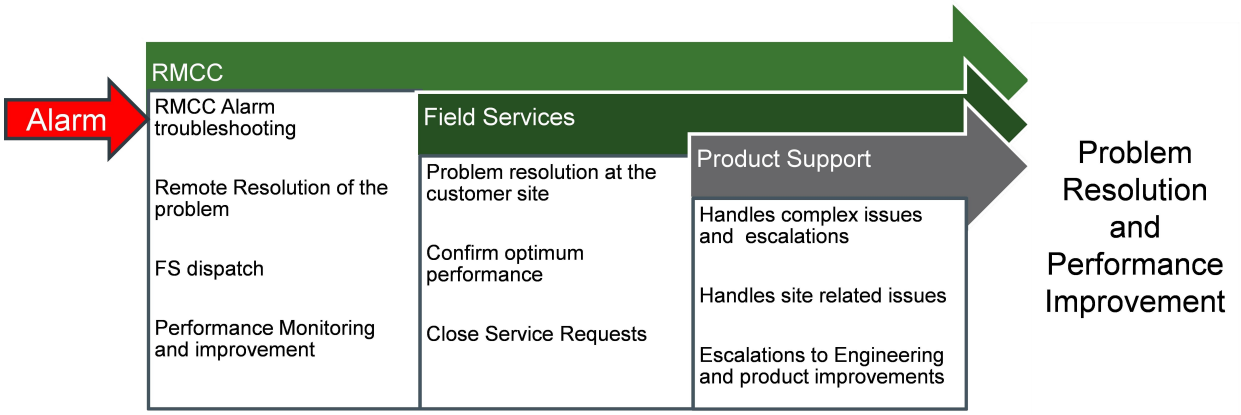
OPERATION AND MAINTENANCE PROCEDURES

Operator will perform the following operation and maintenance activities for each Facility, to the extent necessary to cause such Facility to perform in accordance with the Warranty Specifications:

- Annual maintenance activities:
  - [*]
  - [*]
  - [*]
  - [*]
  - [*]
  - [*]
  - [*]
  - [*]
  - [*]
- Site obligations:
  - An e-mail announcement of a service appointment will be sent to address(es) specified by the client informing of a service visit in advance of a service visit
  - Field Service personnel will sign in at a security office as required by client
  - Field Service personnel will safely and securely maintain and repair the systems as needed in accordance with our established and released procedures
  - Bloom HR and EH&S will work with clients to fulfill requirements for certification of drug testing, training, and other Environmental Health & Safety (EH&S) procedures
- Site visit protocols:
  - Works with customers and Product Development to resolve issues
  - Provides detailed documentation for each maintenance element performed
  - Inspection of installed equipment to ensure peak performance
  - Inspection of all components to ensure proper operation within product and environmental specifications
  - Clearly and professionally interact with customer regarding status of site visits, performance of their systems and general fuel cell education
- Spare Parts
  - Bloom Energy Product Support maintains a list of all spare parts including field replaceable units (FRUs) and consumables for each of its commercial products and BOF

- Spare parts are stocked in localized third party logistics depots in each service zone
- The most common and most critical parts are stocked in each local depot and replenished on a weekly schedule
- Parts not stocked in localized depots are dispatched from our Milpitas, CA warehouse via FedEx or other carriers and couriers

- Failure Response Protocol:



- Emergency Response Protocol:
  - Contact lists of BE personnel to be contacted during normal business hours and during off hours (24-7-365 emergency escalation path) are provided for each region where Bloom Systems are located in order to remedy situations posing a risk to persons or property
  - Remote shutdown from Bloom RMCC if required
  - Emergency power off button provided onsite
- Remote monitoring:
  - 24/7/365 performance monitoring and control of fleet
  - 1st level troubleshooting
  - Cross-functional interface with engineering, software, controls, quality
  - Optimize performance
  - Support new customer site start-ups
  - Customer performance analysis – daily
- Standards Compliance:
  - Complies with Rule 21 interconnection
  - ANSI/CSA FC 1: Stationary Fuel Cell Power Systems – Safety

Schedule 3.2-2

    - IEEE 1547 – Standard for Interconnecting Distributed Resources with Electric Power Systems
    - NFPA 853 – The Standard for Installation of Stationary Fuel Cell Power Systems
    - NFPA 70 – The National Electrical Code
    - NFPA 54 – The National Fuel Gas Code
- Subcontracted Services. The following may in some cases be performed by subcontractors:
    - Water DI system replenishment
    - STS and transfer switch maintenance and repair
    - Some annual maintenance and upgrade work
    - Filter delivery, replacement, removal
    - High Voltage transformer and switchgear maintenance
    - Circuit breaker and similar maintenance
    - Some fuel cell module performance upgrades
    - NG conditioning canister replacement
- Management Staff:
    - Customer Installations Group (CIG) – Turnkey design, engineering, procurement, permitting and installation
    - Services – Commissioning, operations and monitoring of Bloom Systems
    - Customer Experience – Interface with customer
    - PPA Operations – Certain administrative duties
- All Bloom Systems are instrumented to securely record over 1000 data points per Bloom System and stored in a Data Historian that resides in a Secure Co-located Data Center and Backed Up for data recovery
- CIG and Service employees are subject to drug tests, background checks and other screening protocols based on customer site requirements
- Bloom Energy maintains a Code of Safe Practices and ensures that copies are provided to all applicable field service technicians and includes:
    - Injury and illness prevention program
    - Required Personal Protection Equipment (PPE)
    - Corporate EH&S Standard
    - Proper use of Powered Industrial Trucks
    - Contracted Crane Operations
    - Ladder safety program
    - Electrical Safety and Lock-Out Tag-Out (LOTO)
    - Fall protection
    - First Aid/CPR program
    - Contractor EH&S program

Schedule 3.2-3

- Bloom Energy Safety Commitment

Schedule 3.2-4

SCHEDULE 5.1(A)(VII)

CERTAIN REPORTING REQUIREMENTS

The following data will be recorded by Operator for 1 minute intervals and transmitted by Operator to Owner pursuant to a secure file transfer protocol (FTP) on an hourly basis.

Facility Level Data

Description	Data Type	Scale	Data Format
Total KW Total kW power output. Average of power output for previous 10 seconds.	Analog	10	KW
Total KWh Total energy production. Based on grid tie plus critical load.	Analog	1	KWH
Fuel Consumption Total integrated fuel consumption.	Analog	100	MCF
Fuel Flow Total instantaneous fuel consumption. Average of fuel consumption for previous 10 seconds.	Analog	10	SCFM
Efficiency Efficiency of the entire site based on fuel consumption, fuel heating value, and energy production.	Analog	10	%
Fuel Pressure Fuel pressure	Analog	10	PSI
Water Pressure Site water pressure averaged over the previous 10 seconds.	Analog	10	PSI
Run Time Number of run time days.	Analog	100	Days

CIU#1 Heartbeat An integer which updates every 10 seconds and rolls over when reaching max value. Function is as communication watchdog.	Analog	1	Counts

Schedule 5.1(a)(vii)-1

CIU#2 Heartbeat An integer which updates every 10 seconds and rolls over when reaching max value. Function is as communication watchdog.	Analog	1	Counts
Emergency Power Off Status Digital status of the EPO circuit physically wired into CIU IO card. 0 = In Alarm State	Digital	-	

Bloom System Data

Description	Data Type	Scale	Data Format
ES01 KW Total kW power output for Bloom System. Average of power output for previous 10 seconds.	Analog	10	KW
ES02 KW Total kW power output for Bloom System. Average of power output for previous 10 seconds.	Analog	10	KW
ES0# KW Total kW power output for Bloom System. Average of power output for previous 10 seconds.	Analog	10	KW
CO2 Output Calculated CO2 output for Bloom System for previous 10 seconds.	Analog	1	LBS per MMBtu

SCHEDULE 13.14
MAJOR SERVICE PROVIDERS

- [*]
- [*]
- [*]

REDACTED EXHIBIT: This Exhibit contains certain identified information that has been excluded because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed. Redacted information is identified by [*].

EXECUTION VERSION

REPURCHASE AGREEMENT

between

BLOOM ENERGY CORPORATION

as Buyer

and

DIAMOND STATE GENERATION PARTNERS, LLC

as Seller

dated as of June 14, 2019

EXHIBITS

REPURCHASE AGREEMENT

This REPURCHASE AGREEMENT (this "Agreement"), dated as of June 14, 2019 (the "Agreement Date"), is entered into by and between BLOOM ENERGY CORPORATION, a Delaware corporation ("Buyer"), and DIAMOND STATE GENERATION PARTNERS, LLC, a Delaware limited liability company ("Seller"). Buyer and Seller are referred to in this Agreement individually, as a "Party" and, collectively, as the "Parties".

RECITALS

WHEREAS, Seller owns assets comprising of (i) a fuel cell generation project comprised of Bloom Systems with a nameplate capacity of 3 MW located at 512 E. Chestnut Hill Road, Newark, DE 19713 (the "Brookside Facility"); and (ii) a fuel cell generation project comprised of Bloom Systems with a nameplate capacity of 27 MW located at 1493 River Road, New Castle, DE 19720 (the "Red Lion Facility" and together with the Brookside Facility, the "Project", and all Bloom Systems that are part of the Project as of the Agreement Date, the "Existing Systems");

WHEREAS, on or about the Agreement Date, Seller and Buyer are entering into that certain Fuel Cell System Supply and Installation Agreement (the "New System CapEx Agreement"), pursuant to which, among other things, (i) Buyer (as "Seller" under such New System CapEx Agreement) will sell to Seller (as "Buyer" under such New System CapEx Agreement) and Seller will purchase from Buyer, new Bloom Systems with aggregate nameplate capacity of up to 27.5 MW (such Bloom Systems, the "New Systems") and all shared infrastructure BOF not already existing at the applicable Site, and (ii) Buyer will design, engineer, procure, construct, and commission each of the New Systems and such shared infrastructure BOF at the Sites; and

WHEREAS, pursuant to this Agreement, Buyer shall purchase from Seller, and Seller shall sell to Buyer the Existing Systems installed in the Project, such sales to be consummated in installments as provided herein.

NOW, THEREFORE, in consideration of the mutual covenants, representations, warranties and agreements hereinafter set forth, and intending to be legally bound hereby, the Parties agree as follows:

AGREEMENT

ARTICLE I.
DEFINITIONS

Section 1.1 Definitions. As used in this Agreement, capitalized terms not otherwise defined shall have the meanings set forth below:

"A&R MOMA" means that certain Amended and Restated Master Operations and Maintenance Agreement, dated as of the date hereof, by and between Buyer, as "Operator", and Seller as "Owner".

"Administrative Services Agreement" means that certain First Amended and Restated Administrative Services Agreement, amended and restated as of the date hereof, by and between Buyer, as "Administrator", and Seller, as "Project Company."

"Affiliate" of any Person means a Person that directly, or indirectly through one or more intermediaries, controls, or is controlled by, or is under common control with, the Person specified; *provided,* that notwithstanding anything in this Agreement to the contrary, for the purposes hereof: (i) Seller is not an Affiliate of Buyer and Buyer is not an Affiliate of Seller, and (ii) Mehetia is not an Affiliate of Buyer or Seller. For purposes of this Agreement, the direct or indirect ownership of over 50% of the outstanding voting securities of an entity, or the right to receive over 50% of the profits or earnings of an entity shall be deemed to constitute control. Such other relationships as in fact results in actual control over the management, business and affairs of an entity, shall also be deemed to constitute control.

"Agreement" is defined in the preamble.

"Agreement Date" is defined in the preamble.

"Agreement Date Deposit" is defined in Section 2.2(a).

"Arbiter" is defined in Section 2.3(b).

"Bankruptcy" or "Bankrupt" as to any Person means the filing of a petition for relief as to any such Person as debtor or bankrupt under the Bankruptcy Code or like provision of law (except if such petition is contested by such Person and has been dismissed within sixty (60) days); insolvency of such Person as finally determined by a court proceeding; filing by such Person of a petition or application to accomplish the same or for the appointment of a receiver or a trustee for such Person or a substantial part of its assets; commencement of any proceedings relating to such Person under any other reorganization, arrangement, insolvency, adjustment of debt or liquidation law of any jurisdiction, whether now in existence or hereinafter in effect, either by such Person or by another, *provided*, that if such proceeding is commenced by another, such Person indicates its approval of such proceeding, consents thereto or acquiesces therein, or such proceeding is contested by such Person and has not been finally dismissed within sixty (60) days.

"Bankruptcy Code" means 11 U.S. Code § 101 *et. seq.,* as amended.

"Bill of Sale" means each bill of sale, substantially in the form set forth in Exhibit A, dated as of the applicable Transfer Date and duly executed by Seller.

"Bloom Systems" means a solid oxide fuel cell power generating system manufactured by Bloom Energy Corporation.

"BOF" means, for each Site, the (a) existing balance of facility items included in each Facility as of the Agreement Date, including, as applicable, Electrical Interconnection Facilities, the natural gas supply facilities, the water supply facilities, the data communications facilities, the foundations for the Existing Systems and any other facilities and equipment ancillary to the Existing Systems and installed in connection with the Facility at each Site and all other things ancillary to the Facility and required on or in the vicinity of the Site which are necessary for operation of the Existing Systems or which are otherwise required by the Tariff or Site Lease for such Site, and (b) any new balance of facility items installed in a Facility after the Agreement Date, including, as applicable, any new components in respect of Electrical Interconnection Facilities, the natural gas supply facilities, the water supply facilities, or the data communications facilities, the foundations for the New Systems and any other facilities and equipment ancillary to the New Systems and installed in connection with the Facility at each Site and all other things ancillary to the Facility and required on or in the vicinity of the Site which are necessary to achieve Commissioning with respect to any New System at each such Site or which are otherwise required by the Tariff or Site Lease for any New System or Site.

"Brookside Facility" is defined the Recitals.

"Business Day" means a day other than a Saturday, Sunday or other day on which banks in New York, New York, or San Francisco, California, are authorized or required to close.

"Buyer" is defined in the preamble.

"Buyer Default" is defined in Section 7.2.

"Buyer Indemnitee" is defined in Section 8.2.

"Buyout Accrual Amount" means, as of any date of determination, the aggregate amount of interest accrual that has been calculated since the Agreement Date on the Current Buyout Amount (as of such date of determination) based on an interest rate equal to (a) [*]% per annum, until the date on which the first Existing System is purchased hereunder and proceeds are distributed or paid to Mehetia pursuant to this Agreement and the DSGH Limited Liability Company Agreement, and (b) [*]% per annum thereafter (it being understood and agreed that the applicable rate per annum shall be calculated on the basis of a year of three hundred and sixty (360) days and actual days elapsed).

"Claiming Party" is defined in Section 7.7.

"Code" means the Internal Revenue Code of 1986, as amended.

"Commissioning" has the meaning set forth in the New System CapEx Agreement.

"Confidential Information" is defined in Section 6.1.

"Current Buyout Amount" means, as of any date of determination, the Initial Buyout Amount plus the Buyout Accrual Amount less the aggregate amount of cash distributions made to Mehetia from and after the Agreement Date in accordance with the DSGH Limited Liability Company Agreement (other than amounts related to indemnity payments, payments in respect of other damages, or payments made as reimbursement of expenses, in each case from DSGH or Clean Technologies II, LLC or any of their respective Affiliates paid through DSGH to Mehetia in accordance with the DSGH Limited Liability Company Agreement or otherwise paid to Mehetia).

"Disputed Item" is defined in Section 2.3(b).

"DPL" means Delmarva Power & Light Company, d/b/a Delmarva Power, an investor owned utility company regulated by the Delaware Public Service Commission.

"DSGH" means Diamond State Generation Holdings, LLC.

"DSGH Limited Liability Company Agreement" means the Third Amended and Restated Limited Liability Company Agreement of DSGH, dated as of June 14, 2019.

"DSGP Limited Liability Company Agreement" means the Third Amended and Restated Limited Liability Company Agreement of Seller, dated as of June 14, 2019.

"DPSC" means the Delaware Public Service Commission, the Governmental Authority charged with regulating DPL and issuing the Tariff.

"Existing Systems" is defined in the Recitals.

"Facility" means, with respect to each of the Brookside Facility and the Red Lion Facility, the Existing Systems and the associated BOF, at such Site.

"Federal Power Act" means 16 U.S. Code § 791a *et. seq.*, as amended.

"First Subsequent Deposit" is defined in Section 2.2(b).

"Force Majeure Event" means any event or circumstance that (a) prevents a Party from performing its obligations under this Agreement; (b) was not reasonably foreseeable by such Party; (c) was not within the reasonable control of, or the result of the negligence of, or the breach of this Agreement by, such Party; and (d) such Party is unable to reasonably mitigate, avoid or cause to be avoided with the exercise of due diligence. "Force Majeure Event" may include, provided that the conditions in (a) through (d) in the foregoing sentence are met, a failure or interruption of performance due to an act of God, civil or military authority, war, civil disturbances, terrorist activities, fire, explosions, the external power delivery system (a/k/a the grid) being out of the required specifications or totally failing (a/k/a

brownout or blackout), or electric grid curtailment. Notwithstanding the foregoing, Force Majeure Event does not include the lack of economic resources of a Party.

"Governmental Approvals" means (a) any authorizations, consents, approvals, licenses, rulings, permits, tariffs, rates, certifications, variances, orders, judgments, decrees by or with a relevant Governmental Authority and (b) any required notice to, any declaration of, or with, or any registration or filing by, or with, any relevant Governmental Authority.

"Governmental Authority" means any foreign, federal, state, local or other governmental, regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, court, tribunal, arbitrating body or other governmental authority.

"Indemnifiable Loss" means any claim, demand, suit, loss, liability, damage, obligation, payment, fine, cost or expense (including the cost and expense of any investigation, action, suit, proceeding, assessment, judgment, settlement or compromise relating thereto and reasonable attorneys' fees and reasonable disbursements in connection therewith).

"Initial Buyout Amount" means $[*].

"Interim Period" means, with respect to each Existing System that is the subject of a Sale Notice, the period between the delivery of such Sale Notice and the Transfer Date for such Existing System.

"IRS" means the Internal Revenue Service.

"Knowledge" means (a) as to any Person other than a natural Person, the actual knowledge of such Person and its managers, directors, officers and employees who have responsibility for the transactions contemplated by this Agreement and (b) in respect of any Person who is a natural Person, the actual knowledge of such Person.

"Legal Requirement" means any law, statute, act, decree, ordinance, rule, directive (to the extent having the force of law), tariff, order, treaty, code or regulation or any interpretation of any of the foregoing, as enacted, issued or promulgated by any Governmental Authority, NERC, any Person that NERC has delegated its authority to under the Federal Power Act or any Person that operates an interstate electric transmission system, including all amendments, modifications, extensions, replacements or re-enactments thereof, in each case applicable to or binding upon such Person or any of its properties or to which such Person or any of its property is subject.

"Liens" means any lien, security interest, mortgage, hypothecation, encumbrance or other restriction on title or property interest.

"Material Adverse Effect" means, for any Person, any change, effect or occurrence that, individually or in the aggregate, is or could reasonably be expected to be materially adverse to (a) the business, earnings, assets, results of operations, property or condition (financial

or otherwise) of such Person, (b) the validity or enforceability of this Agreement or the transactions contemplated by this Agreement, or (c) any Person's ability to perform its obligations under this Agreement.

"Maximum Liability" means the [*], plus, in each case reasonable costs and attorneys' fees incurred by a Party in connection with enforcing any right or remedy hereunder.

"Mehetia" means Mehetia Inc., a Delaware corporation.

"MW" means megawatt.

"NERC" means the North American Electric Reliability Corporation or any successor.

"New Systems" is defined in the Recitals.

"New System CapEx Agreement" is defined in the Recitals.

"Objections Statement" is defined in Section 2.3(b).

"Party" and "Parties" have the meanings set forth in the preamble.

"Payment Date" is defined in Section 2.3(a).

"Payment Date Amount" is defined in Section 2.3(a).

"Payment Date Amount Calculation Model" means a financial model delivered by Buyer to Seller in connection with each Sale Notice, setting forth the following amounts and supporting calculations: (1) the Initial Buyout Amount; (2) the Buyout Accrual Amount; (3) the amount of cash distributions made to Mehetia; (4) the Current Buyout Amount; (5) the Pro Rata Portion; and (6) the Purchase Price for the applicable Existing Systems.

"Performance Standards" has the meaning set forth in the A&R MOMA.

"Permits" means all Governmental Approvals that are necessary under applicable Legal Requirements or this Agreement to have been obtained.

"Permitted Liens" means any (a) obligations or duties to any Governmental Authority arising in the ordinary course of business (including under licenses and Permits held by Buyer or Seller and under applicable Legal Requirements); (b) obligations or duties under easements, leases or other property rights; (c) any other Liens agreed to in writing by Seller and Buyer; or (d) Liens of any contractor or subcontractor of Buyer that performs any services in connection with the Shutdown or removal of Sale Systems.

"Person" means any individual, partnership, limited liability company, joint venture, corporation, trust, unincorporated organization, or governmental entity or any department or agency thereof.

"Pro Rata Portion" means a percentage determined by multiplying 100 by a fraction, the numerator of which is equal to the System Capacity of the applicable Sale Systems hereunder and the denominator of which is equal to the aggregate System Capacity of the Existing Systems that have not yet been sold hereunder prior to such Sale occurring (by way of example, if there are 20 MW of Existing Systems that have not yet been sold prior to a Sale and 2 MW of Sale Systems purchased in such Sale, the Pro Rata Portion shall be 10%).

"Project" is defined in the Recitals.

"Purchase Price" is defined in Section 2.2.

"Red Lion Facility" is defined in the Recitals.

"Representatives" of a Party means such Party's authorized representatives, including its professional and financial advisors.

"Repurchase Schedule" means the schedule of expected repurchases of Existing Systems set forth as Exhibit B to this Agreement.

"Sale" means the purchase and sale of any Existing System which has not been previously purchased by Buyer pursuant to this Agreement.

"Sale Notice" is defined in Section 2.1(b).

"Sale Systems" is defined in Section 2.1(c).

"Second Subsequent Deposit" is defined in Section 2.2(c).

"Seller" is defined in the preamble.

"Seller Default" is defined in Section 7.1.

"Seller Indemnitee" is defined in Section 8.1.

"Shutdown" means the complete decommissioning of an Existing System.

"Site" means, with respect to the Brookside Facility and the Red Lion Facility, the real property leased to Buyer for the use of such Facility pursuant to the Site Lease for such Facility.

"Site Lease" means, with respect to (a) the Brookside Facility, that certain Lease Agreement, dated as of April 19, 2012, by and between the Delaware Department of Transportation and Buyer; and (b) the Red Lion Facility, that certain Amended and Restated Lease Agreement, dated as of June 26, 2012, by and between Delmarva Power & Light Company and Buyer.

"System Capacity" means, with respect to an Existing System, the "System Capacity" (kW) set forth on the applicable Sale Notice provided to Seller. The System Capacity of the Existing

System(s) sold in each sale shall also be reflected in the Bill of Sale delivered by Seller to Buyer with respect to such Existing System.

"Tariff" means Service Classification "QFCP-RC" as administered by DPL, as approved by the DPSC in Order no. 8062 dated October 18, 2011, as adopted and supplemented by DPSC's Findings, Opinion and Order No. 8079, dated December 1, 2011.

"Third Party Claim" means any claim, action, or proceeding made or brought by any Person who is not (a) a Party to this Agreement, or (b) an Affiliate of a Party to this Agreement.

"Third Party Warranty" is defined in Section 2.6.

"Third Subsequent Deposit" is defined in Section 2.2(d).

"Transfer Date" is defined in Section 2.4.

Section 1.2 Other Definitional Provisions.

(a) All exhibits, annexes, and schedules attached to this Agreement are incorporated herein by this reference and made a part hereof for all purposes. References to sections, exhibits, annexes and schedules are, unless otherwise indicated, references to sections, exhibits, annexes and schedules to this Agreement. References to a section shall mean the referenced section and all sub-sections thereof.

(b) The words "hereof", "herein", "hereunder", and words of similar import when used in this Agreement will refer to this Agreement as a whole and not to any particular provision of this Agreement. Section references contained in this Agreement are references to sections in this Agreement unless otherwise specified. The term "including" will mean "including without limitation".

(c) The definitions contained in this Agreement are applicable to the singular as well as the plural forms of such terms and to the masculine as well as to the feminine and neuter genders of such terms.

(d) Any agreement or instrument defined or referred to herein or in any instrument or certificate delivered in connection herewith means (unless otherwise indicated herein) such agreement or instrument as from time to time amended, amended and restated, modified or supplemented and includes (in the case of agreements or instruments) references to all attachments thereto and instruments incorporated therein.

(e) Any references to a Person are also to its permitted successors and assigns.

(f) References to any statute, code or statutory provision are to be construed as a reference to the same as it exists as of the Agreement Date or Transfer Date, as applicable, and include references to all bylaws, instruments, orders and regulations for the time being made thereunder or deriving validity therefrom unless the context otherwise requires.

ARTICLE II.
PURCHASE AND SALE

Section 2.1 Repurchase Schedule; Sale Notices.

(a) The Repurchase Schedule, reflecting the Parties' expectations as of the Agreement Date of System Capacity of Existing Systems to be purchased by Buyer hereunder, is set forth as Exhibit B to this Agreement. For the avoidance of doubt, neither Buyer nor Seller makes any representation or warranty regarding achievement of the Repurchase Schedule, and the actual schedule of decommissioning, sale and purchase of the Existing Systems may vary from the Repurchase Schedule.

(b) At least five (5) Business Days prior to each Payment Date, Buyer shall deliver to Seller a written sale notice, substantially in the form attached hereto as Exhibit C (each, a "Sale Notice"), which shall set forth (i) the number of Existing Systems to be purchased on the corresponding Transfer Date, (ii) the calculation for the Purchase Price to be paid for such Existing System(s) on such Payment Date in accordance with Section 2.2 and the corresponding Payment Date Amount(s) in accordance with Section 2.3(a), and (iii) the System Capacity of Existing Systems subject to the Sale Notice and the remaining System Capacity of all Existing Systems not yet purchased hereunder (for the avoidance of doubt, excluding the Existing Systems subject to that Sale Notice). Buyer shall also deliver a Payment Date Amount Calculation Model to Seller as an attachment to each Sale Notice.

(c) On each Transfer Date, subject to the satisfaction (or waiver) of the conditions precedent in Section 2.7, Buyer shall purchase the Existing Systems set forth in the Sale Notice (such Existing Systems, the "Sale Systems").

(d) Buyer shall perform, or cause to be performed, all Shutdown and removal activities in a timely manner such that all Existing Systems are removed from each Facility within ten (10) Business Days following Commissioning of the last New System purchased under the New System CapEx Agreement. Buyer shall use commercially reasonable efforts to minimize the period during which any Existing System has been Shutdown without a New System being Commissioned under the New System CapEx Agreement. Buyer shall cause all decommissioning and removal activities and Shutdown activities to be performed in a good and workmanlike manner, and in accordance with Performance Standards, to the extent applicable to such activities.

Section 2.2 Purchase Price. With respect to each Sale, the aggregate purchase price for the Sale Systems (as applicable, the "Purchase Price") shall be the sum of the following:

(a) A deposit in the amount of $[*], payable on the Agreement Date (the "Agreement Date Deposit"); plus

(b) A deposit in the amount of $[*], payable within three (3) Business Days of the Agreement Date (the "First Subsequent Deposit"); plus

(c) A deposit in the amount of $[*], payable on or prior to July 3, 2019 (the "Second Subsequent Deposit"); plus

(d) A deposit in the amount of $[*], payable on or prior to October 29, 2019 (the "Third Subsequent Deposit"); plus

(e) The Current Buyout Amount multiplied by the Pro Rata Portion of the Sale Systems, payable on the Payment Date.

Section 2.1 Payment of Purchase Price.

(a) Buyer shall pay the portion of the Purchase Price set forth in Section 2.2(e) (each a "Payment Date Amount") to Seller (or to Seller's designee) for each Sale System on the date specified in the applicable Sale Notice (the "Payment Date"), which shall not be later than the Business Day immediately prior to the Transfer Date.

(b) If Seller has any objections to the Payment Date Amount or the Purchase Price within 20 days following the delivery of a Sale Notice (whether or not payment for such Sale Systems was made on the Payment Date and whether or not the Transfer Date has occurred) Seller will deliver to Buyer a statement setting forth its objections thereto (an "Objections Statement"), which statement will identify in reasonable detail those items and amounts to which Seller objects (the "Disputed Items"). After the delivery of an Objections Statement, a meeting shall be held promptly between the Parties, attended by representatives of the Parties with decision-making authority regarding the dispute, to attempt in good faith to negotiate a resolution of the dispute and each Disputed Item. If the Parties do not reach a final resolution within 20 days after the delivery of the Objections Statement to Buyer, Seller and Buyer will submit any unresolved Disputed Items to an independent national accounting, consulting or valuation firm mutually agreeable to Buyer and Seller (the "Arbiter"). In the event the Parties submit any unresolved Disputed Items to the Arbiter, each Party will submit a Sale Notice which in the case of each Party may be a Sale Notice that, with respect to the unresolved Disputed Items (but not, for the avoidance of doubt, with respect to any other items), is different than (but not more favorable to the submitting Party than) the Sale Notice initially submitted to Seller or the Objections Statement delivered to Buyer, as applicable) together with such supporting documentation as it deems appropriate, to the Arbiter within 20 days after the date on which such unresolved Disputed Items were submitted to the Arbiter for resolution, it being agreed that the Parties will make their respective submission contemporaneously, and with a copy to the other Party. Seller and Buyer will use their respective commercially reasonable efforts to cause the Arbiter to resolve all Disputed Items submitted to it as soon as practicable, but in any event within 30 days after the date on which the Arbiter receives the Sale Notices prepared by Seller and Buyer. Seller and Buyer will not engage in any ex parte communication with the Arbiter. The Arbiter will resolve such dispute by choosing, in its entirety, the Sale Notice proposed by either Seller or Buyer, and will make no other resolution of such dispute (including by combining elements of the Sale Notices submitted by both Parties). The Sale Notice selected by the Arbiter will be final, binding and non-appealable by the Parties hereto. Each Party will

bear its own costs and expenses in connection with the resolution of such dispute by the Arbiter. The costs and expenses of the Arbiter will be paid by the party whose Sale Notice is not chosen by the Arbiter in its resolution of the dispute.

(c) To the extent that the resolution of the Payment Date Amount, as determined through negotiation of the Parties or by an Arbiter is greater than the Payment Date Amount that was actually paid to Seller on the applicable Payment Date, then Buyer shall pay to Seller an amount equal to such difference within five (5) Business Days of the determination thereof.

Section 2.2 Transfer of Title.

Title and all rights to each Sale System shall remain with Seller until the date on which both (a) Buyer has paid Seller the portion of the Purchase Price set forth in Section 2.2(e) for such Sale System, and (b) such Sale System has been removed from its concrete pad (the "Transfer Date"). On the Transfer Date, legal and beneficial title and all rights to the applicable Sale System(s) shall automatically pass to Buyer. Seller shall, on the Transfer Date, deliver to Buyer a Bill of Sale evidencing the transfer of title to the applicable Sale System(s) to Buyer, but no delay or failure to deliver such Bill of Sale shall affect the transfer of title of the applicable Sale System(s).

Section 2.3 Interim Period.

During the Interim Period, Buyer shall have a license (which is hereby granted by Seller) to enter upon the Sites to engage in the Shutdown of the Sale Systems listed in the applicable Sale Notice; *provided* that (a) Buyer may not commence the Shutdown of any Existing System until following the payment of the Payment Date Amount payable for such Existing System on the Payment Date, (b) risk of loss shall pass from Seller to Buyer with respect to each Sale System on the Payment Date, and (c) the foregoing shall not affect any of Seller (or Seller Indemnitees') rights in ARTICLE VIII with respect to Indemnifiable Losses (or otherwise).

Section 2.4 Post Sale Effect.

If any express or implied warranties, indemnities, guaranties, remedies, covenants and other rights which any subcontractor or supplier has made to Seller with respect to any good, service, or other deliverable furnished under this Agreement in respect of an Existing System (each a "Third Party Warranty") would provide any additional rights to Buyer beyond the warranties under ARTICLE IV, then (i) such Third Party Warranty providing additional rights will be for the benefit of and passed through to Buyer to the fullest extent possible, (ii) Seller hereby transfers and assigns to Buyer, effective as of the applicable Transfer Date, all of Seller's right, title and interest under such Third Party Warranty to exercise such additional rights, and (iii) Seller hereby appoints Buyer as attorney-in-fact coupled with an interest to exercise and enforce all such additional rights in the name of either Buyer or Seller. Nothing in this Section 2.6 will limit Seller's obligations to Buyer under ARTICLE IV or Buyer's obligations to Seller and Seller Indemnitees under Section 8.1.

Section 2.5 Conditions Precedent.

(a) Upon the satisfaction of the conditions set forth in Section 2.7(b) (as may be waived by the applicable Party in its sole discretion) with respect to an Existing System to be included in a Sale pursuant to Section 2.1, Seller shall sell, assign, convey, transfer and deliver to Buyer, and Buyer shall purchase, assume and acquire from Seller, all of Seller's right, title and interest in and to each applicable Existing System, effective as of the Transfer Date.

(b) Conditions Precedent to the Transfer Date. Buyer's obligation to purchase, assume, and acquire an Existing System from Seller on the Transfer Date and Seller's obligation to sell, assign, convey, transfer and deliver to Buyer all of Seller's right, title and interest in such Existing System on the Transfer Date shall be subject to Buyer's and Seller's satisfaction of the following conditions precedent (as may be waived, in such Party's sole discretion, by (x) Buyer with respect to the conditions set forth in clauses (i), (ii) (with respect to Seller), or (iii) (with respect to Seller), and (y) Seller with respect to the conditions set forth in clauses (ii) (with respect to Buyer), or (iii) (with respect to Buyer):

(i) Buyer has made full payment of the Payment Date Amount owed to Seller for such Existing System;

(ii) the representations and warranties set forth in ARTICLE IV and ARTICLE V hereof shall be true and correct in all material respects; and

(iii) no Seller Default or Buyer Default hereunder shall exist and be continuing.

ARTICLE III.
RECORDS AND AUDITS

Section 3.1 Record-Keeping Documentation.

As promptly as practicable after a Transfer Date, Seller shall use its commercially reasonable efforts to deliver all records to Buyer in Seller's possession and which Buyer otherwise does not have access to for each Existing System being transferred pursuant to a Sale Notice.

ARTICLE IV.
REPRESENTATIONS AND WARRANTIES OF SELLER

Section 4.1 Representations and Warranties of Seller. Seller represents and warrants to Buyer as of the Agreement Date and as of each Transfer Date as follows:

(a) Formation. Seller is a limited liability company duly formed, validly existing and in good standing under the laws of the State of Delaware and has all requisite limited liability company power and authority to own, lease, and operate its business as currently conducted.

(b) Authority. Seller has full limited liability company power and authority to execute and deliver this Agreement and to consummate the transactions contemplated hereby. The execution and delivery by Seller of this Agreement and the consummation by Seller of the transactions contemplated hereby have been duly and validly authorized by all necessary limited liability company action required on the part of Seller, and this Agreement has been duly and validly executed and delivered by Seller. This Agreement constitutes the legal, valid and binding agreement of Seller, enforceable against Seller in accordance with its terms, except as enforcement may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting creditors' rights generally and by general principles of equity (regardless of whether considered in a proceeding in equity or at law).

(c) Consents and Approvals; No Violation. Neither the execution, delivery and performance of this Agreement nor the consummation by Seller of the transactions contemplated hereby will (i) conflict with or result in any breach of any provision of the certificate of formation of Seller nor Seller's limited liability company agreement, (ii) conflict with, result in any violation or breach of, constitute a default under, result in the creation of any Lien (other than Permitted Liens) on Seller's assets, or create any right of termination under any material agreement or other instrument or obligation to which Seller is a party that would individually or in the aggregate result in a Material Adverse Effect on Seller or materially or adversely affect its ability to perform its obligations hereunder or (iii) constitute violations of any law, regulation, order, judgment or decree applicable to Seller, which violations, individually or in the aggregate, would result in a Material Adverse Effect on Seller or materially or adversely affect its ability to perform its obligations hereunder.

(d) Legal Proceedings. There are no pending or, to Seller's Knowledge, threatened claims, disputes, governmental investigations, suits, actions, arbitrations, legal, administrative or other proceedings, domestic or foreign, criminal or civil, at law or in equity, against Seller that challenge the enforceability of this Agreement or the ability of Seller to consummate the transactions contemplated hereby, in each case, that could reasonably be expected to result in a Material Adverse Effect on Seller or materially or adversely affect its ability to perform its obligations hereunder.

(e) Title; Liens. As of each Transfer Date, with respect to any assets comprising an Existing System, Seller has and will convey good and marketable title to such assets to be sold to Buyer on such date, free and clear of all Liens other than Permitted Liens.

(f) AS-IS SALE. EXCEPT FOR THE REPRESENTATIONS AND WARRANTIES SET FORTH IN THIS ARTICLE IV, THE SALE SYSTEMS ARE TRANSFERRED "AS IS, WHERE IS", AND SELLER EXPRESSLY DISCLAIMS ANY REPRESENTATIONS OR WARRANTIES OF ANY KIND OR NATURE, EXPRESS OR IMPLIED, AS TO LIABILITIES, OPERATIONS OF THE SALE SYSTEMS, VALUE OR QUALITY OF THE SALE SYSTEMS OR THE PROSPECTS (FINANCIAL AND OTHERWISE), RISKS AND OTHER INCIDENTS OF THE SALE

SYSTEMS, AND SPECIFICALLY DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY, USAGE, SUITABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE WITH RESPECT TO THE SALE SYSTEMS, OR ANY PART THEREOF.

ARTICLE V.
REPRESENTATIONS AND WARRANTIES OF BUYER

Section 5.1 Representations and Warranties of Buyer. Buyer represents and warrants to Seller as of the Agreement Date and as of each Transfer Date, as follows.

(a) Organization. Buyer is a corporation duly incorporated, validly existing and in good standing under the laws of the State of Delaware and has all requisite corporate power and authority to own, lease, and operate its business as currently conducted. Buyer is duly qualified to do business as a foreign corporation and is in good standing under the laws of each jurisdiction that its business, as currently being conducted, shall require it to be so qualified, except where the failure to be so qualified would not have a Material Adverse Effect on Buyer or its ability to perform its obligations hereunder.

(b) Authority. Buyer has full corporate power and authority to execute and deliver this Agreement and to consummate the transactions contemplated hereby. The execution and delivery by Buyer of this Agreement and the consummation by Buyer of the transactions contemplated hereby has been duly and validly authorized by all necessary corporate action required on the part of Buyer and this Agreement has been duly and validly executed and delivered by Buyer. This Agreement constitutes the legal, valid and binding agreement of Buyer, enforceable against Buyer in accordance with its terms, except as enforcement may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting creditors' rights generally and by general principles of equity (regardless of whether considered in a proceeding in equity or at law).

(c) Consents and Approvals; No Violation. Neither the execution, delivery and performance of this Agreement nor the consummation by Buyer of the transactions contemplated hereby will (i) conflict with or result in any breach of any provision of the certificate of incorporation or bylaws of Buyer, (ii) with or without the giving of notice or lapse of time or both, conflict with, result in any violation or breach of, constitute a default under, result in any right to accelerate, result in the creation of any Lien on Buyer's assets, or create any right of termination under the conditions or provisions of any note, bond, mortgage, indenture, material agreement or other instrument or obligation to which Buyer is a party or by which it, or any material part of its assets may be bound, in each case that would individually or in the aggregate result in a Material Adverse Effect on Buyer or its ability to perform its obligations hereunder or (iii) constitute violations of any law, regulation, order, judgment or decree applicable to Buyer, which violations, individually or in the aggregate, would result in a Material Adverse Effect on Buyer or its ability to perform its obligations hereunder. Buyer shall perform all obligations hereunder in accordance with all applicable Legal Requirements. Neither the execution,

delivery nor performance of this Agreement nor the consummation of the transactions contemplated hereby will violate any Legal Requirements or Permits. Buyer has all necessary Permits and Governmental Approvals to perform its obligations hereunder, including taking title to the Existing Systems.

(d) Legal Proceedings. There are no pending or, to Buyer's Knowledge, threatened claims, disputes, governmental investigations, suits, actions (including non-judicial real or personal property foreclosure actions), arbitrations, legal, administrative or other proceedings of any nature, domestic or foreign, criminal or civil, at law or in equity, by or against Buyer that challenge the enforceability of this Agreement or the ability of Buyer to consummate the transactions contemplated hereby, in each case, that could reasonably be expected to result in a Material Adverse Effect on Buyer or its ability to perform its obligations hereunder.

ARTICLE VI.
CONFIDENTIALITY

Section 6.1 Confidential Information. Subject to the other terms of this ARTICLE VI each Party shall, and shall cause its Affiliates and its respective stockholders, members, subsidiaries and Representatives to, hold confidential the terms of this Agreement and all information it has obtained or obtains from the other Party in connection with this Agreement concerning Seller and Buyer and their respective assets, business, operations or prospects (the "Confidential Information"), including all materials and information furnished by Seller in performance of this Agreement, regardless of form conveyed or whether financial or technical in nature, including any trade secrets and proprietary know how and software whether such information bears a marking indicating that they are proprietary or confidential or not; provided, however, that Confidential Information shall not include (a) the fact that the Parties have entered into this Agreement, (b) the nature of the transactions contemplated by this Agreement, or (c) information that (i) is or becomes generally available to the public other than as a result of any fault, act or omission by a Party or any of its Representatives, (ii) is or becomes available to a Party or any of its Representatives on a non-confidential basis from a source other than the other Party or its Representatives, provided that such source was not and is not bound by any contractual, legal or fiduciary obligation of confidentiality with respect to such information or (iii) was or is independently developed or conceived by a Party or its Representatives without use of or reliance upon the Confidential Information of the other Party, as evidenced by sufficient written record. Notwithstanding the foregoing, clauses (b) and (c) in the preceding sentence shall not apply to Confidential Information obtained by a Party as a result of any direct or indirect relationship between the Parties relating to the Existing Systems, Site, Facility or otherwise.

Section 6.2 Permitted Disclosures.

(a) Legally Compelled Disclosure. Confidential Information may be disclosed (i) as required or requested to be disclosed by a Party or any of its Affiliates or their respective stockholders, members, subsidiaries or Representatives as a result of any applicable Legal Requirement or rule or regulation of any stock exchange, the Financial Industry Regulatory Authority, Inc. or other regulatory authority or self-regulatory

authority having jurisdiction over such Party, or (ii) as required or requested by the IRS, the Department of Justice or the Office of the Inspector General in connection with an Existing System, cash grant, or tax credits relating thereto, including in connection with a request for any private letter ruling, any determination letter or any audit. If a Party becomes compelled by legal or administrative process to disclose any Confidential Information, such Party shall, to the extent permitted by Legal Requirements, provide the other Party with prompt notice so that the other Party may seek a protective order or other appropriate remedy or waive compliance with the non-disclosure provisions of Section 6.1 and this Section 6.2 with respect to the information required to be disclosed. If such protective order or other remedy is not obtained, or such other Party waives compliance with the non-disclosure provisions of Section 6.1 and this Section 6.2 with respect to the information required to be disclosed, the first Party shall furnish only that portion of such information that it is advised by counsel is legally required to be furnished and shall exercise reasonable efforts, at the expense of the Party whose Confidential Information is being disclosed, to obtain reliable assurance that confidential treatment will be accorded such information, including, in the case of disclosures to the IRS described in clause (ii) above, to obtain reliable assurance that, to the maximum extent permitted by applicable Legal Requirements, such information will not be made available for public inspection pursuant to Section 6110 of the Code.

(b) Disclosure to Representatives. Notwithstanding the foregoing, and subject always to the restrictions in Section 6.2(a), a Party may disclose Confidential Information received by it to its and its Affiliates' actual or potential investors or financing parties and its and their employees, consultants, legal counsel or agents who have a need to know such information; provided that such Party informs each such Person who has access to the Confidential Information of the confidential nature of such Confidential Information, the terms of this Agreement, and that such terms apply to them. The Parties shall use commercially reasonable efforts to ensure that each such Person complies with the terms of this Agreement and that any Confidential Information received by such Person is kept confidential.

(c) Securities Filings. A Party may file this Agreement as an exhibit to any relevant filing with the Securities Exchange Commission (or equivalent foreign agency) in accordance with Legal Requirements only after complying with the procedure set forth in this Section 6.2(c). In such event, the Party seeking such disclosure shall prepare a draft confidential treatment request and proposed redacted version of this Agreement to request confidential treatment for this Agreement, and the other Party agrees to promptly (and in any event, no less than fourteen (14) days after receipt of such confidential treatment request and proposed redactions) give its input in a reasonable manner in order to allow the Party seeking disclosure to file its request within the time lines prescribed by Legal Requirements. The Party seeking such disclosure shall exercise commercially reasonable efforts to obtain confidential treatment of the Agreement from the Securities Exchange Commission (or equivalent foreign agency) as represented by the redacted version reviewed by the other Party. Each Party shall bear its own costs in connection with such efforts.

(d) Other Permitted Disclosures. Nothing herein shall be construed as prohibiting a Party hereunder from using such Confidential Information in connection with (i) any claim against the other Party, (ii) any exercise by a Party hereunder of any of its rights hereunder, (iii) a financing or proposed financing by Seller or Buyer or their respective Affiliates, (iv) a disposition or proposed disposition by any direct or indirect Affiliate of Seller of all or a portion of such Person's equity interests in Seller, (v) a disposition or proposed disposition by Buyer of any Existing System, or (vi) any disclosure required to be made pursuant to the Tariff, an Interconnection Agreement, a Gas Supply Agreement, or a Site Lease, provided that, in the case of items (iii), (iv) and (v), the potential financing party or purchaser has entered into a confidentiality agreement with respect to Confidential Information on customary terms used in confidentiality agreements in connection with corporate financings or acquisitions before any such information may be disclosed and a copy of such confidentiality agreement has been provided to the non-disclosing Party for informational purposes, which copy of such confidentiality agreement may contain redactions of confidential information relating to the potential financing source or purchaser.

ARTICLE VII.
EVENTS OF DEFAULT AND TERMINATION

Section 7.1 Seller Default.

The occurrence at any time of any of the following events shall constitute a "Seller Default":

(a) Failure to Perform Obligations. Unless due to a Force Majeure Event, the failure of Seller to perform or cause to be performed any material obligation required to be performed by Seller under this Agreement, or the failure of any representation and warranty set forth herein to be true and correct as and when made; provided, however, that if such failure by its nature can be cured, then Seller shall have a period of thirty (30) days after receipt of written notice of such failure to cure the same and a Seller Default shall not be deemed to exist during such period; provided, further, that if Seller commences to cure such failure during such period and is diligently and in good faith attempting to effect such cure, said period shall be extended for sixty (60) additional days. Notwithstanding the foregoing, no Seller Default shall be deemed to occur pursuant to this Section 7.1(a) during any period during which Buyer remains the managing member (directly or indirectly, including DSGH being the managing member) of Seller.

(b) Bankruptcy. If Seller is Bankrupt.

Section 7.2 Buyer Default.

The occurrence at any time of the following events with respect to Buyer shall constitute a "Buyer Default":

(a) Failure to Pay. The failure of Buyer to pay any undisputed amounts owing to Seller or Mehetia, if Seller directs Buyer to make payment directly to Mehetia, on or

before the day on which such amounts are due and payable under the terms of this Agreement and Buyer's failure to cure each such failure within five (5) Business Days after Buyer receives written notice of each such failure.

(b) Failure to Perform Other Obligations. Unless due to a Force Majeure Event, the failure of Buyer to perform or cause to be performed any material obligation required to be performed by Buyer under this Agreement or the failure of any representation and warranty set forth herein to be true and correct as and when made; *provided, however*, that if such failure by its nature can be cured, then Buyer shall have a period of thirty (30) days after receipt of written notice of such failure to cure the same and a Buyer Default shall not be deemed to exist during such period; *provided, further*, that if Buyer commences to cure such failure during such period and is diligently and in good faith attempting to effect such cure, said period shall be extended for sixty (60) additional days.

(c) Bankruptcy. If Buyer is Bankrupt.

Section 7.3 Buyer's Remedies Upon Occurrence of a Seller Default. If a Seller Default has occurred, Buyer may terminate this Agreement by written notice, and assert all rights and remedies available to Buyer at law or in equity, subject to the limitations of liability set forth in Section 8.3.

Section 7.4 Seller's Remedies Upon Occurrence of a Buyer Default. If a Buyer Default has occurred Seller may terminate this Agreement only with respect to those Existing Systems as to which the Payment Date Amount has not yet been paid to Seller, whether or not such Existing Systems are subject to a Sale Notice, by written notice to Buyer and assert all rights and remedies available to Seller at law or in equity, subject to the limitations of liability set forth in Section 8.3.

Section 7.5 Specific Performance. The Parties hereto agree that irreparable damage would occur in the event that either Party breaches or threatens to breach this Agreement. It is accordingly agreed that Buyer or Seller shall be entitled to an injunction or injunctions to prevent breaches of this Agreement and to enforce specifically the terms and provisions hereof in any court of the United States or any state having jurisdiction, this being in addition to any other remedy to which either Party is entitled at law or in equity.

Section 7.6 Preservation of Rights. Termination of this Agreement shall not affect any rights or obligations as between the Parties which may have accrued prior to such termination or which expressly or by implication are intended to survive termination whether resulting from the event giving rise to termination or otherwise, including ARTICLE VI and ARTICLE VIII.

Section 7.7 Force Majeure. If either Party is rendered wholly or partially unable to perform any of its obligations under this Agreement by reason of a Force Majeure Event, that Party (the "Claiming Party") will be excused from whatever performance is affected by the Force Majeure Event to the extent so affected; *provided, however*, that (a) the Claiming Party, within a reasonable time after the occurrence of such Force Majeure Event gives the other Party notice describing the particulars of the occurrence; (b) the suspension of performance shall be of no greater scope and

of no longer duration than is reasonably required by the Force Majeure Event; (c) no liability of either Party for an event that arose before the occurrence of the Force Majeure Event shall be excused as a result of the Force Majeure Event; (d) the Claiming Party shall exercise commercially reasonable efforts to correct or cure the event or condition excusing performance and resume performance of all its obligations; and (e) when the Claiming Party is able to resume performance of its obligations under this Agreement, the Claiming Party shall promptly give the other Party notice to that effect and shall promptly resume performance.

ARTICLE VIII.
INDEMNIFICATION

Section 8.1 General Indemnification of Seller by Buyer. Buyer shall indemnify, defend and hold harmless Seller, its members, managers, officers, directors, employees and agents (each, a "Seller Indemnitee") from and against any and all Indemnifiable Losses asserted against or suffered by any Seller Indemnitee: (i) arising out of the ownership or operation of Existing Systems prior to the Transfer Date to the extent of any payments or proceeds or benefits received by Buyer under any Third Party Warranty with respect to any Existing System; *provided* that (a) such payments, proceeds or benefits were received after the Transfer Date for such Existing System, and (b) the facts, events or circumstances in which the Third Party Warranty claim are based upon occurred, at least in part, prior to the applicable Transfer Date; or (ii) arising out of any Third Party Claim in connection with (a) the removal, Shutdown and/or storage of the Existing Systems or re-installation of the Existing Systems to the extent arising out of or in connection with the negligent, intentional, willful or fraudulent acts or omissions of Buyer or its contractors, subcontractors, agents or employees or others under Buyer's control, or (b) the ownership or operation of Existing Systems after the Transfer Date for such Existing Systems; *provided* that Buyer shall have no obligation to indemnify a Seller Indemnitee to the extent the Indemnifiable Losses arising from a Third Party Claim are caused by or arise out of any act of gross negligence, fraud or willful misconduct of any Seller Indemnitee or the breach by Seller of its covenants, representations and warranties under this Agreement. Notwithstanding anything to the contrary herein, and for the avoidance of doubt, Buyer's indemnification obligations under this Section 8.1 shall apply if the Indemnifiable Losses incurred by Seller and/or other Seller Indemnitees were those described in clauses (a) or (b) of the immediately preceding sentence, and were caused by, or arose out of the conduct of any Person acting at the direction of, or who is or was under the control of, Buyer, or any of its subsidiaries or Affiliates, or any of their respective officers, directors, employees, contractors, subcontractors or agents, even if such Person is or was an employee, independent contractor, subcontractor or agent of Seller or otherwise a Seller Indemnitee.

Section 8.2 General Indemnification of Buyer by Seller. Seller shall indemnify, defend and hold harmless Buyer, its shareholders, officers, directors, employees and agents (each, a "Buyer Indemnitee") from and against any and all Indemnifiable Losses asserted against or suffered by any Buyer Indemnitee arising out of a Third Party Claim (other than a claim for a Buyer Indemnitee's breach of contract) to the extent arising out of or in connection with the negligent, intentional, willful or fraudulent acts or omissions of Seller or its subcontractors, agents or employees or others under Seller's control; *provided* that Seller shall have no obligation to indemnify a Buyer Indemnitee to the extent the Indemnifiable Losses arising from a Third Party Claim are caused by or arise out of

(i) any gross negligence, fraud or willful misconduct of any Buyer Indemnitee, or the breach by Buyer or any Buyer Indemnitee of its covenants, representations and warranties under this Agreement or (ii) any act or omission of (1) Buyer or its subsidiaries or Affiliates, or any of their respective officers, directors, employees, contractors, subcontractors or agents acting in its capacity as the "Operator" under the A&R MOMA or the "Administrator" under the Administrative Services Agreement or acting in its capacity as the "Managing Member" of Seller pursuant to the DSGP Limited Liability Company Agreement (or any such actions or omissions taken as "Operator" or "Administrator" or "Managing Member" prior to the Agreement Date), or (2) any Person who was acting at the direction of, or who is or was under the control of, Buyer, or any of its subsidiaries or Affiliates, or any of their respective officers, directors, employees, contractors, subcontractors, or agents, including any such Person who is or was a Seller Indemnitee or otherwise hired by, engaged by, or contracted with, Seller with respect to the Project, Facility or Existing Systems.

Section 8.3 Limitation of Liability.

(a) Notwithstanding anything to the contrary in this Agreement, in no event shall a Party be liable to the other Party for an amount in excess of the Maximum Liability; *provided*, that the foregoing limitation shall not apply to liability arising out of (A) the fraud, willful misconduct or gross negligence of a Party or that Party's employees, agents, contractors or subcontractors, (B) disputes over any Payment Date Amount for any Existing System, (C) a Third Party Claim, (D) a claim with respect to injury to or death of any individual, or (E) a claim with respect to property damage to Existing Systems, New Systems or BOF. For the purposes of this provision, Seller and its employees, agents, contractors and subcontractors will be deemed to be employees, agents, contractors or subcontractors of Buyer if any such Person was acting at the direction of, or is or was under the control of, Buyer, or any of its subsidiaries or Affiliates, or any of their respective officers, directors, employees, contractors, subcontractors or agents; *provided*, for the avoidance of doubt, no employee, agent, contractor or subcontractor of Buyer shall be deemed to be an employee, agent, contractor or subcontractor of Seller.

(b) Except for amounts due under a Third Party Claim in connection with indemnification under this ARTICLE VIII, damages hereunder are limited to direct damages, and in no event shall a Party be liable to the other Party, and the Parties hereby waive claims, for indirect, punitive, special or consequential damages or loss of profits in connection with direct actions between the Parties.

(c) Neither Party shall have any right to off-set any obligations or amounts owed under this Agreement.

Section 8.4 Survival. The Parties' respective rights and obligations under this ARTICLE VIII, Section 2.3(b) and Section 2.3(c) shall survive any total or partial termination of this Agreement.

ARTICLE IX.
MISCELLANEOUS PROVISIONS

Section 9.1 Amendment and Modification. This Agreement may be amended, modified or supplemented only by written agreement of Buyer and Seller.

Section 9.2 Waiver of Compliance; Consents. Except as otherwise provided in this Agreement, any failure of any of the Parties to comply with any obligation, covenant, agreement or condition herein may be waived by the Party entitled to the benefits thereof only by a written instrument signed by the Party granting such waiver, but any such waiver of such obligation, covenant, agreement or condition shall not operate as a waiver of, or estoppel with respect to, any subsequent or previous failure to comply therewith.

Section 9.3 Notices. All notices, reports, certifications, or other documentation, and other communications hereunder shall be in writing and shall be deemed given when received if delivered personally or by facsimile transmission with completed transmission acknowledgment or by electronic mail, or when delivered if mailed by overnight delivery via a nationally recognized courier or registered or certified first class mail (return receipt requested), postage prepaid, to the recipient Party at its below address (or at such other address or facsimile number for a Party as shall be specified by like notice; *provided, however*, that notices of a change of address shall be effective only upon receipt thereof and that any notice provided by electronic mail will be followed promptly by another form of notice consistent with this Section 9.3 and will be effective when such follow-up notice is deemed effective):

To Seller:

Diamond State Generation Partners, LLC
c/o Southern Power Company
30 Ivan Allen Jr. Blvd., NW
Bin SC 1108
Atlanta, GA 30308
Attention: General Counsel, [*]
Email: [*]

and to:

Diamond State Generation Partners, LLC
c/o Southern Power Company
30 Ivan Allen Jr. Blvd., NW
Bin SC 1108
Atlanta, GA 30308
Attention: Corporate Secretary, [*]
Email: [*]

and to:

Bloom Energy Corporation

4353 N. 1st Street
San Jose, CA 95134
Attention: General Counsel

and to:

Mehetia Inc.
Eleven Madison Avenue
New York, NY 10010
Attention: [*] and [*]
Email: [*] and [*]
Facsimile: [*]

With copies to (which copies shall not constitute notice):
Bloom Energy Corporation
4353 N. 1st Street
San Jose, CA 95134
Attention: [*]
Email: [*]

and to:

Credit Suisse Securities (USA) LLC
Eleven Madison Avenue
New York, NY 10010
Attention: General Counsel – Americas

and to:

McDermott Will & Emery LLP
340 Madison Avenue
New York, NY 10173
Attention: [*] and [*]
Email: [*][*]

To Buyer:

Bloom Energy Corporation
4353 N. 1st Street
San Jose, CA 95134
Attention: Scott Reynolds
Email: sreynolds@bloomenergy.com

and to:

Bloom Energy Corporation
4353 N. 1st Street
San Jose, CA 95134
Attention: General Counsel

Section 9.4 Assignment. Neither this Agreement nor any of the rights, interests or obligations hereunder shall be assigned by any of the Parties (whether by operation of law or otherwise) without the prior written consent of the other Party; *provided*, *however*, (a) the right to receive payment of the Purchase Price hereunder may be assigned to Mehetia without the prior written consent of Buyer, and (b) Buyer shall be entitled to subcontract any of its obligations under this Agreement or to assign its obligations under this Agreement, in each case to an Affiliate under common ownership with Buyer without consent, provided further that (i) such assignment or subcontracting shall not excuse Buyer from the obligation to competently perform any subcontracted or assigned obligations or any of its other obligations under this Agreement and (ii) nothing in this Agreement shall be deemed to require the consent of any Party with respect to any change in control, merger or sale of all or substantially all of the assets of Southern Power Company or Buyer. Any purported assignment or delegation in violation of this Section shall be null and void.

Section 9.5 Dispute Resolution; Service of Process.

(a) In the event a dispute, controversy or claim arises hereunder, including any claim whether in contract, tort (including negligence), strict product liability or otherwise, the aggrieved Party will promptly provide written notification of the dispute to the other Party after such dispute arises. Thereafter, a meeting shall be held promptly between the Parties, attended by representatives of the Parties with decision-making authority regarding the dispute, to attempt in good faith to negotiate a resolution of the dispute. If the Parties are not successful in resolving a dispute within twenty-one (21) days of such meeting, then, subject to the limitations on remedies set forth in Section 7.3 and Section 7.4 and ARTICLE VIII, either Party may pursue whatever rights it has available under this Agreement, at law or in equity in accordance with Section 9.6 herein. Notwithstanding the foregoing, this Section 9.5 shall not apply to disputes regarding any Payment Date Amount or the Purchase Price pursuant to Section 2.3(b) and Section 2.3(c).

(b) In the event of any dispute arising out of or relating to this Agreement, each Party hereby consents to service of process made to the addressees set forth in Section 9.3 herein either by overnight delivery by a nationally recognized courier or by certified first class mail, return receipt requested, and hereby acknowledges that service by such means shall constitute valid and lawful service of process against the Party being served.

Section 9.6 Governing Law, Jurisdiction, Venue. THIS AGREEMENT SHALL BE GOVERNED BY AND INTERPRETED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK, WITHOUT GIVING EFFECT TO ANY CONFLICTS OF LAW OR OTHER PRINCIPLES THEREOF THAT WOULD RESULT IN THE APPLICATION OF THE LAWS OF ANOTHER JURISDICTION (OTHER THAN SECTION 5-1401 OF THE NEW YORK

GENERAL OBLIGATIONS LAW). THE PARTIES HEREBY IRREVOCABLY SUBMIT TO THE EXCLUSIVE JURISDICTION OF THE COURTS OF THE STATE OF NEW YORK AND OF THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF NEW YORK WITH RESPECT TO ANY DISPUTE ARISING OUT OF OR RELATING TO THIS AGREEMENT. EACH PARTY IRREVOCABLY AND UNCONDITIONALLY WAIVES TRIAL BY JURY IN ANY ACTION, SUIT OR PROCEEDING RELATING TO ANY SUCH DISPUTE AND FOR ANY COUNTERCLAIM WITH RESPECT THERETO.

Section 9.7 Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Signatures delivered by facsimile, portable document format (.PDF) or other electronic means (including services such as DocuSign) will be considered original signatures.

Section 9.8 Interpretation. The article, section and schedule headings contained in this Agreement are solely for the purpose of reference, are not part of the agreement of the Parties and shall not in any way affect the meaning or interpretation of this Agreement.

Section 9.9 Entire Agreement. This Agreement and the exhibits, schedules, documents, certificates and instruments referred to herein, embody the entire agreement and understanding of the Parties in respect of the transactions contemplated by this Agreement. Each Party acknowledges that, in agreeing to enter into this Agreement, it has not relied on any representation, warranty, collateral contract or other assurance (except those repeated in this Agreement and any other agreement entered into on the date of this Agreement between the Parties) made by or on behalf of any other Party at any time before the signature of this Agreement.

Section 9.10 Construction of Agreement. The terms and provisions of this Agreement represent the results of negotiations between Buyer and Seller, each of which has been represented by counsel of its own choosing, and neither of which has acted under duress or compulsion, whether legal, economic or otherwise. Accordingly, the terms and provisions of this Agreement shall be interpreted and construed in accordance with their usual and customary meanings, and Buyer and Seller hereby waive the application in connection with the interpretation and construction of this Agreement of any rule of law to the effect that ambiguous or conflicting terms or provisions contained in this Agreement shall be interpreted or construed against the Party whose attorney prepared the executed draft or any earlier draft of this Agreement.

Section 9.11 Severability. If any term or other provision of this Agreement is invalid, illegal or incapable of being enforced by any rule of law or public policy, all other conditions and provisions of this Agreement shall nevertheless remain in full force and effect so long as the economic or legal substance of the transactions contemplated hereby is not affected in any manner materially adverse to any Party.

Section 9.12 Further Assurances. Each Party agrees to execute and deliver such reasonable additional documents and instruments and to perform such reasonable additional acts as may be necessary or appropriate to effectuate, carry out and perform all of the terms, provisions, and conditions of this Agreement and the transactions contemplated by this Agreement.

Section 9.13 Time of Essence. Time is of the essence with respect to all matters contained in this Agreement.

Section 9.14 No Rights in Third Parties. Except as otherwise specified herein, (a) nothing in this Agreement nor any action taken hereunder shall be construed to create any duty, liability or standard of care to any Person that is not a Party, (b) no Person that is not a Party shall have any rights or interest, direct or indirect, in this Agreement and (c) this Agreement is intended solely for the benefit of the Parties, and the Parties expressly disclaim any intent to create any rights in any third party as a third-party beneficiary to this Agreement.

Section 9.15 Transfer Taxes.

Buyer shall be responsible for the payment of all transfer, documentary, sales, use, stamp, registration, value added and other such taxes and fees (including any penalties and interest) incurred in connection with this Agreement or the transactions contemplated hereby. Buyer shall indemnify Seller and any Seller Indemnitee for any liability relating to any such transfer, documentary, sales, use, stamp, registration, value added and other such taxes and fees (including any penalties and interest).

[Remainder of page intentionally left blank]

IN WITNESS WHEREOF, Buyer and Seller have caused this Repurchase Agreement to be signed by their respective duly authorized officers as of the Agreement Date.

SELLER:

DIAMOND STATE GENERATION PARTNERS, LLC
a Delaware limited liability company

By: **Diamond State Generation Holdings, LLC**
Its: Manager

By: /s/ Tim Gray
Name: Tim Gray
Title: Vice President

BUYER:

BLOOM ENERGY CORPORATION
a Delaware corporation

By: /s/ Deon Boles
Name: Deon Boles
Title: Corporate Controller

EXHIBIT A

Form of Bill of Sale

BILL OF SALE

This BILL OF SALE, dated as of _____ __, 2019 is made by DIAMOND STATE GENERATION PARTNERS, LLC ("Seller") to BLOOM ENERGY CORPORATION ("Buyer"), and is delivered pursuant to the Repurchase Agreement, dated as of June 14, 2019 (the "Agreement"), between Seller and Buyer, in connection with the transfer of the assets described on Attachment A attached hereto (the "Purchased Systems").

Seller hereby assigns, conveys, sells, delivers, sets over and transfers to Buyer, for the consideration, and on the terms and conditions, set forth in the Agreement, all of Seller's rights, title and interest in, under and to the Purchased Systems, and Buyer hereby accepts such assignment, and agrees, in accordance with the Agreement, to assume all liabilities and obligations with respect thereto.

This Bill of Sale shall inure to the benefit of and be binding upon the parties hereto and their respective successors and assigns.

This Bill of Sale shall be governed by, and construed in accordance with, the laws of the State of New York.

[Signature Page Follows]

IN WITNESS WHEREOF, the parties hereto have caused this Bill of Sale to be signed by their respective duly authorized officers as of the date first written above.

SELLER:

DIAMOND STATE GENERATION PARTNERS, LLC

By: _____
Name:
Title:

BUYER:

BLOOM ENERGY CORPORATION

By: _____
Name:
Title:

Attachment A to Bill of Sale

Purchased Systems

Serial No.	Facility	System Capacity (kW-AC)
	[Red Lion] / [Brookside]	

EXHIBIT B

Repurchase Schedule

Date	Aggregate System Capacity Repurchased (kW)
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]

EXHIBIT C

Form of Sale Notice

SALE NOTICE

This SALE NOTICE, dated as of _____ __, 201_ is made by BLOOM ENERGY CORPORATION ("Buyer") to DIAMOND STATE GENERATION PARTNERS, LLC ("Seller"), and is delivered pursuant to the Repurchase Agreement, dated as of June 14, 2019 (the "Agreement"), between Seller and Buyer.

Buyer hereby notifies Seller of Buyer's intent to purchase [__] Existing Systems with an aggregate System Capacity equal to [_____]kW. The Serial No., Facility and individual System Capacity for each such Existing System is set forth on Attachment A attached hereto.

The aggregate Payment Date Amount to be paid for such Existing Systems equals $[_____]. Buyer's calculation of the Payment Date Amount for such Existing Systems is set forth in the Payment Date Amount Calculation Model which is attached hereto as Attachment B.

The Payment Date for such Existing Systems shall occur on [_____], 2019.

The Transfer Date for such Existing Systems is expected to occur on or about [_____, 2019].

Following the Transfer Date of the Existing Systems subject to this Sale Notice, the aggregate System Capacity of the remaining Existing Systems that are subject to the Repurchase Agreement is equal to [_____]kW.

[Signature Page Follows]

IN WITNESS WHEREOF, the undersigned has caused this Sale Notice to be signed by its duly authorized officers as of the date first written above.

BUYER:

BLOOM ENERGY CORPORATION

By: _____
Name:
Title:

Attachment A to Sale Notice

Serial No.	Facility	System Capacity (kW-AC)
	[Red Lion] / [Brookside]	

Attachment B to Sale Notice

Payment Date Amount Calculation Model

See Attached

DM_US 157179328-13.085887.0029

EXECUTION VERSION

REDACTED EXHIBIT: This Exhibit contains certain identified information that has been excluded because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed. Redacted information is identified by [*].

THIRD AMENDED AND RESTATED

LIMITED LIABILITY COMPANY AGREEMENT

OF

DIAMOND STATE GENERATION PARTNERS, LLC

dated as of June 14, 2019

ANNEXES

SCHEDULES

EXHIBITS

THIRD AMENDED AND RESTATED

LIMITED LIABILITY COMPANY AGREEMENT

OF

DIAMOND STATE GENERATION PARTNERS, LLC

THIS THIRD AMENDED AND RESTATED LIMITED LIABILITY COMPANY AGREEMENT (this "Agreement") of DIAMOND STATE GENERATION PARTNERS, LLC, a Delaware limited liability company (the "Company"), is made and entered into as of June 14, 2019 by and between Diamond State Generation Holdings, LLC, a Delaware limited liability company (the "Class A Member"), and SP Diamond State Class B Holdings, LLC, a Delaware limited liability company ("Southern" or the "Class B Member"; and the Class B Member together with the Class A Member, the "Members"). This Agreement amends and restates the Second Amended and Restated Limited Liability Company Agreement of the Company, dated as of March 20, 2013, including all amendments thereto (the "Second A&R LLCA"), in its entirety in accordance with the following terms and conditions.

Preliminary Statements

WHEREAS, the Company is organized under the provisions of the Delaware Limited Liability Company Act (as amended from time to time, the "Act"). The Certificate of Formation (as amended and restated from time to time, the "Certificate" or "Certificate of Formation") was filed on April 14, 2011 with the Secretary of State of the State of Delaware. Pursuant to that certain Certificate of Amendment of Certificate of Formation of Germinis 2011 Generation Partners, LLC, filed on May 26, 2011 with the Secretary of State of the State of Delaware by an authorized person under Section 18-202 of the Act, the Certificate was amended on May 27, 2011 to reflect a change in name from "Germinis 2011 Generation Partners, LLC" to "Diamond State Generation Partners, LLC";

WHEREAS, pursuant to the Equity Capital Contribution Agreement among Bloom, the Company, the Class A Member and the Class B Member, dated as of the date hereof (the "ECCA"), the Class B Member has agreed to make a series of capital contributions to the Company, including one on the date hereof, in return for the issuance of, with respect to the Class B Member, 100% of the Class B Membership Interests in the Company, and the Class A Member has agreed to exchange its existing 100% membership interest in the Company for the issuance of 100% of the Class A Membership Interests in the Company, subject to the terms and conditions as provided therein; and

WHEREAS, upon issuance of the Class A Membership Interests and Class B Membership Interests in the Company, the Members desire to amend and restate the Second A&R LLCA.

NOW, THEREFORE, in consideration of the mutual covenants and agreements contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree, effective as of the date hereof (the "Effective Date"), that:

A. There shall be two classes of Membership Interests, Class A Membership Interests and Class B Membership Interests, as set forth on Annex II;

B. The Class B Member and the Class A Member are each admitted as the sole Members of the Company on the date hereof; and

C. The Second Amended and Restated Limited Liability Company Agreement of the Company is hereby amended and restated in its entirety as set forth herein.

ARTICLE I
DEFINITIONS

Section 1.1 Definitions. Capitalized terms used but not otherwise defined in this Agreement have the meanings given to such terms in Annex I.

ARTICLE II
FORMATION; OFFICES; TERM

Section 2.1 Formation of the Company. The Company is organized under the provisions of the Act. The Certificate was filed on April 14, 2011 with the Secretary of State of the State of Delaware and amended as set forth above to reflect a change in name from "Germinis 2011 Generation Partners, LLC" to "Diamond State Generation Partners, LLC."

Section 2.2 Name. The name of the Company is, and the business of the Company shall be conducted under the name of, "Diamond State Generation Partners, LLC." The name of the Company may be changed from time to time by amendment of the Certificate. The Company may transact business under an assumed name by filing an assumed name certificate in the manner prescribed by Applicable Law.

Section 2.3 Term. The Company's existence shall be perpetual unless earlier terminated pursuant to the provisions of this Agreement.

Section 2.4 Purpose. The Company has been formed for the object and purpose of: (i) owning a portfolio of Systems (herein defined as the "Existing Systems") having an aggregate nameplate capacity of up to 30 MW, (ii) gradually replacing some or all of the Existing Systems with replacement Systems (herein defined as the "New Systems"), such that, at any time, the total aggregate nameplate capacity is no more than 30 MW, (iii) selling and transferring some or all of the Existing Systems pursuant to the Repurchase Agreement as the New Systems are purchased and installed pursuant to the CapEx Agreement, (iv) entering into the ECCA, CapEx Agreement,

Repurchase Agreement, the MOMA and Site Leases, and all other contracts necessary or useful in connection with the purchase, installation, ownership and operation of the Systems and Projects, (iii) making tax filings, (iv) requesting capital contributions from certain Members through Funding Notices (as defined in the ECCA) and as set forth herein, and (v) all such other actions reasonably related to carrying out the foregoing.

Section 2.5 Powers. The Company shall have the power and authority to do any and all acts necessary or convenient to or for the furtherance of the purposes described herein, and shall have and may exercise all powers and authorities, statutory or otherwise, conferred upon limited liability companies under the laws of the State of Delaware.

Section 2.6 Offices. The registered office of the Company required by the Act to be maintained in the State of Delaware shall be the office of the registered agent named in the Certificate or such other office (which need not be a place of business of the Company) as the Managing Member may designate in the manner provided by Applicable Law. The registered agent of the Company in the State of Delaware shall be the registered agent named in the Certificate or such other Person or Persons as the Managing Member may designate in the manner provided by Applicable Law. The principal office of the Company shall be 4353 N. 1ST Street, San Jose, CA 95134, or at such other location as may be from time to time determined by the Managing Member. The Company may have such other offices as the Managing Member may designate.

Section 2.7 Title to Company Assets. Title to Company assets, whether real, personal or mixed and whether tangible or intangible, shall be deemed to be owned by the Company as an entity, and no Member, Manager or Officer, individually or collectively, shall have any ownership interest in such Company assets or any portion thereof. Title to any or all of the Company assets shall be held in the name of the Company. All Company assets shall be recorded as the property of the Company in its books and records, irrespective of the name in which record title to such Company assets is held.

Section 2.8 No Partnership Intended. The Members intend that the Company not be a partnership, limited partnership, joint venture or other arrangement other than for tax purposes under the Code, the applicable Treasury Regulations and any state, municipal or other income tax law or regulation, and this Agreement shall not be construed to suggest otherwise.

ARTICLE III
RIGHTS AND OBLIGATIONS OF THE MEMBERS

Section 3.1 Membership Interests.

(a) The Membership Interests comprise 100 Class A Membership Interests, all of which are issued and held by the Class A Member on the Effective Date, and 100 Class B Membership Interests, all of which are issued and held by Southern on the Effective Date.

(b) The Class A Membership Interests and the Class B Membership Interests shall: (i) have the rights and obligations ascribed to such Membership Interests in this Agreement and the Act; (ii) be evidenced solely by certificates in the forms annexed hereto as Exhibit A and Exhibit B, respectively, or such other form as may be prescribed from time to time by any Legal Requirements; (iii) be recorded in a register of Membership Interests, which register the Managing Member shall maintain; (iv) be transferable only on recordation of such Transfer in the register of Membership Interest, which recordation the Managing Member shall make, upon compliance with the provisions of Article IX hereof and upon presentation of the certificates duly endorsed for Transfer, or accompanied by assignment documentation in accordance with Article IX; (v) be "securities" governed by Article 8 of the UCC in any jurisdiction (x) that has adopted revisions to Article 8 of the UCC substantially consistent with the 1994 revisions to Article 8 adopted by the American Law Institute and the National Conference of Commissioners on Uniform State Laws and (y) whose laws may be applicable, from time to time, to the issues of perfection, the effect of perfection or non-perfection, and the priority of a security interest in Membership Interests in the Company; and (vi) be personal property.

(c) The Company shall be entitled to treat the registered holder of a Membership Interest, as shown in the register of Membership Interests referred to in Section 3.1(b), as the Member for all purposes of this Agreement, except that the Managing Member may record in the register of Membership Interest any security interest of a secured party pursuant to any security interest permitted by this Agreement.

(d) If a Member transfers all of its Membership Interest to another Person pursuant to and in accordance with the terms in Article IX, the transferor shall automatically cease to be a Member.

Section 3.2 Actions by the Members.

(a) Except as otherwise permitted by this Agreement (including Section 3.2(e) below), all actions of the Members shall be taken at meetings of the Members which may be requested by any Member for any reason and shall be called by the Managing Member within 10 days following the written request of a Member. The Members may conduct any Company business at any such meeting that is permitted under the Act or this Agreement. Meetings shall be at a reasonable time and place. Accurate minutes of any meeting shall be taken and filed with the minute books of the Company. Following each meeting, the minutes of the meeting shall be sent promptly to each Member.

(b) Members may participate in any meeting of the Members by means of conference telephone or other communications equipment so that all persons participating in the meeting can hear each other or by any other means permitted by law. Such participation shall constitute presence in person at such meeting.

(c) The presence in person or by proxy of Members owning more than 50% of the aggregate Class A Membership Interests and more than 50% of the aggregate Class B Membership Interests shall constitute a quorum for purposes of transacting business at any meeting of the Members; provided that, in the event that a quorum is not present at or otherwise represented at a meeting of the Members duly called in accordance of this Section 3.2, the Managing Member may call a second meeting to occur no sooner than five (5) Business Days nor later than ten (10) Business Days after such notice from the Managing Member, and if a quorum is not present at such second meeting, the Members in attendance may, nonetheless, approve any actions reasonably necessary to protect the assets or ongoing revenue of the Company. For the avoidance of doubt, no Major Decision shall be agreed at any meeting, or otherwise taken, without a Class Majority Vote.

(d) Written notice stating the place, day and hour of the meeting of the Members, and the purpose or purposes for which the meeting is called, shall be delivered by or at the direction of the Managing Member or of the Member calling such meeting, to each Member of record entitled to vote at such meeting not less than 5 Business Days nor more than 30 days prior to the meeting. Notwithstanding the foregoing, meetings of the Members may be held without notice so long as all the Members are present in person or by proxy.

(e) Any action may be taken by the Members without a meeting if such action is authorized or approved by the written consent of Members representing sufficient Membership Interests to authorize or approve such action pursuant to this Agreement. The Members may conduct any Company business or take any action required of Members under this Agreement through written consent. Where action is authorized by written consent no prior notice is required and no meeting of Members needs to be called or noticed. A copy of any action taken by written consent must be sent promptly to all Members and all actions by written consent shall be filed with the minute books of the Company.

(f) (i) Each Class A Membership Interest shall be entitled to one vote and (ii) each Class B Membership Interest shall be entitled to one vote for purposes of any vote, consent or approval of Members required under this Agreement or the Act. With respect to those matters required or permitted to be voted upon by the Members, or for which a consent or approval of Members is required or permitted, the affirmative vote, consent or approval of Members owning more than 50% of the outstanding Membership Interests (the "Majority Vote") shall be required to authorize or approve any such matter; provided that for Major Decisions the affirmative vote, consent or approval of more than 50% of the outstanding Class A Membership Interests and more than 50% of the outstanding Class B Membership Interests shall be required to authorize or approve such Major Decision in addition to any other approval required by this Agreement or the Act (a "Class Majority Vote"); and provided further, that for the matters set forth in Section 8.1(b) of this Agreement, the affirmative vote, consent or approval of more than 50% of the outstanding Class A Membership Interests and Class B Membership Interests (as applicable), voting separately as a single class, shall be required to authorize or approve such matter. Except as otherwise expressly provided in this Agreement, no separate vote, consent or approval of either Class A Members acting

as a class or Class B Members acting as a class, shall be required to authorize or approve any matter for which a vote, consent or approval of Members is required under this Agreement.

Section 3.3 Management Rights. Except as set forth in Section 3.3(a), Section 3.3(b) and Section 8.1(b), no Member other than the Managing Member shall have any right, power or authority to take part in the management or control of the business of, or transact any business for, the Company, to sign for or on behalf of the Company or to bind the Company in any manner whatsoever. Except as otherwise provided herein, the Managing Member shall not hold out or represent to any third party that any other Member has any such power or right or that any Member is anything other than a member in the Company. A Member, other than a Member who is the Managing Member, shall not be deemed to be participating in the control of the business of the Company by virtue of its possessing or exercising any rights set forth in this Agreement or the Act or any other agreement relating to the Company.

(a) Notwithstanding anything in this Agreement to the contrary, all decisions and actions that relate solely to the Existing Systems or Existing Project (and not any New Systems, portion of the New Project or any Shared Assets or the Tariffs), shall be made exclusively by the Class A Member and carried out by the Managing Member in such manner as the Class A Member reasonably directs.

(b) Notwithstanding anything in this Agreement to the contrary, all decisions and actions that relate solely to the New Systems or New Project (and not any Existing Systems, portion of the Existing Project or any Shared Assets or the Tariffs), shall be made exclusively by the Class B Member and carried out by the Managing Member in such manner as the Class B Member reasonably directs; but prior to the Section 203 Order being obtained, this paragraph will only govern decisions and actions that relate solely to the installation of the New Systems or New Project.

Section 3.4 Other Activities. Notwithstanding any duty otherwise existing at law or in equity, any Member may engage in or possess an interest in other business ventures of every nature and description, independently or with others, even if such activities compete directly with the business of the Company, and neither the Company nor any of the Members shall have any rights by virtue of this Agreement in and to such independent ventures or any income, profits or property derived from them.

Section 3.5 No Right to Withdraw. Except in the case of Transfers in accordance with Article IX, no Member shall have any right to resign voluntarily or otherwise withdraw from the Company without the prior written consent of each of the remaining Members of the Company in their sole and absolute discretion.

Section 3.6 Limitation of Liability of Members.

(a) Each Member and its officers, directors, shareholders, Affiliates, employees and agents (each, a "Member Party") shall (i) have liability limited as described in the Act and other applicable Legal Requirements and (ii) be exculpated from liability for and defended, indemnified and held harmless by the Company from any and all judgments, awards, causes of action, lawsuits, suits, proceedings, governmental investigations or audits, losses (including amounts paid in settlement of claims), assessments, fines, penalties, administrative orders or injunctions (including any loss of profits, consequential, punitive, incidental or special damages recovered by any Person other than a Member or an Affiliate of a Member), including interest, penalties, reasonable attorney's fees, disbursements and costs of investigations, deficiencies, levies, duties and imposts ("Claims") arising out of the performance by such Member Party of its obligations under this Agreement so long as (A) the Member Party acted in good faith and in a manner reasonably believed by it to be in the best interest of or not opposed to the interest of the Company and (B) the Member Party's actions did not constitute willful misconduct, fraud or gross negligence or willful breach of any of its covenants under this Agreement. Except as otherwise required by the Act, the debts, obligations and liabilities of the Company, whether arising in contract, tort or otherwise, shall be the debts, obligations and liabilities solely of the Company, and the Members shall not be obligated personally for any of such debts, obligations or liabilities solely by reason of being a Member of the Company.

(b) Each of the Members shall be fully protected in relying in good faith upon the records of the Company and upon such information, opinions, reports or statements presented to the Company by any other Person who is a Member or any officer or employee of the Company, or by any other individual as to matters that such Member reasonably believes are within such other Person's professional or expert competence, including information, opinions, reports or statements as to the value and amount of the assets, liabilities, profits or losses of the Company or any other facts pertinent to the existence and amount of assets from which distributions to the Members might properly be paid. Without limiting the foregoing, the Managing Member shall be fully protected in relying on the Class B Member's directions in connection with any action taken pursuant to Section 3.3(b).

(c) To the extent that, at law or in equity, a Member, in its capacity as a member or manager of the Company or otherwise, has duties (including fiduciary duties) and liabilities relating thereto to the Company or to any Member or other Person bound by this Agreement, such Member, acting under this Agreement shall not be liable to the Company or to any Member or other Person bound by this Agreement for its good faith reliance on the provisions of this Agreement; provided that this Section 3.6(c) shall not be construed as limiting the obligations or liabilities of such Member in any capacity other than a member or manager, whether pursuant to this Agreement or otherwise. The provisions of this Agreement, to the extent that they restrict or eliminate the duties and liabilities of a Member, in its capacity as a member or manager of the Company, otherwise existing at law or in equity, are agreed by the Members to replace such other duties and liabilities of such Member.

(d) Except as otherwise provided in Section 9.10 hereof with respect to liability resulting from fraud or willful misconduct, with respect to its failure to pay any amount due to any

Indemnified Parties under the Transaction Documents or with respect to Third Party claims, no Member, in its capacity as Managing Member or otherwise, shall have any liability of any kind to any other Member under this Agreement for monetary damages in an amount that would exceed its aggregate obligation to indemnify the Class B Indemnified Parties or the Class A Indemnified Parties, as applicable, pursuant to Section 9.10.

(e) No Member, in its capacity as Managing Member, as long as such capacity shall exist, shall have any liability to the Company, a Member, or any other Person bound by this Agreement for damages resulting from a breach or breaches by the Operator of any of its obligations, covenants or agreements under the MOMA.

Section 3.7 Liability for Deficits. None of the Members shall be liable to the Company for any deficit in its Capital Account, nor shall such deficits be deemed assets of the Company, except to the extent otherwise provided by law with respect to third-party creditors of the Company.

Section 3.8 Company Property. All property owned by the Company, whether real or personal, tangible or intangible and wherever located, shall be deemed to be owned by the Company, and no Member, individually, shall have any ownership of such property.

Section 3.9 Retirement, Resignation, Expulsion, Incompetency, Bankruptcy or Dissolution of a Member. The retirement, resignation, expulsion, Bankruptcy or dissolution of a Member shall not, in and of itself, dissolve the Company. Subject to Section 8.2(d), the successors in interest to the bankrupt Member shall, for the purpose of settling the estate, have all of the rights of such Member, including the same rights and subject to the same limitations that such Member would have had under the provisions of this Agreement to Transfer its Membership Interest. A successor in interest to a Member shall not become a substituted Member except as provided in this Agreement.

Section 3.10 Withdrawal of Capital. No Member shall have the right to withdraw capital from the Company or to receive or demand distributions (except distributions described in Article VI) or return of its Capital Contributions until the Company is dissolved in accordance with this Agreement and applicable provisions of the Act. No Member shall be entitled to demand or receive any interest on its Capital Contributions.

Section 3.11 [Reserved].

Section 3.12 Covenants.

(a) Each Member covenants to the Company and each other Member that it is and will remain a "United States person," as defined in Section 7701(a)(30) of the Code and will not be subject to withholding under Section 1446 of the Code. Contemporaneously with the execution hereof, the Class A Member has provided to the Company a nonforeign affidavit satisfying the requirements of Section 1446(f)(2) of the Code, such that the Company shall not be required to

deduct and withhold under Section 1446(f) of the Code any amounts from distributions made to the Class A Member under this Agreement.

(b) The Managing Member covenants to the Company and each other Member that no part of the assets of the Company is or will be used predominantly outside of the United States.

(c) Each Member covenants to the Company and each other Member that it will not take any action that would (i) cause the assets of the Company to become subject to the alternative depreciation system within the meaning of Section 168(g) of the Code or "tax-exempt use property" within the meaning of Section 168(h) of the Code; or (ii) result in the "recapture" under Section 50(a) of the Code of any ITC with respect to the New Systems.

(d) The Managing Member shall be required to perform its duties and obligations hereunder in good faith and in a manner reasonably believed to be in the best interest of the Company.

(e) The Managing Member shall cause the Company to file (i) any applications, reports or other filings required to be made by the Company under any federal, state or local Legal Requirements applicable to the Members, the Company or the Project relating to the ownership, control and operation of the Project by the Company and (ii) any further filings that may be necessary, proper or advisable in connection with the matters referred to in clause (i) above; provided that the Managing Member shall provide Southern a reasonable opportunity to review and comment on any such filing that is outside of the normal course of operation of the Company or the Project prior to the submission thereof to the applicable Governmental Authority and shall consider in good faith all comments received from Southern. Each Member shall make their respective required filings under any other applicable Legal Requirements. In connection with the transactions contemplated by this Agreement, each of the Members and the Company shall: (iii) cooperate with each other in connection with the making of all filings, notifications and any other material actions pursuant to this Section 3.12(e), including, subject to applicable Legal Requirements, by permitting counsel for the other Parties to review in advance, and consider in good faith the views of the other Parties in connection with, any proposed written communication to any Governmental Authority addressing the terms of this Agreement; and (iv) furnish to the other Parties such information and assistance as such Parties may reasonably request in connection with (x) the preparation of any submissions to, or agency proceedings by, any Governmental Authority, or (y) obtaining any consents, approvals or waivers required by any Governmental Authority.

Section 3.13 Closing Obligations. The obligation of each of the Class A Member and the Class B Member to make its respective Capital Contributions is unconditional, except as provided herein and in the ECCA, and subject to full recourse.

Section 3.14 Events of Default. An event of default shall occur upon the occurrence of any of the following by a Member: (i) failure to make any Capital Contribution when due or perform any other obligation with respect to such payment and the same is not cured within 5

Business Days after notice that the same is due, (ii) making an untrue material representation or warranty, or (iii) a material breach by such Member of any provision in this Agreement. Without in any way limiting any other remedies available to the Class A Member or Class B Member hereunder, upon an event of default by the Class A Member or Class B Member, the other Member shall have the right to suspend performance of its obligations that are prevented by such default.

Section 3.15 Separateness. Each Member and the Company are separate and distinct entities, and the Members agree that the Company shall maintain its existence separate and distinct from any other Person, including, without limitation, adhering to the following:

(a) The Company has not formed, acquired or held and shall not form, acquire or hold any Subsidiary;

(b) The Company has not engaged in, sought, consented to or permitted and shall not engage in, seek, consent to or permit any dissolution, winding up, liquidation, consolidation or merger or any sale or other transfer of all or substantially all of its assets or any sale of assets outside the ordinary course of its business, except in each case as permitted by (i) this Agreement (specifically with respect to the sale of Existing Systems pursuant to the Repurchase Agreement) and, (ii) any transfer of the Company's Membership Interests in connection with the transactions described in the ECCA or this Agreement;

(c) The Company shall not incur any debt or contingent liabilities except as permitted by this Agreement;

(d) The Company shall not commingle assets with those of any other Person and shall hold its assets in its own name;

(e) The Company shall conduct its own business in its own name and not in the name of any other Person, including any Member;

(f) The Company shall maintain bank accounts (if any), books and records separate from any other Person;

(g) The Company shall observe all formalities of this Agreement and the Certificate of Formation;

(h) The Company shall not identify itself as a department or division of any other Person;

(i) The Company shall not acquire obligations or securities of its Members;

(j) The Company shall pay its own liabilities out of its own funds;

(k) The Company shall maintain adequate capital in light of its contemplated business operations and liabilities;

(l) The Company shall use its own stationery, invoices and checks separate from those of any other Person, including any Member;

(m) The Company shall pay the salaries of its own employees, if any, and maintain a sufficient number of employees in light of its contemplated business operations;

(n) The Company shall not guarantee or become obligated for the debts of any other entity or hold out its credit as being available to satisfy the obligations of any other Person;

(o) The Company shall not make any loans to any other Person other than in accordance with this Agreement;

(p) The Company shall conduct all transaction and maintain relationship with any Affiliates on an arm's length basis and on commercially reasonable terms;

(q) The Company shall not pledge its assets for the benefit of any other Person, except as provided in the Transaction Documents;

(r) The Company shall hold itself out as a separate entity, and shall use commercially reasonable efforts to correct any known misunderstanding regarding its separate identity.

ARTICLE IV
CAPITAL CONTRIBUTIONS; CAPITAL ACCOUNTS

Section 4.1 Capital Contributions.

(a) The Members will make Capital Contributions to the Company at the times and in the amounts required under the ECCA and as described herein. The Members acknowledge that as of the Effective Date, (i) the Class A Member has made a Capital Contribution to the Company in an amount equal to the value of the Existing Systems and Existing Project, and any other assets owned by the Company immediately prior to the admission of the Class B Member, as set forth in Annex II, and (ii) the Class B Member has made the Capital Contributions as set forth on Annex II, and has agreed to make further Capital Contributions at the times and in the amounts provided in the ECCA up to the Maximum Aggregate Southern Portfolio Purchase Price.

(b) The Company shall be entitled to enforce the obligations of the Class B Member with respect to any Capital Contribution to be made on or after the Effective Date and the obligations of the Class A Member with respect to the Capital Contribution made on the Effective Date, and the Company shall have all remedies available at law or in equity in the event any such obligation is not satisfied.

(c) For federal income tax purposes, the admission of the Class B Member as a member of the Company on the Effective Date shall be treated as the formation by the Class A Member and the Class B Member of a new partnership, with the Class B Member being deemed to contribute to such new partnership cash in exchange for a partnership interest and the Class A Member being deemed to contribute to such new partnership the Existing Systems, the Existing Project, and all other assets owned by the Company immediately prior to the admission of the Class B Member in exchange for a partnership interest, and as if such new partnership assumed from the Class A Member all liabilities of the Company. The Class A Member agrees to provide to the Company, with a copy to Southern, such information as may be necessary for purposes of determining the tax basis in the assets deemed to be contributed by the Class A Member and of complying with Section 704(c) of the Code.

Section 4.2 Capital Accounts.

(a) A Capital Account will be established and maintained for each Member in the manner required by the Treasury Regulations under Section 704(b) of the Code. If there is more than one Member in a class, then each of the Members in that class will have a separate Capital Account.

(b) A Member's Capital Account will be increased by (i) the amount of money the Member contributes to the Company, (ii) the Gross Asset Value of any property the Member contributes to the Company (net of liabilities secured by the property that the Company is considered to assume or take subject to under Section 752 of the Code), and (iii) the income and gain (or items thereof) that the Member is allocated by the Company, including any income and gain exempted from tax and gain described in Section 4.2(c). A Member's Capital Account will be decreased by (iv) the amount of money distributed to the Member by the Company, (v) the Gross Asset Value of any property distributed to the Member by the Company (net of liabilities secured by the property that the Member is considered to assume or take subject to under Section 752 of the Code), (vi) any expenditures of the Company described in Section 705(a)(2)(B) of the Code (i.e., expenditures that cannot be capitalized or deducted in computing taxable income) that are allocated to the Member, and (vii) losses and deductions (or items thereof) that are allocated by the Company to the Member, including losses described in Section 4.2(c), but the Capital Account will not be reduced again under this clause (vii) for expenditures that already reduced it under clause (vi).

(c) The Gross Asset Values of all the Company assets will be adjusted to equal their respective Gross Fair Market Values upon the occurrence of any of the following events: (i) if any new or existing Member contributes more than a de minimis amount of money or property, (ii) if more than a de minimis amount of money or other property is distributed by the Company to a Member to redeem its Membership Interest, or (iii) if the Company is liquidated within the meaning of Treasury Regulations Section 1.704-1(b)(2)(ii)(g). Following the occurrence of an event in clauses (i) and (ii) the Managing Member will make an adjustment to Gross Asset Value only if it reasonably determines, after Consultation with the other Members, that the adjustments are necessary or appropriate to reflect the relative economic interests of the Members in the Company.

In addition, the Gross Asset Value of any Company asset that is distributed to a Member will be adjusted to equal the Gross Fair Market Value of the asset on the applicable Distribution Date. In the event the Gross Asset Value of any item of the Company's property is adjusted as described in this Section 4.2(c), then the amount of the adjustment will be treated as an item of gain (if the adjustment increases the Gross Asset Value) or an item of loss (if the adjustment decreases the Gross Asset Value) from the disposition of such property.

(d) The initial Capital Account balance and Percentage Interest of each Member is shown in Schedule 4.2(d). Any subsequent contributions made by the Members will be considered contributions of such amounts to the Company. The Managing Member will update Schedule 4.2(d) from time to time as necessary to reflect accurately the information therein; provided, however, that, notwithstanding anything in this Agreement or the ECCA to the contrary, failure to update Schedule 4.2(d) in accordance with this Section 4.2(d) shall not affect the actual amounts considered Capital Contributions hereunder, all of which shall be deemed made on the date actually contributed. Any such updating will be consistent with how this Article IV requires that the Capital Accounts be maintained. Any reference in this Agreement to Schedule 4.2(d) will be treated as a reference to Schedule 4.2(d) as amended and in effect from time to time.

(e) If all or a portion of a Membership Interest in the Company is Transferred in accordance with the terms of this Agreement, then the transferee will succeed to the Capital Account of the transferor to the extent it relates to the Membership Interest so Transferred.

(f) The provisions of this Agreement relating to maintenance of Capital Accounts are intended to comply with Treasury Regulation Sections 1.704-1(b) and 1.704-2, and will be interpreted and applied in a manner consistent with such Treasury Regulations or any successor provisions.

ARTICLE V
ALLOCATIONS

Section 5.1 Maintenance of Separate Records for Existing Systems and New Systems. In order to properly carry out the allocations of income and loss as provided in this Article V, the income and loss from the ownership and operation of each of the Existing Systems and the New Systems during each Accounting Period shall be determined as set forth below and in Section 5.2.

(a) For purposes of this Agreement, "Existing Systems Income and Losses" shall mean, for any Accounting Period, the net income or loss determined for the Existing Systems by assigning to the Existing Systems (i) a pro rata share of all Operating Revenue, Operating Expenses, Extraordinary Shared Facility Revenue, and Extraordinary Shared Facility Maintenance Expense for such Accounting Period based upon the Existing Systems Output Percentage for such Accounting Period, and (ii) all Specially Allocated Existing System Items for such Accounting Period.

(b) For purposes of this Agreement, "New Systems Income and Losses" shall mean, for any Accounting Period, the net income or loss determined for the New Systems by assigning to the New Systems (i) a pro rata share of all Operating Revenue, Operating Expenses, Extraordinary Shared Facility Revenue, and Extraordinary Shared Facility Maintenance Expenses for such Accounting Period based upon the New Systems Output Percentage for such Accounting Period, and (ii) all Specially Allocated New System Items for such Accounting Period.

(c) The ITC and any state income tax credits attributable to the New Systems shall be allocated to the Class B Member in accordance with its Percentage Interest in New Systems Income and Losses.

(d) For purposes of this Agreement, the following terms shall have the following meanings:

(i) "Accounting Period" shall mean (A) each calendar month with respect to which both Class A Membership Interests and Class B Membership Interests are outstanding for the entirety of such calendar month, and (B) for any calendar month with respect to which both Class A Membership Interests and Class B Membership Interests are outstanding for part, but not all, of such Calendar Month, the portion of such calendar month during which both Class A Membership Interests and Class B Membership Interests are outstanding.

(ii) "Existing Systems Output Percentage" shall mean, for any Accounting Period in which Existing Systems are in operation, the percentage determined by dividing the total output of the Existing Systems (measured in kWh as determined by the Bloom System Meters (as defined in the MOMA)) for such Accounting Period by the total output of all Systems (measured in kWh as determined by the Bloom System Meters (as defined in the MOMA)) for such Accounting Period.

(iii) "Extraordinary Shared Facility Maintenance Expenses" shall mean, for any Accounting Period, any expenses recognized under GAAP during such Accounting Period that are not due to a casualty or damages to equipment for which insurance proceeds will be available and are either "exclusions" to repairs of the Shared Facilities under Section 4.8 of the MOMA, or that relate to replacement or repair of the Shared Facilities that are not merely ordinary maintenance and that are expected to extend the useful life of any portion of the Shared Facilities for more than one year.

(iv) "Extraordinary Shared Facility Revenue" shall mean, for any Accounting Period, any revenues recognized under GAAP in such Accounting Period (1) from any insurance proceeds due to damage or destruction of any Shared Facilities, to the extent that any such amounts received are in excess of the amount required to repair or replace such Shared Facilities, and (2) from any governmental agency as a result of payment

for compensation due to any action in condemnation or eminent domain of all or any portion of the Shared Facilities.

(v) "New Systems Output Percentage" shall mean, for any Accounting Period in which New Systems are in operation, the percentage determined by dividing the total output of the New Systems (measured in kWh as determined by the Bloom System Meters (as defined in the MOMA)) for such Accounting Period by the total output of all Systems (measured in kWh as determined by the Bloom System Meters (as defined in the MOMA)) for such Accounting Period.

(vi) "Operating Expenses" shall mean, for any Accounting Period, all expenses recognized under GAAP during such Accounting Period relating to the operation of the Facilities including, without limitation, the charges for all utility services, rent, permit fees, PJM meter charges and administrative fees and expenses (including, without limitation, bank charges, legal fees, and accounting and auditor fees), but excluding any items included in Extraordinary Shared Facility Maintenance Expenses, Specially Allocated Existing System Items and Specially Allocated New System Items, as applicable; provided, however, that Operating Expenses shall not include charges for natural gas required by the Systems at the Site and for which reimbursement has or will be sought or advance payment has been made.

(vii) "Operating Revenue" shall mean, for any Accounting Period, all revenues recognized under GAAP during such Accounting Period from the operation of the Facilities, including net revenues from the sale of power, capacity and ancillary services into the PJM Market, revenues recognized from Delmarva or any successor in accordance with the Tariffs or any replacement thereof, interest and investment income, revenues from the Efficiency Guaranty (as defined in the MOMA), and any business interruption insurance proceeds or similar revenue replacement or revenue substitution insurance or other contracts, but excluding (1) any items included in Extraordinary Shared Facility Revenue, any Specially Allocated Existing System Items, and any Specially Allocated New System Items, as applicable, (2) tax credits or tax benefits of any kind otherwise governed by Section 5.1(d)(viii) or Section 5.1(d)(ix), (3) reimbursements or "pass-throughs" for the purchase of natural gas, (4) insurance proceeds otherwise governed by Section 5.1(d)(iv) (other than business interruption insurance proceeds), (5) warranty or guaranty payments by any manufacturer, contractor or operator of the Facilities or any part thereof otherwise governed by Section 5.1(d)(viii) or Section 5.1(d)(ix), (6) amounts paid in purchase or repurchase of any of the Existing Systems pursuant to the Repurchase Agreement or otherwise (which amounts are governed by Section 5.1(d)(viii), or (7) indemnification otherwise governed by Section 5.1(d)(viii) or Section 5.1(d)(ix).

(viii) "Specially Allocated Existing System Items" shall mean, for any Accounting Period, all revenue, expenses, tax credits, depreciation, income, gains and losses recognized under GAAP during such Accounting Period that are unique or related only to

the operation, ownership or disposition of the Existing Systems, such as, without limitation, revenue and income in respect of recoveries under the other Transaction Documents that are unique to the Existing Systems (including, without limitation, payments pursuant to the Existing System Portfolio Output Warranty (as defined in the MOMA) and any indemnification payments pertaining only to the Existing Systems), and gain or loss from the sale or disposition of Existing Systems, including under the Repurchase Agreement.

(ix) "Specially Allocated New System Items" shall mean, for any Accounting Period, all revenue, expenses, tax credits, depreciation, income, gains and losses recognized under GAAP during such Accounting Period that are unique or related only to the operation, ownership or disposition of the New Systems, such as, without limitation, revenue and income in respect of recoveries under the other Transaction Documents that are unique to the New Systems (including, without limitation, payments pursuant to the Output Guaranty (as defined in the MOMA) and indemnification payments pertaining only to the New Systems), and gain or loss from any sale or disposition of New Systems.

(e) For purposes of determining the Existing Systems Output Percentage and the New Systems Output Percentage for any Accounting Period, in the event of a Bloom Systems Meter (as defined in the MOMA) malfunction, the parties hereto will cooperate in good faith to develop appropriate adjustments.

Section 5.2 Revenue and Expense Statement.

(a) Notwithstanding anything in this Agreement to the contrary, the Managing Member shall cause the Administrator to prepare and deliver to the Members within twenty (20) days after the end of each Accounting Period a statement (the "Revenue and Expense Statement") setting forth the Administrator's good faith determination of each of the Members' allocated (in accordance with Section 5.1) revenues, expenses, income, gains and losses for such Accounting Period including the information set forth in Schedule 5.2, and prepared in accordance with GAAP.

(b) After receipt of each Revenue and Expense Statement from the Administrator, the Members shall have thirty (30) days to review the Revenue and Expense Statement. During each such thirty (30) day period, each Member and its Representatives shall have reasonable access to the accounting records of the Company and to such historical financial information relating to the Revenue and Expense Statement as such Member may reasonably request for the purpose of reviewing the Revenue and Expense Statement and preparing a Statement of Objections (as defined below).

(c) On or prior to the thirtieth (30^{th}) day after the Members' receipt of each Revenue and Expense Statement, each Member may object to the Revenue and Expense Statement by delivering to the other Member a written statement setting forth such Member's objections in reasonable detail, indicating each disputed item or amount and the basis for such Member's disagreement therewith (the "Statement of Objections"). If either Member timely

delivers the Statement of Objections, the Members shall negotiate in good faith to resolve such objections within thirty (30) days after the delivery of the Statement of Objections. If the Members are able to resolve such objections within such thirty (30) day period, the Revenue and Expense Statement and the calculation of the Existing Systems Income and Losses and the New Systems Income and Losses (and all components thereof), with such changes as may have been previously agreed upon in writing by the Members, shall be final and binding.

(d) If the Members fail to reach an agreement with respect to all of the matters set forth in the Statement of Objections within the thirty (30) day period following delivery of the Statement of Objections, then any amounts remaining in dispute shall be submitted for resolution to the Independent Accountant who, acting as an expert and not an arbitrator, shall resolve the amounts in dispute only and make any resulting adjustments to the Revenue and Expense Statement and the calculation of Existing Systems Income and Losses and/or the New Systems Income and Losses (and all applicable components thereof remaining in dispute) contained therein in each case in accordance with the terms of this Agreement. The Independent Accountant shall only decide the specific items under dispute by the Members, and may engage any engineers or other professionals as the Independent Accountant deems necessary to assist with such determination.

(e) The fees and expenses of the Independent Accountant (and any third parties engaged by the Independent Accountant) shall be paid fifty percent (50%) by the Class A Member and fifty percent (50%) by the Class B Member; provided, however, that if either, but not both, of the Member's initial submission as to net income or net income allocations varies by more than five percent (5%) from the determination of the Independent Accountant, that party will pay the fees and expenses of the Independent Accountant.

(f) The Independent Accountant shall make a determination as soon as reasonably practicable within thirty (30) days (or such other time as the Members may agree in writing) after its engagement, and the Independent Accountant's resolution of the disputed items and its adjustments to the Revenue and Expense Statement and the calculation of Existing Systems Income and Losses and/or the New Systems Income and Losses (and any applicable components thereof) contained therein shall be conclusive and binding upon the Class A Member and the Class B Member, absent fraud.

Section 5.3 Allocations. After giving effect to the allocations in Section 5.4, for purposes of maintaining Capital Accounts, all items of Company income, loss, gain, deduction and credit for any Fiscal Year will be allocated among the Members as follows:

(a) On and after the date hereof, all items of Existing Systems Income and Losses shall be allocated to the Class A Member, and all items of New Systems Income and Losses shall be allocated to the Class B Member.

(b) No losses or deductions may be allocated to a Member pursuant to this Section 5.3 to the extent the allocation would lead to or increase a deficit in such Member's Adjusted Capital Account. Losses or deductions that a Member cannot be allocated by reason of this Section 5.3(b) will be allocated to the other Members.

Section 5.4 Adjustments. The following adjustments will be made in the allocations in Section 5.3 to comply with Treasury Regulation Section 1.704-1(b):

(a) In any Fiscal Year in which there is a net decrease in Company Minimum Gain, income and gain in the amount of the net decrease will be allocated to Members in the ratio required by Treasury Regulation Section 1.704-2. This provision is intended to comply with the minimum gain chargeback requirement in Treasury Regulation Section 1.704-2(f) and will be interpreted consistently therewith.

(b) In any Fiscal Year in which there is a net decrease in Minimum Gain Attributable to Member Nonrecourse Debt, income and gain in the amount of the net decrease will be allocated to each Member who was considered to have had a share of such minimum gain at the beginning of the Fiscal Year in the ratio required by Treasury Regulation Sections 1.704-2(i)(4) and 1.704-2(j)(2)(ii). This provision is intended to comply with the partner nonrecourse debt minimum gain chargeback requirement in Treasury Regulation Section 1.704-2(i)(4) and will be interpreted consistently therewith.

(c) In the event any Member unexpectedly receives any adjustments, allocations or distributions described in Treasury Regulation Sections 1.704-1(b)(2)(ii)(d)(4), (5) or (6), gross income will be specially allocated to each such Member in an amount and manner sufficient to eliminate, to the extent required by the Treasury Regulations, any deficit in the Member's Adjusted Capital Account as quickly as possible. However, an allocation will be made under this Section 5.4(c) only if and to the extent that the Member would have a deficit in its Adjusted Capital Account after all other allocations provided for in Sections 5.3 and 5.4 have been tentatively made as if this Section 5.4(c) were not in this Agreement.

(d) In the event that any Member has a deficit in its Adjusted Capital Account at the end of any Fiscal Year after all the other allocations in Section 5.3 and 5.4 have been taken into account, then the Member will be specially allocated items of Company income and gain as quickly as possible to eliminate the deficit.

(e) Nonrecourse Deductions for any Fiscal Year will be allocated to the Members in the same ratio as other income and loss under Section 5.3(a) or Sections 10.2(c) and (d), as applicable.

(f) Any Member Nonrecourse Deductions for any Fiscal Year will be allocated to the Member who bears the economic risk of loss with respect to the Member Nonrecourse Debt

to which the Member Nonrecourse Deductions are attributable in accordance with Treasury Regulation Section 1.704-2(i)(1).

(g) If the Company distributes property to a Member in liquidation of the Membership Interest of the Member and there is an adjustment in the adjusted tax basis of Company property under Section 734(b) of the Code, there will be a corresponding adjustment to the Capital Account of the Member receiving the distribution. If the Company distributes cash to a Member in excess of its outside basis in its Membership Interest, leading to an adjustment in the inside basis of the Company property under Section 734(b) of the Code, solely for purposes of adjusting Capital Accounts of the Members, the adjustment in the inside basis will be treated as gain or loss and be allocated among the Members in the same ratio as other gain or loss for the Fiscal Year in which the adjustment occurs. This provision is intended to comply with Treasury Regulation Sections 1.704-1(b)(2)(iv)(m)(2) and (4) and will be interpreted consistently therewith.

(h) The allocations in this Section 5.4 are required to comply with the Treasury Regulations. To the extent the Company can do so consistently with the Treasury Regulations, the net amount of the allocations under this Article V and Section 10.2 to each Member will be the net amount that would have been allocated to each Member if this Agreement did not have this Section 5.4.

Section 5.5 Tax Allocations.

(a) All tax items of Company income, gain, deductions and losses for each Fiscal Year will be allocated in the same proportions as the allocations of book items of Company income, gain, deductions and losses were made for such Fiscal Year pursuant to Sections 5.3 and 5.4, provided, however, that all state and federal tax credits (including, without limitation, the ITC) pertaining to the New Systems shall be allocated to the Class B Member in proportion to their Percentage Interest in New Systems Income and Losses;

(b) Notwithstanding Section 5.5(a), if, as a result of contributions of property by a Member to the Company or an adjustment to the Gross Asset Value of Company assets pursuant to this Agreement, there exists a variation between the adjusted basis of an item of Company property for United States federal income tax purposes and as determined under the definition of Gross Asset Value, allocations of income, gain, loss, and deduction will be allocated among the Members so as to take into account any variation between the adjusted basis of such property to the Company for United States federal income tax purposes and its initial Gross Asset Value using the traditional method pursuant to Treasury Regulation Section 1.704-3(b).

(c) To the extent that an adjustment to the adjusted tax basis of any Company asset is made pursuant to Section 743(b) of the Code as the result of a purchase of a Membership Interest in the Company, any adjustment to the depreciation, amortization, gain or loss resulting from such adjustment will affect the transferee only and will not affect the Capital Account of the transferor or transferee. In such case, the transferee will be required to agree to provide to the

Company (i) information about the allocation of any step-up or step-down in basis to the Company's assets and (ii) the depreciation or amortization method for any step-up in basis to the Company's assets.

(d) Solely for purposes of determining a Member's proportionate share of the "excess non-recourse liabilities" of the Company within the meaning of Treasury Regulation Section 1.752-3(a)(3), each Member's share of such liability shall be consistent with the ratio of the Existing Systems Income and Losses over the sum of Existing Systems Income and Losses and New Systems Income and Losses, , as to the Class A Member, and the ratio of the New Systems Income and Losses over the sum of the New Systems Income and Losses and the Existing Systems Income and Losses, as to the Class B Member, then in effect.

Section 5.6 Transfer or Change in Company Interest. If the respective Membership Interests or allocation ratios described in this Article V of the existing Members in the Company change or if a Membership Interest is Transferred in compliance with this Agreement to any other Person, then, for the Fiscal Year in which the change or Transfer occurs, all income, gains, losses, deductions, credits and other tax incidents resulting from the operations of the Company shall be allocated, as between the Members for the Fiscal Year in which the change occurs or between the transferor and transferee, by taking into account their varying interests using the proration method permitted by Treasury Regulation Section 1.706-1(c)(2)(ii), unless otherwise agreed by all the Members.

Section 5.7 Timing of Allocations. Items of income, gain, loss, deduction and credit will be allocated to the Members pursuant to this Article V as of the last day of each Fiscal Year; provided that such items shall also be allocated at such times as the Gross Asset Values of the Company's assets are adjusted pursuant to Section 4.2(c) and prior to any distribution under Section 10.2.

ARTICLE VI
DISTRIBUTIONS

Section 6.1 Distributions.

(a) Except as provided otherwise in Section 6.1(b), Section 6.1(c), Section 6.1(d), Section 6.1(e) or Section 10.2, Company Distributable Cash will be distributed to the Members on each Distribution Date in the manner described in this Section 6.1. Any Company Distributable Cash will be distributed to the Members as follows: (i) to the Class A Member, any such Company Distributable Cash specifically relating to the Existing Systems or otherwise arising from the Existing Systems Income and Losses, and (ii) to the Class B Member, any Company Distributable Cash specifically relating to the New Systems or otherwise arising from the New Systems Income and Losses, with respect to (i) and (ii), exclusive of any depreciation or amortization. The Managing Member shall determine the amount of Company Distributable Cash arising from the Existing Systems Income and Losses and the amount of Company Distributable

Cash arising from New Systems Income and Losses for such purposes by only using (A) cash flows from items of income, revenue and gain included in Existing Systems Income and Losses to pay expenses and losses included in Existing Systems Income and Losses, and (B) cash flows from items of income, revenue and gain included in New Systems Income and Losses to pay expenses and losses included in New Systems Income and Losses; provided, however, amounts paid to the Company for the repurchase of the Existing Systems (other than the "Agreement Date Deposit", "First Subsequent Deposit", "Second Subsequent Deposit", and "Third Subsequent Deposit" under and as defined in the Repurchase Agreement) shall be governed by subsection (b) below and amounts paid to the Company under the Repurchase Agreement as "First Subsequent Deposit", "Second Subsequent Deposit" and "Third Subsequent Deposit" thereunder shall be governed by subsection (c) below.

(b) Notwithstanding Section 6.1(a) or anything else to the contrary contained herein, (i) any proceeds from the sale of the Existing Systems under the Repurchase Agreement (other than the "Agreement Date Deposit", "First Subsequent Deposit", "Second Subsequent Deposit" and "Third Subsequent Deposit" under and as defined in the Repurchase Agreement), (ii) any other proceeds derived from the Existing Systems, (iii) any proceeds released from any reserves held for the benefit of the Existing Systems, (iv) any insurance proceeds related to the Existing Systems or (v) any warranty or guaranty payments related to the Existing Systems shall be distributed 100% to the Class A Member. Notwithstanding anything else in this Agreement or the Repurchase Agreement, the Members agree to treat any such proceeds as a distribution of money for purposes of Section 731 of the Code.

(c) Notwithstanding Section 6.1(a) or anything else to the contrary contained herein, (i) the "Agreement Date Deposit" shall be used to pay existing Indebtedness, and (ii) the "First Subsequent Deposit", "Second Subsequent Deposit" and "Third Subsequent Deposit" as defined in and as set forth in the Repurchase Agreement shall be used by the Company (1) first, to prepay any existing Indebtedness outstanding as of the date such amount is received by the Company, (2) second, to satisfy any past-due payment obligations of Bloom to make payments of any "Payment Date Amount(s)" that are owed as of such date, and (3) third, any remainder shall be distributed 100% to the Class A Member as a special distribution. All of the foregoing payments or distributions shall be made by the Company within one (1) Business Day of the Company's receipt of such amount. Notwithstanding anything else in this Agreement or the Repurchase Agreement, the Members agree to treat any proceeds under (3) as a distribution of money for purposes of Section 731 of the Code.

(d) Notwithstanding Section 6.1(a) or anything else to the contrary contained herein, (i) any proceeds derived from the New Systems, (ii) any proceeds released from any reserves held for the benefit of the New Systems, (iv) any insurance proceeds related to the New Systems or (v) any warranty or guaranty payments related to the New Systems shall be distributed 100% to the Class B Member.

(e) Notwithstanding Section 6.1(a) or anything else to the contrary contained herein, any indemnification payments or payments for damages made to the Company shall be distributed (i) 100% to the Class A Member if related to the Existing Systems, the Existing BOF, the Class A Member or any of its members (or their Affiliates), (ii) 100% to the Class B Member if related to the New Systems, the New BOF, the Class B Member or any of its members (or their Affiliates) and (iii) otherwise pro rata between the Class A Member and the Class B Member based upon the Existing Systems Output Percentage and the New Systems Output Percentage for the Accounting Period(s) to which such indemnification or payments relate.

Section 6.2 Withholding Taxes. If the Company is required to withhold taxes with respect to any allocation or distribution to any Member pursuant to any applicable federal, state or local tax laws, the Company may, after first notifying the Member and permitting the Member, if legally permitted, to contest the applicability of such taxes, withhold such amounts and make such payments to taxing authorities as are necessary to ensure compliance with such tax laws. Any funds withheld by reason of this Section 6.2 shall nonetheless be deemed distributed to the Member in question for all purposes under this Agreement. If the Company fails to withhold from actual distributions any amounts it was required to withhold, the Company may, at its option, as determined by Managing Member, (a) require the Member to which the withholding was credited to reimburse the Company for such withholding, or (b) reduce any subsequent distributions by the amount of such withholding. This obligation of a Member to reimburse the Company for taxes that were required to be withheld shall continue after such Member Transfers its Membership Interests in the Company. Each Member agrees to furnish the Company with any representations and forms as shall reasonably be requested by the Company or Managing Member to assist it in determining the extent of, and in fulfilling, any withholding obligations it may have.

Section 6.3 Limitation upon Distributions. No distribution of Company Distributable Cash will be made if the distribution would violate any contract or agreement to which the Company is then a party, the Act or any other Legal Requirement then applicable to the Company.

Section 6.4 No Return of Distributions. Any distribution of Company Distributable Cash or property pursuant to this Agreement shall be treated as a compromise within the meaning of Section 18-502(b) of the Act and, to the full extent permitted by law, any Member receiving the payment of any such money or distribution of any such property shall not be required to return any such money or property to any Person, the Company or any creditor of the Company. However, if any court of competent jurisdiction holds that, notwithstanding the provisions of this Agreement, any Member is obligated to return such money or property; such obligation shall be the obligation of such Member and not of the other Members. Without limiting the generality of the foregoing, a deficit Capital Account of a Member shall not be deemed to be a liability of such Member nor an asset or property of the Company.

ARTICLE VII
ACCOUNTING AND RECORDS

Section 7.1 Reports.

(a) The Managing Member shall cause the Administrator to prepare and deliver to each Member as soon as practical, but in no event later than thirty (30) days after the end of each calendar month, a written report (each, an "Operations Report") that will include a summary of the kilowatt hours produced and sold by the Company during such month with respect to each of the Existing Systems and the New Systems, information regarding the Existing Systems', New Systems' and other Shared Assets' availability during such month, notice of material events, including but not limited to, defaults under Material Contracts, any Material Adverse Effect that has occurred at the Company, any regulatory (including FERC) filings, and such other relevant operational information as may from time to time be reasonably requested by any other Member.

(b) No later than November 1st of each calendar year, the Managing Member shall prepare or cause the Administrator to prepare, and shall submit to each Member, an annual capital and operating budget for the Company for the following Fiscal Year, which budget shall contain separate budgeting line items for each of the Existing Systems, the New Systems and the Shared Assets (the "Annual Budget").

Section 7.2 Books and Records and Inspection.

(a) The Class A Member shall provide, and the Managing Member shall cause the Administrator to provide, to the Class B Member such information as may be necessary for the Class B Member to keep and maintain full and accurate books of account, financial records and supporting documents that reflect, completely, accurately and in reasonable detail in all material respects, each transaction of the Company and such other matters as are usually entered into the records or maintained by Persons engaged in a business of like character or as are required by law, and to prepare annual unaudited financial statements (including an income statement, balance sheet and statement of cash flows) with respect to the Company in accordance with GAAP; provided that the Class B Member shall have no obligation to provide to the Company or the Class A Member any reports, statements or records prepared by the Class B Member using information so provided to it. The financial records and reports of the Company shall be kept on an accrual basis and kept in accordance with GAAP.

(b) In addition to and without limiting the generality of Section 7.2(a), the Managing Member shall cause the Company to keep and shall, on behalf of the Company, maintain at the Company's principal office:

(i) true and full information regarding the status of the financial condition of the Company, including any financial statements until the applicable statute of limitations expires with respect to the Company tax year to which such information and financial statements relate;

(ii) promptly after becoming available, a copy of the Company's federal, state, and local income Tax Returns for each year;

(iii) minutes of the proceedings of the Members;

(iv) a current list of the name and last known business, residence or mailing address of each Member;

(v) a copy of this Agreement and the Company's Certificate of Formation, and all amendments thereto, together with executed copies of any written powers of attorney pursuant to which this Agreement and such Certificate of Formation and all amendments thereto which have been executed and copies of written consents of Members;

(vi) true and full information regarding the amount of cash and a description and statement of the agreed value of any other property and services contributed by each Member, and the date upon which each became a Member;

(vii) copies of records that would enable a Member to determine the Member's share of Company Distributable Cash under Section 6.1 and the Members' relative voting rights; and

(viii) all records related to the production and sale of Energy by the Company as it relates to the Existing Systems and the New Systems, respectively.

(c) Upon receiving reasonable prior notice to the Managing Member, all books and records of the Company shall be open to inspection and copying by any of the Members or their Representatives during business hours and at such Member's expense, for any purpose reasonably related to such Member's interest in the Company; provided that any such inspection or copying is conducted in a manner which does not unreasonably interfere with the Company's business.

Section 7.3 Bank Accounts, Notes and Drafts.

(a) All funds not required for the immediate needs of the Company shall be placed in Permitted Investments, which investments shall have a maturity appropriate for the anticipated cash flow needs of the Company. All Company funds shall be deposited and held in accounts which are separate from all other accounts maintained by the Members, and the Company's funds shall not be commingled with any funds of any other Person, including any Member or any Affiliate of a Member.

(b) The Members acknowledge that the Managing Member may maintain Company funds in accounts, money market funds, certificates of deposit, other liquid assets in excess of the insurance provided by the Federal Deposit Insurance Corporation, or other depository insurance institutions and that the Managing Member shall not be accountable or liable for any loss

of such funds resulting from failure or insolvency of the depository institution, so long as any such maintenance of funds is in compliance with the first sentence of Section 7.3(a).

(c) Checks, notes, drafts and other orders for the payment of money shall be signed by such Persons as the Managing Member from time to time may authorize; provided, however, that the Managing Member shall not cause the Company to pay or incur any expense includable in New Systems Income or Loss without the prior written consent of the Class B Member if the amount of such expense would exceed one hundred ten percent (110%) of the amount budgeted therefor in the Base Case Model. When the Managing Member so authorizes, the signature of any such Person may be a facsimile.

Section 7.4 Intentionally Omitted.

Section 7.5 Partnership Status and Tax Elections.

(a) The Members intend that the Company will be taxed as a partnership for United States federal, state and local income tax purposes. The Members agree not to elect to be excluded from the application of Subchapter K of Chapter 1 of Subtitle A of the Code or any similar state statute and agree not to elect for the Company to be treated as a corporation, or an association taxable as a corporation, under the Code or any similar state statute.

(b) The Company will make the following elections on the appropriate Tax Returns:

(i) to the extent permitted under Section 706 of the Code, to adopt as the Company's fiscal year the calendar year;

(ii) to adopt the accrual method of accounting;

(iii) if a distribution of the Company's property as described in Section 734 of the Code occurs or a transfer of Membership Interest as described in Section 743 of the Code occurs, to elect pursuant to Section 754 of the Code to adjust the basis of the Company's properties;

(iv) to elect to amortize the organizational expenses of the Company ratably over a period of one hundred eighty (180) months as permitted by Section 709(b) of the Code; and

(v) if approved in writing by Members representing a Class Majority Vote, any other election the Managing Member may deem appropriate.

Section 7.6 Company Tax Returns. The United States federal income Tax Returns for the Company and all other Tax Returns of the Company shall be prepared as directed by the Class B Member in Consultation with the other Members. The Class A Member shall provide the

Class B Member with all information possessed by the Class A Member and necessary for the preparation of the Tax Returns of the Company. If a Member notifies the Managing Member that any real property Taxes with respect to the Project were assessed against or invoiced to such Member, then the Managing Member will cause the Company to pay such Taxes in full and in a timely manner and, as appropriate, allocate such cost to either the Existing Systems Income and Losses or the New Systems Income and Losses. With respect to each Tax Year, the Class B Member will cause the Company to prepare preliminary Tax Returns and issue preliminary K-1's to the Members no later than March 1 of the following Tax Year. The Class B Member, in Consultation with the other Members, may extend the time for filing any such Tax Returns as provided for under applicable statutes; provided that, in the event of any such extension, the Class B Member shall provide each of the other Members with an estimate of such Member's distributive share of each category of tax items of the Company described in Section 702(a) of the Code for such Tax Year within 20 days of the filing of such extension. At the Company's expense, the Class B Member may cause the Company to retain an Accounting Firm to prepare or review and sign the necessary federal and state income Tax Returns and information returns for the Company. Each Member shall provide such information, if any, as may be reasonably needed by the Company for purposes of preparing such Tax Returns. At least 30 days prior to filing the federal and state income Tax Returns, which shall be filed no later than September 15th of each calendar year the Class B Member shall deliver to the other Members for their review a copy of the Company's federal and state income Tax Returns in the form proposed to be filed for each Fiscal Year and shall incorporate all reasonable changes or comments to such proposed Tax Returns requested by the other Members (who shall be required to make all reasonable efforts to provide such changes or comments in a reasonable amount of time) at least 10 days prior to the filing date for such returns. The dispute provisions under Section 11.11 may be invoked if the other Member disagrees with a position taken on any Tax Return; provided that the Accounting Firm preparing the Tax Return still must be able to sign the Tax Return consistent with the resolution of the dispute; provided, further that if the dispute process would not be completed by the date that the Tax Return must be filed under this Section 7.6, then the Class B Member will file the Tax Return as originally prepared by the required date, but the Class B Member may be required to amend the Tax Return after a conclusion is reached in the dispute process; and provided still further that in the event such challenge confirms the original position in question, the challenging Member shall promptly pay all of the Accounting Firm's reasonable fees and expenses incurred in connection with such challenge. After taking into account any such requested changes, the Class B Member shall cause the Company to timely file, taking into account any applicable extensions, such Tax Returns. Within 20 days after filing such federal and state income Tax Returns and information returns, the Class B Member shall cause the Company to deliver to each Member a copy of the Company's federal and state income Tax Returns and information returns as filed for each Fiscal Year, together with any additional tax-related information in the possession of the Company that such Member may reasonably and timely request in order to properly prepare its own income Tax Returns.

Section 7.7 Tax Audits.

(a) The Class B Member is hereby designated as the initial "partnership representative," as that term is used in Section 6223 of the Code (the "Partnership Representative"), of the Company, with all of the rights, duties and powers provided for in Sections 6221 through 6241 of the Code, inclusive. The Class B Member is hereby directed and authorized to take whatever steps the Class B Member, in its reasonable discretion, deems necessary or desirable to perfect such designation, including filing any forms or documents with the IRS, taking such other action as may from time to time be required under the Treasury Regulations. The Class B Member shall remain as the Partnership Representative so long as it remains a Member and retains any ownership interests in the Company unless the Class B Member requests that it not serve as Partnership Representative and such request is approved by a Class Majority Vote, or if the other Members reasonably determines to remove the Partnership Representative for fraud or willful misconduct and appoint a replacement. Notwithstanding anything to the contrary herein, at the option of the Class B Member, the Class A Member shall serve as the Partnership Representative with respect to any audit or similar proceeding relating solely to the Existing Systems.

(b) The Partnership Representative, in Consultation with the other Members, shall direct the defense of any claims made by the IRS to the extent that such claims relate to the adjustment of Company items at the Company level, except that the strategy to be taken in connection with any such defense and the selection of counsel shall be approved by the Member most likely to be impacted by the outcome of the audit (for example, if the matter at issue is primarily the New Systems, the Class B Member shall directly assist with the oversight of the defense). The Partnership Representative shall cause the Company to retain and to pay the fees and expenses of counsel approved as described in the preceding sentence and to pay the fees and expenses of other advisors chosen by the Partnership Representative in Consultation with the other Members. The Partnership Representative shall promptly deliver to each Member a copy of all notices, communications, reports and writings received from the IRS by the Company relating to or potentially resulting in an adjustment of Company items, shall promptly advise each Member of the substance of any conversations with the IRS in connection therewith and shall keep the Members advised of all developments with respect to any proposed adjustments that come to its attention. In addition, the Partnership Representative shall (A) provide each Member with a draft copy of any correspondence or filing to be submitted by the Company in connection with any administrative or judicial proceedings relating to the determination of Company items at the Company level reasonably in advance of such submission, (B) consider incorporating all reasonable changes or comments to such correspondence or filing requested by any Member and (C) provide each Member with a final copy of correspondence or filing. The Partnership Representative will provide each Member with notice reasonably in advance of any meetings or conferences with respect to any administrative or judicial proceedings relating to the determination of Company items at the Company level (including any meetings or conferences with counsel or advisors to the Company with respect to such proceedings) and each Member shall have the right to participate, at its sole cost and expense, in any such meetings or conferences. Without the consent of the other Members, if such action would have a disproportionate material adverse effect upon any of the other Members, the Partnership Representative shall not (i) commence a judicial action with respect to a federal income tax matter

or appeal any adverse determination of a judicial tribunal; (ii) enter into a settlement agreement with the IRS; (iii) file any request contemplated by Section 6227 of the Code; (iv) enter into an agreement extending the period of limitations as contemplated in Section 6235(b) of Code; or (v) file any election pursuant to Section 6221(b) of the Code. Notwithstanding anything in this Agreement to the contrary, in the event the Company receives a notice of final partnership adjustment under Section 6231 of the Code, the Company shall make, and the Partnership Representative is hereby authorized and directed to make on behalf of the Company, the election described in Section 6226 of the Code, unless otherwise agreed by all of the Members in writing.

(c) Any cost or expense incurred by the Partnership Representative in connection with its duties as Partnership Representative and shall be paid by the Company and shall be an expense described in Section 5.1(a)(vii) and Section 5.1(b)(v).

(d) Notwithstanding anything to the contrary in this Section 7.7, Southern shall have the right to control any administrative or judicial proceedings relating to the amount of the ITC with respect to investments in the New Systems or the eligibility of such investments for the ITC, and the Partnership Representative shall act as directed by Southern in connection with any such proceeding, and the Class A Member shall have no right to participate in such proceedings except to the extent provided in the ECCA.

Section 7.8 Cooperation. Subject to the provisions of this Article VII, each Member shall provide the other Members with such assistance as may reasonably be requested by such other Members in connection with the preparation of any Tax Return, any audit or other examination by any Governmental Authority, or any judicial or administrative proceedings relating to the liability for any Taxes with respect to the operations of the Company.

Section 7.9 Fiscal Year. The fiscal year of the Company (the "Fiscal Year") shall be the same as the taxable year of the Company. The taxable year of the Company will be a year that ends on December 31st of each calendar year, or such other year as may be required by applicable federal income tax law.

ARTICLE VIII
MANAGEMENT

Section 8.1 Management.

(a) Each of the Members acknowledges and agrees that the Managing Member shall have the authority, powers and responsibilities described herein; provided that the Managing Member shall not (i) take or permit any action that would be a Major Decision hereunder without the prior occurrence of a Class Majority Vote approving such action, (ii) refrain from taking any action that has been approved as a Major Decision hereunder, or (iii) take or permit any action with respect to the matters set forth in Section 8.1(b) that has not been approved by the applicable Members. Except for (a) Major Decisions, (b) the matters set forth in Section 8.1(b), and (c) as

otherwise required by applicable Legal Requirements, the powers of the Company shall be exercised by or under the authority of, and the business and affairs of the Company shall be managed under the direction of, the Managing Member, who shall take all actions for and on behalf of the Company not otherwise provided for in this Agreement. In addition, the Members may, with the consent of the Managing Member, vest in the Managing Member the authority to take actions for and on behalf of the Company not otherwise provided for in this Agreement. Any such vested authority shall require a Class Majority Vote.

(b) Notwithstanding anything in this Agreement to the contrary, (i) Southern shall have the sole and exclusive authority to act on behalf of the Company and to take any and all actions necessary, in the sole discretion of Southern, to enforce the Company's rights (A) under the CapEx Agreement, (B) under the MOMA or the Administrative Services Agreement other than those that pertain exclusively to the Existing Systems, (C) with respect to the obligations of Bloom and the Class A Member, under the ECCA, and (D) under any other Transaction Documents or Project Documents to the extent that they pertain exclusively to the New Systems and (ii) the Class A Member shall have the sole and exclusive authority to act on behalf of the Company and to take any and all actions necessary, in the sole discretion of the Class A Member, to enforce the Company's rights (A) under the MOMA or the Administrative Services Agreement, in each case, that pertain exclusively to the Existing Systems, (B) with respect to the obligations of Southern under the ECCA, (C) under the Repurchase Agreement, (D) under the Class B Guaranty, and (E) under any other Transaction Documents or Project Documents to the extent that they pertain exclusively to the Existing Systems.

Section 8.2 Managing Member.

(a) The Managing Member shall be the Member designated to act as such hereunder from time to time in accordance with the provisions of this Section 8.2 (the "Managing Member"). The initial Managing Member shall be the Class A Member, who shall serve in such capacity until the later of the date upon which the redemption in full of Mehetia's membership interest in DSGH has occurred or the date on which the Section 203 Order is obtained (such later date, the "Managing Member Transfer Date"). Upon the Managing Member Transfer Date, Southern shall automatically, without any further action on the part of any Member, become the Managing Member in place and instead of the Class A Member. Notwithstanding the foregoing, upon a material breach by the Class A Member under this Agreement, which material breach has not been cured as soon as practicable following receipt of written notice of such material breach from the Class B Member, the Class B Member shall have the sole and exclusive authority to remove the Class A Member as the Managing Member and to fill any vacancy as Managing Member caused by such removal; provided, that upon any such removal, the rights to information and the rights to vote on Major Decisions currently in favor of the Class B Member hereunder shall be provided to the Class A Member and the Members shall amend this Agreement as necessary to reflect such rights in addition to any other rights mutually agreed by the Class A Member and the Class B Member in such amendment. The Class A Member and the Class B Member shall cooperate respecting the transition of Managing Member duties and responsibilities. The Managing Member shall be

responsible for and coordinate the operation and maintenance of the Project and shall operate and maintain the Project, or cause the Project to be operated and maintained, in accordance with the Prudent Operator Standard; provided, however, that in the event the Managing Member is not Bloom or an Affiliate of Bloom, the requirement related to the Prudent Operator Standard will be satisfied so long as Bloom or an Affiliate of Bloom is retained to provide operation and maintenance services for the Portfolio (including the MOMA).

(b) The Managing Member hereby covenants to cause the Company to implement any Major Decisions approved under this Agreement, and not to take any Major Decisions without a Class Majority Vote.

(c) The Managing Member shall use its commercially reasonable efforts to follow the instructions of the Class A Member respecting matters that pertain primarily or exclusively to the Existing Project and to follow the instructions of Southern respecting matters that pertain primarily or exclusively to the New Project, as long as, or to the extent that, such instructions can be undertaken within the Annual Budget and in compliance with Applicable Law.

(d) In addition to the rights of the Class B Member as set forth in Section 8.2(a) above, the other Members may at any time (i) remove a Managing Member following any Bankruptcy of the Managing Member or foreclosure or involuntary transfer of the Membership Interests held by the Managing Member (or any Bankruptcy of any Person that Controls the Managing Member), and (ii) fill any vacancy as Managing Member caused by such removal.

(e) The Managing Member may, from time to time, designate one or more officers with such titles as may be designated by the Managing Member to act in the name of the Company with such authority as is delegated to the Managing Member hereunder and as may be delegated to such officer(s) by the Managing Member. Any such officers appointed by the Class A Member, acting as the Managing Member, shall be deemed to be automatically removed from any such office upon the change of Managing Member pursuant to Section 8.2(a), without any further action of any Person and any actions taken by such officers following such date shall not have the power or authority to bind the Company; provided that all such officers shall cooperate with any such transition and shall provide written resignations or any further assurances regarding their removal as are reasonably requested by Southern.

Section 8.3 Major Decisions.

(a) In addition to any other approval required by Applicable Law or this Agreement, Major Decisions are reserved to the Members, and none of the Company, the Managing Member, or any officer thereof shall do or take or make or approve any Major Decisions with respect to the Company without a Class Majority Vote. For the avoidance of doubt, decisions described in Section 3.3 will be handled in accordance with its provisions.

(b) The Managing Member will submit proposed Major Decisions to the Members in writing in accordance with Section 11.1 for their approval, with each submission setting forth in reasonable detail the Major Decision proposed and the basis for the Managing Member's recommendation. Any Member who fails to notify the Managing Member that it is approving or rejecting a proposed Major Decision within 10 Business Days after the date on which the Managing Member submits such proposed Major Decision to such Member shall be deemed to have approved the Major Decision.

Section 8.4 Insurance. The Managing Member shall cause the Company to acquire and maintain (including making changes to coverage and carriers) casualty, general liability (including product liability), property damage and/or other types of insurance consistent with the Prudent Operator Standard or as otherwise required under the Transaction Documents.

Section 8.5 Notice of Material Breach. The Managing Member shall promptly notify the Members (but in no event more than within 5 Business Days of obtaining actual knowledge) of any (a) notice of default delivered by a party to a Material Contract to the Company or the Managing Member or (b) default by a party to a Material Contract (other than the Company or any Affiliate thereof (which, for the avoidance of doubt, shall exclude Bloom)) under such Material Contract, in the case of either (a) or (b), which default could reasonably be expected to cause material harm to the Company.

ARTICLE IX
TRANSFERS, CHANGES OF CONTROL AND INDEMNIFICATION

Section 9.1 Restrictions Applicable to All Transfers by Members.

(a) Each Member may sell, transfer, assign, convey, pledge, mortgage, encumber, hypothecate or otherwise dispose of all or any part of its Membership Interests or any interest, rights or obligations with respect thereto, or permit a Change of Control of any entity subject to a restriction on Change of Control under this Article IX (any such action, a "Transfer"), only in accordance with Article IX.

(b) A Member shall not Transfer any Membership Interests if such Transfer would:

(i) constitute a violation of any securities laws or any other applicable federal or state laws rules or regulations, or the order of any court or administrative body having jurisdiction over the Company or any of its assets or any material contract, lease, security, indenture or agreement binding on the Company or its assets;

(ii) result in any adverse Tax effects on any non-transferring Member, unless the transferor has indemnified the other Members against any such adverse tax effects in a manner reasonably acceptable to the other Members;

(iii) require the Company to register as an investment company under the 1940 Investment Company Act; or

(iv) result in a transfer to a Disqualified Entity.

Any attempted Transfer of a Membership Interest that does not comply with this Article IX shall be null and void and not recognized by the Company for any purpose and, for the avoidance of doubt, the Company and the non-transferring Member hereby reserve all of their respective remedies and recourse under contract and law with respect to any such Transfer, including (without limitation) the right to seek and obtain injunctive relief.

Section 9.2 Conditions to Transfers of Class A Membership Interests. Except as otherwise provided in this Article IX, all Transfers of Class A Membership Interests must satisfy the following conditions in addition to the conditions set forth in Section 9.1:

(a) The transferring Member must give written notice of the proposed Transfer to each of the Members not less than 30 days prior to the effective date of the proposed Transfer;

(b) The transferring Member and the prospective transferee must each execute, acknowledge and deliver to the Company (as applicable) an assignment agreement substantially in the form of Exhibit C and such other instruments as the other Members may reasonably deem necessary or appropriate to confirm the transferor's intention that the transferee become a Member in its place and the transferee's undertaking to be bound by the terms of this Agreement and to assume the obligations of the transferor under this Agreement and, to the extent the transferor is to be released from such obligations, the ECCA. The prospective transferee shall make the representations and warranties in such assignment agreement and be bound by this Agreement as of the date of such Transfer; provided that, unless the transferee becomes the Managing Member the covenants in Sections 3.12(b) and (e) shall not apply;

(c) Subject to clause (f) below, the Transfer will not cause there to be more than one Class A Member;

(d) The transferring Member and the prospective transferee shall pay any out-of-pocket expenses of the Company or the other Members resulting from the Transfer;

(e) The transferring Member and the prospective transferee shall have all permits and consents required for such Transfer;

(f) Such Transfer by a Class A Member, other than a Transfer to an Affiliate of the transferor, shall not be a Transfer of less than such Member's entire Class A Membership Interest;

(g) If the Class A Member is the Managing Member at such time, then the Transferee must be a Qualified Manager;

(h) The transferee of a Class A Membership Interest and its Affiliates must not be in litigation or other material dispute with the Class B Member or its Affiliates; and

(i) The Class A Member shall have obtained the Class B Member's prior written consent to such transfer.

Section 9.3 Conditions to Transfers of Class B Membership Interests. Except as otherwise provided in this Article IX,

(a) all Transfers of Class B Membership Interests must satisfy the following conditions in addition to the conditions set forth in Section 9.1:

(i) The transferring Member must give written notice of the proposed Transfer to each of the Members not less than 30 days prior to the effective date of the proposed Transfer;

(ii) The transferring Member and the prospective transferee must each execute, acknowledge and deliver to the Company (as applicable) an assignment agreement substantially in the form of Exhibit C and such other instruments as the other Members may reasonably deem necessary or appropriate to confirm the transferor's intention that the transferee become a Member in its place and the transferee's undertaking to be bound by the terms of this Agreement and to assume the obligations of the transferor under this Agreement and, to the extent the transferor is to be released from such obligations, the ECCA. The prospective transferee shall make the representations and warranties and be bound by the covenants in Sections 3.11 and 3.12 as of the date of such Transfer; provided that, unless the transferee becomes the Managing Member the covenants in Sections 3.12(b) and (e) shall not apply;

(iii) The transferring Member and the prospective transferee shall pay any out-of-pocket expenses of the Company or the other Members resulting from the Transfer;

(iv) The transferring Member and the prospective transferee shall have all permits and consents required for such Transfer;

(v) Such Transfer by a Class B Member, other than a Transfer to an Affiliate of the transferor or a Transfer to an existing Class B Member, shall not be a Transfer of less than such Member's entire Class B Membership Interest;

(vi) If the Class B Member is the Managing Member at such time, then the Transferee must be a Qualified Manager;

(vii) The transferee of a Class B Membership Interest or its Affiliates must not be (x) a Class A Member Competitor or its Affiliates or (y) in litigation or other material dispute with the Class A Member or its Affiliates; and

(viii) The Class B Member shall have obtained the Class A Member's prior written consent.

Section 9.4 Conditions to Changes of Control of Upstream Entities. With respect to any Transfer that is a Change of Control of a Member, in addition to the conditions set forth in Section 9.1:

(a) The transferring Person and the prospective transferee shall pay any out-of-pocket expenses of the Company or the other Members resulting from the Transfer;

(b) The transferring entity and the prospective transferee shall have all permits and consents required for such Transfer as they apply to the Company;

(c) If the Transfer is a Change of Control of the Class A Member, the prior written consent of the Class B Member shall have been obtained; and

(d) If the Transfer is a Change of Control of the Class B Member, the prior written consent of the Class A Member shall have been obtained.

Upon any Change of Control of the Class A Member (other than a Change of Control of Bloom or Mehetia Inc. (or its Affiliates)), the Class A Member shall cease to be the Managing Member immediately upon receipt of any required Governmental Approvals and the Class B Member shall be entitled to appoint a new Managing Member.

For the avoidance of doubt, (1) neither a Change of Control of Bloom nor a Change of Control of Mehetia Inc. (or any of its direct or indirect owners) shall be deemed to be a Change of Control of the Class A Member, and (2) neither a Change of Control of Southern Company nor a Change of Control of Southern Power Company shall be deemed to be a Change of Control of the Class B Member.

Section 9.5 Certain Permitted Transfers. Except as otherwise provided in Section 9.1 and this Section 9.5, notwithstanding the provisions set forth in Section 9.3, the following Transfers (the "Permitted Transfers") may be made at any time and from time to time, without restriction and without notice to, approval of, filing with, consent by, or other action of or by, any Member or other Person:

(a) The grant of any security interest in any Class B Membership Interest pursuant to any security agreement any Class B Member may enter into with lenders; provided that, after the final Funding Date under the ECCA, the requirements in Section 9.3(a)(i) shall be satisfied in respect of a grant of a security interest in a Class B Membership Interest,

(b) any Transfer in connection with any foreclosure or other exercise of remedies in respect of any Class B Membership Interest subject to a security interest referred to in

Section 9.5(a); provided, however, that the requirements in Sections 9.3(a)(i), (ii), (iv), and (vi) shall be satisfied in respect of any such Transfer of Class B Membership Interests,

(c) the redemption of Mehetia Inc.'s membership interest in DSGH including under Section 3.12(o) of the DSGH LLCA,

(d) the transfer of Mehetia Inc.'s membership interest in DSGH pursuant to the Sale Option or Purchase Option (each as defined under the DSGH LLCA) or otherwise, and

(e) any transfer of the stock of Mehetia Inc. or the equity interests of any of its direct or indirect owners.

Section 9.6 Regulatory and Other Authorizations and Consents. In connection with any Transfer pursuant to Section 9.5 (the "Designated Transfer"), each Member involved shall use all commercially reasonable efforts to obtain all authorizations, consents, orders and approvals of, give all notices to and make all filings with, all Governmental Authorities and third parties that may be or become necessary for the Designated Transfer, and will cooperate fully with the other Members in promptly seeking to obtain all such authorizations, consents, orders and approvals, giving such notices and making such filings, including the provision to such third parties and Governmental Authorities of such financial statements and other publicly available financial information with respect to such Member, as such third parties or Governmental Authorities may reasonably request; provided, however, that no Member involved shall have any obligation to pay any consideration to obtain any such consents. In addition, the Members involved shall keep each other reasonably apprised of their efforts to obtain necessary consents and waivers from third parties or Governmental Authorities and the responses of such third parties and Governmental Authorities to requests to provide such consents and waivers.

Section 9.7 Admission. Any transferee of all or part of any Membership Interests pursuant to a Transfer made in accordance with this Agreement shall be admitted to the Company as a substitute Member upon its execution of a counterpart to this Agreement.

Section 9.8 Security Interest Consent. If any Member grants a security interest in any Membership Interest in a Permitted Transfer, upon request by such Member, each other Member will execute and deliver to any person holding such security interest (for itself and/or for the benefit of other lenders) such acknowledgments, consents or other instruments as such person may reasonably request to confirm that such grant and any foreclosure or other exercise of remedies in respect of such Membership constitutes a Permitted Transfer under, and subject to the terms of, this Agreement.

Section 9.9 *Intentionally Left Blank*.

Section 9.10 Indemnification; Other Rights of the Members.

(a) Beginning on the Effective Date (or, with respect to any additional Member that becomes a Member after the Effective Date, on the first date on which such Person becomes a Member hereunder) and continuing thereafter, the Class A Member agrees to indemnify, defend and hold harmless the Class B Indemnified Parties from and against any and all Class B Indemnified Costs; provided, however, except with respect to Class B Indemnified Costs (x) resulting from fraud or willful misconduct, (y) resulting from failure to pay any amount due to Class B Indemnified Parties under this Agreement or the ECCA, or (z) resulting from a Third Party Claim, in no event will the Class A Member's aggregate obligation (including any prior indemnity payments by the Class A Member under this Agreement or under the ECCA) to indemnify the Class B Indemnified Parties hereunder exceed 100% of the amount of the sum of the Capital Contributions of the Class B Member as of the date of such claim for indemnification.

(b) Beginning on the Effective Date (or, with respect to any additional Member that becomes a Member after the Effective Date, on the first date on which such Person becomes a Member hereunder) and continuing thereafter, the Class B Member agrees to indemnify, defend and hold harmless the Class A Indemnified Parties and the Company from and against any and all the Class A Indemnified Costs; provided, however, except with respect to Class A Member Indemnified Costs (x) resulting from fraud or willful misconduct, (y) resulting from failure to pay any amount due to Class A Indemnified Parties under this Agreement or the ECCA or (z) resulting from a Third Party Claim, in no event will the Class B Member's aggregate obligations (including any prior indemnity payments by the Class B Member under this Agreement or under the ECCA) to indemnify the Class A Indemnified Parties hereunder exceed 100% of the amount of the Class A Member's initial Capital Account balance shown on Schedule 4.2(d) as of the Effective Date.

(c) Other than with respect to Indemnified Costs resulting from Third Party Claims, no claim for indemnification may be made with respect to any Indemnified Costs (other than fraud, willful misconduct, or failure to pay any amount due to Indemnified Parties under any Transaction Document) until the aggregate amount of such costs for which indemnification is (or previously has been) sought by the Indemnified Party under all Transaction Documents exceeds One Hundred Thousand Dollars ($100,000) and once such threshold amount of claims has been reached, the relevant Indemnified Party and its Affiliates shall have the right to be indemnified only to the extent the amount of Indemnified Costs claimed exceed such threshold amount. Claims for indemnification under this Agreement and the other Transaction Documents shall not be duplicative of one another and shall not allow for duplicative recoveries.

Section 9.11 Indemnification of Members by the Company. Each Member Party shall be exculpated from liability for and defended, indemnified and held harmless by the Company as set forth in Section 3.6(a).

Section 9.12 Direct Claims. In any case in which an Indemnified Party seeks indemnification under Section 9.10 that is not subject to Section 9.13 because no Third Party Claim is involved, the Indemnified Party shall promptly notify the Indemnifying Party in writing of any amounts that the Indemnified Party claims are subject to indemnification under the terms of this

Article IX. The failure of the Indemnified Party to exercise promptness in such notification shall not amount to a waiver of such claim, except to the extent the resulting delay materially and adversely prejudices the position of the Indemnifying Party with respect to such claim.

Section 9.13 Third Party Claims. An Indemnified Party shall give written notice to the Indemnifying Party within 10 days after it has actual knowledge of commencement or assertion of any Third Party Claim in respect of which the Indemnified Party may seek indemnification under Section 9.10. Such notice shall state the nature and basis of such Third Party Claim and the events and the amounts thereof to the extent known. Any failure to so notify the Indemnifying Party shall not relieve the Indemnifying Party from any liability that the Indemnifying Party may have to the Indemnified Party under this Article IX, except to the extent the failure to give such notice materially and adversely prejudices the Indemnifying Party. In case any such action, proceeding or claim is brought against an Indemnified Party, so long as it has acknowledged in writing to the Indemnified Party that it is liable for such Third Party Claim pursuant to this Section 9.13, the Indemnifying Party shall be entitled to participate in and, unless in the reasonable judgment of the Indemnified Party a conflict of interests between it and the Indemnifying Party may exist in respect of such Third Party Claim or such Third Party Claim entails a material risk of criminal penalties or civil fines or non-monetary sanctions being imposed on the Indemnified Party or a risk of materially adversely affecting the Indemnified Party's business (a "Third Party Penalty Claim"), to assume the defense thereof, with counsel selected by the Indemnifying Party and reasonably satisfactory to the Indemnified Party, and after notice from the Indemnifying Party to the Indemnified Party of its election so to assume the defense thereof, the Indemnifying Party shall not be liable to the Indemnified Party for any legal or other expenses subsequently incurred by the latter in connection with the defense thereof; provided nothing contained herein shall permit the Class A Member to control or participate in any Tax contest or dispute involving a Class A Member or any Affiliate of a Class A Member, or permit a Class B Member to control or participate in any Tax contest or dispute involving any Affiliate of the Class B Member; and; provided, further, the Parties agree that the handling of any Tax contests involving the Company will be governed by Section 7.7. In the event that (i) the Indemnifying Party advises an Indemnified Party that the Indemnifying Party will not contest a claim for indemnification hereunder, (ii) the Indemnifying Party fails, within 30 days of receipt of any indemnification notice to notify, in writing, such Indemnified Party of its election, to defend, settle or compromise, at its sole cost and expense, any such Third Party Claim (or discontinues its defense at any time after it commences such defense) or (iii) in the reasonable judgment of the Indemnified Party, a conflict of interests between it and the Indemnifying Party exists in respect of such Third Party Claim or the action or claim is a Third Party Penalty Claim, then the Indemnified Party may, at its option, defend, settle or otherwise compromise or pay such action or claim or Third Party Claim in each case, at the sole cost and expense of the Indemnifying Party. In any event, unless and until the Indemnifying Party elects in writing to assume and does so assume the defense of any such claim, proceeding or action, the Indemnifying Party shall be liable for the Indemnified Party's reasonable costs and expenses arising out of the defense, settlement or compromise of any such action, claim or proceeding. The Indemnified Party shall cooperate to the extent commercially reasonable with the Indemnifying Party in connection with any negotiation

or defense of any such action or claim by the Indemnifying Party. The Indemnifying Party shall keep the Indemnified Party fully apprised at all times as to the status of the defense or any settlement negotiations with respect thereto. If the Indemnifying Party elects to defend any such action or claim, then the Indemnified Party shall be entitled to participate in such defense with counsel of its choice at its sole cost and expense unless otherwise specified herein; provided that any such participation of the Indemnified Party shall be at the Indemnifying Party's sole cost and expense to the extent such participation relates to a Third Party Penalty Claim. If the Indemnifying Party does not assume such defense, the Indemnified Party shall keep the Indemnifying Party apprised at all times as to the status of the defense; provided, however, that the failure to keep the Indemnifying Party so informed shall not affect the obligations of the Indemnifying Party hereunder. The Indemnifying Party shall not be liable for any settlement of any action, claim or proceeding effected without its written consent; provided, however, that the Indemnifying Party shall not unreasonably withhold, delay or condition any such consent. Notwithstanding anything in this Section 9.13 to the contrary, the Indemnifying Party shall not, without the Indemnified Party's prior written consent, (i) settle or compromise any claim or consent to entry of judgment in respect thereof which involves any condition other than payment of money by the Indemnified Party, (ii) settle or compromise any claim or consent to entry of judgment in respect thereof without first demonstrating to Indemnified Party the ability to pay such claim or judgment, or (iii) settle or compromise any claim or consent to entry of judgment in respect thereof that does not include, as an unconditional term thereof, the giving by the claimant or the plaintiff to the Indemnified Party, a full and complete release from all liability in respect of such claim.

Section 9.14 No Duplication. Any liability for indemnification under this Article IX shall be determined without duplication of recovery. Without limiting the generality of the prior sentence, if a statement of facts, condition or event constitutes a breach of more than one representation, warranty, covenant or agreement which is subject to the indemnification obligation in Section 9.10, only one recovery of Indemnified Costs per Indemnified Party shall be allowed.

Section 9.15 Sole Remedy. Except in the case of fraud, willful misconduct or failure to pay, the enforcement of the claims of the Parties under Article IX of this Agreement are the sole and exclusive remedies that a Party shall have under this Agreement and the ECCA for the recovery of Indemnified Costs; provided, however, that notwithstanding anything to the contrary in this Agreement, each Party hereby reserves all equitable remedies.

Section 9.16 Final Date for Assertion of Indemnity Claims. All claims by an Indemnified Party for indemnification pursuant to this Article IX resulting from breaches of representations or warranties in Article III of the ECCA shall be forever barred unless the other Party is notified within the time periods provided in Section 7.7 of the ECCA, provided that if written notice of a claim for indemnification has been given by an Indemnified Party on or prior to the last day of the applicable period, then the obligation of the other Party to indemnify such Indemnified Party pursuant to this Article IX shall survive with respect to such claim until such claim is finally resolved.

Section 9.17 Reasonable Steps to Mitigate. Each Indemnified Party will take, at the Indemnifying Party's own reasonable cost and expense, all reasonable commercial steps identified by Indemnifying Party to the Indemnified Parties to mitigate all Indemnified Costs (other than any such Indemnified Costs that are Taxes), which steps may include availing itself of any defenses, limitations, rights of contribution, claims against third Persons and other rights at law or equity. The Indemnified Parties will provide such evidence and documentation of the nature and extent of the Indemnified Costs as may be reasonably requested by the Indemnifying Party.

Section 9.18 Net of Insurance Benefits. All Indemnified Costs shall be net of insurance recoveries from insurance policies of the Company (including under the existing title policies) to the extent that any proceeds of such policies, less any costs, expenses or premiums incurred by the Company in connection therewith, are distributed by the Company to the Indemnified Party; provided, however, such amount shall account for any costs or expenses incurred by the Indemnified Party in connection with obtaining insurance proceeds with respect to any breach or nonperformance hereunder.

Section 9.19 No Consequential Damages. Indemnified Costs shall not include, and an Indemnifying Party shall have no obligation to indemnify any Indemnified Party for or in respect of, any punitive, consequential or exemplary damages of any nature including but not limited to damages for lost profits or revenues or the loss or use of such profits or revenue, loss by reason of plant shutdown or inability to operate at rated capacity, increased operating expenses of plant or equipment, increased costs of purchasing or providing equipment, materials, labor, services, costs of replacement, power or capital, debt service fees or penalties, inventory or use charges, damages to reputation, damages for lost opportunities, or claims of the Company's customers, Members or Affiliates, regardless of whether said claim is based upon contract, warranty, tort (including negligence and strict liability) or other theory of law unless payable by such Indemnified Party as part of a Third Party Claim; provided, however, that the lost profits or revenues (and the loss or use thereof) language set forth in this Section 9.19 shall not be interpreted to exclude from Indemnified Costs any damages, losses, claims, liabilities, demands charges, suits, Taxes, penalties, costs or expenses that would otherwise be included within the definition of Indemnified Costs because they result from a reduction in the profits of the Company.

Section 9.20 Payment of Indemnification Claims. All claims for indemnification shall be paid by Indemnifying Party in immediately available funds in U.S. dollars. Any undisputed portion of an indemnification claim shall be paid promptly by the Indemnifying Party to the Indemnified Parties involved. An Indemnifying Party may dispute any portion of an indemnification claim; provided, however, that such disputed indemnification claim shall be paid promptly by the Indemnifying Party to the Indemnified Party together with interest at a market rate upon the final determination of the payable amount of the claim (if any) by a court of competent jurisdiction.

Section 9.21 Repayment; Subrogation. If the amount of any Indemnified Costs, at any time after the making of an indemnity payment in respect thereof, is reduced by recovery, settlement or otherwise under any insurance coverage (excluding any proceeds from self-insurance

or flow through insurance policies) or under any claim, recovery, settlement or payment by or against any other entity, the amount of such reduction, less any costs, expenses or premiums incurred in connection therewith, must promptly be repaid by the Indemnified Party to the Indemnifying Party net of any Taxes imposed upon the Indemnified Party in respect of such amounts, but taking into account any Tax benefit the Indemnified Party receives as a result of such repayment. Upon making any indemnity payment (other than any indemnity payment relating to Taxes), the Indemnifying Party will, to the extent of such indemnity payment, be subrogated to all rights of the Indemnified Party against any third party, except third parties that provide insurance coverage to the Indemnified Party or its Affiliates, in respect of the Indemnified Costs to which the indemnity payment relates. Without limiting the generality or effect of any other provision hereof, each such Indemnified Party and the Indemnifying Party shall duly execute upon request all instruments reasonably necessary to evidence and perfect the above described subrogation rights, and otherwise cooperate in the prosecution of such claims at the direction of the Indemnifying Party. Nothing in this Section 9.21 will be construed to require any Party to obtain or maintain any insurance coverage.

ARTICLE X
DISSOLUTION AND WINDING-UP

Section 10.1 Events of Dissolution. The Company shall be dissolved and its affairs shall be wound up upon the first to occur of any of the following:

(a) the written consent of the Members representing a Class Majority Vote to dissolve and terminate the Company;

(b) the entry of a decree of judicial dissolution under Section 18-802 of the Act;

(c) the disposition of all or substantially all of the Company's business and assets;

(d) the issuance of a final, nonappealable court order which makes it unlawful for the business of the Company to be carried on; or

(e) at any time there are no members of the Company unless the business of the Company is continued in accordance with the Act.

Section 10.2 Distribution of Assets.

(a) The Members hereby appoint the Managing Member to act as the liquidator upon the occurrence of one of the events in Section 10.1. Upon the occurrence of such an event, the liquidator will proceed diligently to wind up the affairs of the Company and make final distributions as provided herein and in the Act. The liquidator may sell, and will use commercially reasonable efforts to obtain the best possible price for, any or all Company property, including to Members. In no event, without the approval of Members by a Class Majority Vote, will a sale to a

Member be for an amount that is less than fair market value (determined by the Appraisal Method if the Members (by a Class Majority Vote) are unable to agree on the fair market value).

(b) The liquidator will first pay, satisfy or discharge from Company funds all of the debts, liabilities and obligations of the Company (including all expenses incurred in liquidation) or otherwise make adequate provision for payment and discharge thereof (including the establishment of a cash escrow fund for contingent, conditional or unmatured liabilities in such amount and for such term as the liquidator may reasonably determine) in the order of priority as provided by law.

(c) All assets of the Company will be treated as if sold.

(d) Items of income, gain, loss and deduction for the taxable year of liquidation, including any gain or loss upon the deemed sale of a Company asset under Section 10.2(c) hereof, will be allocated among the members as provided under Section 5.3 after giving effect to the allocations in Section 5.4.

(e) After the allocations in clauses (c) and (d) have been made, then cash and property will be distributed pro rata to the Members in the amount of the positive balances in their Capital Accounts by the end of the taxable year during which the liquidation occurs (or, if later, within ninety (90) days after the date of such liquidation).

(f) The distribution of cash and property to a Member under this Section 10.2 constitutes a complete return to the Member of its Capital Contributions and a complete distribution to the Member on its Membership Interests in the Company of all the Company's property and constitutes a compromise to which all Members have consented within the meaning of Section 18-502(b) of the Act. If the assets of the Company remaining after the payment or discharge of the debts and liabilities of the Company are insufficient to return Capital Contributions of each Member, such Member shall have no recourse against the Company or any other Member, except as provided in Section 9.10.

Section 10.3 In-Kind Distributions. There shall be no distribution of assets of the Company in kind without a prior Class Majority Vote.

Section 10.4 Certificate of Cancellation.

(a) When all debts, liabilities and obligations have been paid and discharged or adequate provisions have been made therefor and all of the remaining property and assets have been distributed to the Members, a certificate of cancellation shall be executed and filed by the liquidator with the Secretary of State of the State of Delaware, which certificate shall set forth the information required by Section 18-203 of the Act.

(b) Upon the filing of the certificate of cancellation, the existence of the Company shall cease.

(c) All costs and expenses in fulfilling the obligations under this Section 10.4 shall be borne by the Company.

ARTICLE XI
MISCELLANEOUS

Section 11.1 Notices. Unless otherwise provided herein, any offer, acceptance, election, approval, consent, certification, request, waiver, notice or other communication required or permitted to be given hereunder (collectively referred to as a "Notice"), shall be in writing and delivered (a) in person, (b) by registered or certified mail with postage prepaid and return receipt requested, (c) by recognized overnight courier service with charges prepaid or (d) by facsimile transmission, directed to the intended recipient at the address of such Member on Schedule 4.2(d) or at such other address as any Member hereafter may designate to the others in accordance with a Notice under this Section 11.1. A Notice or other communication will be deemed delivered on the earliest to occur of (i) its actual receipt when delivered in person, (ii) the fifth (5th) Business Day following its deposit in registered or certified mail, with postage prepaid, and return receipt requested, (iii) the second (2nd) Business Day following its deposit with a recognized overnight courier service or (iv) the date of receipt of a facsimile or, if such date of receipt is not a Business Day, the next Business Day following such date of receipt; provided the sender can and does provide evidence of successful transmission. Any Notice or other communication received on a day that is not a Business Day or later than 5:00 p.m. on a Business Day shall be deemed to be received on the next Business Day.

Section 11.2 Amendment. Except for an amendment of Schedule 4.2(d), an amendment of Annex II to reflect the issuance of additional Membership Interests or a Transfer of Membership Interests, or an amendment in connection with the admission of a new Member, in each case in accordance with the terms of this Agreement, this Agreement may be changed, modified or amended only by an instrument in writing duly executed by all Members.

Section 11.3 Partition. Each of the Members hereby irrevocably waives, to the extent it may lawfully do so, any right that such Member may have to maintain any action for partition with respect to the Company property.

Section 11.4 Waivers and Modifications. Any waiver or consent, express, implied or deemed, to or of any breach or default by any Person in the performance by that Person of its obligations with respect to the Company or any action inconsistent with this Agreement is not a consent or waiver to or of any other breach or default in the performance by that Person of the same or any other obligations of that Person with respect to the Company or any other such action. Failure on the part of a Person to insist in any one or more instances upon strict performance of any provisions of this Agreement, to take advantage of any of its rights hereunder, or to declare any other Person in default with respect to the Company, irrespective of how long that failure continues, does not constitute a waiver by the Person so failing of its rights with respect to that other Person or its rights with respect to that default until the applicable statute of limitations period has lapsed. All waivers

and consents hereunder shall be in writing duly executed by all Members affected by such waiver or consent and shall be delivered to the other Members in the manner described in Section 11.1.

Section 11.5 Severability. Except as otherwise provided in the succeeding sentence, every term and provision of this Agreement is intended to be severable, and if any term or provision of this Agreement is illegal or invalid for any reason whatsoever, such illegality or invalidity shall not affect the legality or validity of the remainder of this Agreement. The preceding sentence shall be of no force or effect if the consequence of enforcing the remainder of this Agreement without such illegal or invalid terms or provision would be to cause any Party to lose the benefit of its economic bargain.

Section 11.6 Successors; No Third-Party Beneficiaries. This Agreement is binding on and inures to the benefit of the Members and their respective heirs, legal representatives, successors and permitted assigns. Nothing in this Agreement shall provide any benefit to any third party or entitle any third party to any claim, cause of action, remedy or right of any kind, it being the intent of the Members that this Agreement shall not be construed as a third-party beneficiary contract. To the full extent permitted by Legal Requirements, no creditor or other third party having dealings with the Company shall have the right to pursue any other right or remedy hereunder or at law or in equity, it being understood and agreed that the provisions of this Agreement shall be solely for the benefit of, and may be enforced solely by, the parties hereto and their respective successors and permitted assigns. None of the rights of the Members herein set forth to make Capital Contributions or loans to the Company shall be deemed an asset of the Company for any purpose by any creditor or other third party, nor may such rights or obligations be sold, transferred or assigned by the Company or pledged or encumbered by the Company to secure any debt or other obligation of the Company or of any of the Members.

Section 11.7 Entire Agreement. This Agreement, including the Schedules, Annexes and Exhibits attached hereto or incorporated herein by reference, and the ECCA, and the Class B Guaranty constitute the entire agreement of the Members with respect to the matters covered herein. This Agreement supersedes all prior agreements and oral understandings among the parties hereto with respect to such matters.

Section 11.8 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of Delaware, excluding any conflict of laws rule or principle that might refer the governance or construction of this Agreement to the law of another jurisdiction.

Section 11.9 Further Assurances. In connection with this Agreement and the transactions contemplated hereby, each Member shall execute and deliver any additional documents and instruments and perform any additional acts that may be reasonably required or useful to carry out the intent and purpose of this Agreement and as are not inconsistent with the terms hereof.

Section 11.10 Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be an original but all of which together will constitute one

instrument, binding upon all parties hereto, notwithstanding that all of such parties may not have executed the same counterpart.

Section 11.11 Dispute Resolution. In the event a dispute, controversy or claim arises hereunder, the aggrieved party will promptly provide written notification of the dispute to the other party within 10 days after such dispute arises. A meeting will be held promptly between the parties, attended by representatives of the parties with decision-making authority regarding the dispute, to attempt in good faith to negotiate a resolution of the dispute. If the parties are not successful in resolving a dispute within twenty-one (21) days, the parties will thereafter be entitled to pursue all such remedies as may be available to them; provided that the parties hereby irrevocably submit to the exclusive jurisdiction of any state or federal court in New York county, New York or any state of federal court in the State of Delaware with respect to any action or proceeding arising out of or relating to this Agreement. For the avoidance of doubt, no Member waives its right to maintain a legal action or proceeding in the courts of the State of Delaware with respect to matters relating to the organization or internal affairs of the Company.

Section 11.12 Confidentiality.

(a) Each of the Members shall, and shall cause their Affiliates and their respective stockholders, members, subsidiaries and Representatives to, hold confidential all information they may have or obtain concerning the Class B Member, the Class A Member, any other Member, the Company and their respective assets, business, operations or prospects or this Agreement (the "Confidential Information"); provided, however, such Confidential Information shall not include information that (i) becomes generally available to the public other than as a result of a disclosure by such Member or any of its Representatives, (ii) becomes available to such Member or any of its Representatives on a nonconfidential basis prior to its disclosure by the Company or its Representatives, (iii) is required or requested to be disclosed by such Member or any of its Affiliates or their respective stockholders, members, subsidiaries or Representatives as a result of any applicable Legal Requirement or rule or regulation of any stock exchange, the Financial Industry Regulatory Authority, Inc. or other regulatory authority or self-regulatory authority having jurisdiction over such Member, (iv) is required or requested by the IRS in connection with the Project, including in connection with a request for any private letter ruling, any determination letter or any audit, or (v) is independently developed by Member or any of its Representatives; provided that with respect to clauses (iii) and (iv), if such Confidential Information remains or is reasonably believed to remain generally unavailable to the public, such information will remain Confidential Information in all other respects and for all other purposes. If such party becomes compelled by legal or administrative process to disclose any Confidential Information, such party will provide the other Members with prompt notice so that the other Members may seek a protective order or other appropriate remedy or waive compliance with the non-disclosure provisions of this Section 11.12(a) with respect to the information required to be disclosed. If such protective order or other remedy is not obtained, or such other Members waive compliance with the non-disclosure provisions of this Section 11.12(a) with respect to the information required to be disclosed, the first party will furnish only that portion of such information that it is advised, by opinion of counsel, is

legally required to be furnished and will exercise reasonable efforts, at the other Members' expense, to obtain reliable assurance that confidential treatment will be accorded such information, including, in the case of disclosures to the IRS described in clause (iv) above, to obtain reliable assurance that, to the maximum extent permitted by applicable Legal Requirements, such information will not be made available for public inspection pursuant to Section 6110 of the Code.

(b) Except to the extent necessary for the exercise of its rights and remedies and the performance of its obligations under this Agreement, the Project Documents and Transaction Documents (including without limitation, the ownership, operation and administration of the Company), the Class B Member, the Class A Member and their respective Affiliates will hold confidential and not disclose directly or indirectly, any of the economic terms particular to this Agreement and the ECCA, including the amount of any Member's Capital Contribution, economic returns thereon or the identity of any Member other than with respect to the disclosures of the type described in clause (a)(i) through (v) above or in clause (c) below that are permitted for the other Members and their respective Affiliates. The foregoing shall not restrict the Class B Member (or any Affiliate) from using project data related to the Project in connection with the development of other energy projects by the Class B Member (or any of their respective Affiliates).

(c) Nothing in Section 11.12(a) and (b) shall be construed as prohibiting a party hereunder or its Affiliates from using such Confidential Information in connection with (i) any claim against another Member or the Managing Member hereunder or under any other Transaction Document or Project Document, (ii) any exercise by a party hereunder of any of its rights hereunder and under any other Transaction Document or Project Document (including without limitation, the ownership, operation and administration of the Company) and (iii) a disposition by a Member of all or a portion of its Membership Interest or a disposition of an equity interest in such Member or its Affiliates, or a potential financing of the Project; provided that such potential purchaser or lender shall have entered into a confidentiality agreement with respect to Confidential Information on customary terms used in confidentiality agreements in connection with corporate acquisitions before any such information may be disclosed. In addition, each Member hereby acknowledges that the United States federal securities laws, among other things, prohibit certain persons in possession of material, non-public information concerning companies or securities from buying or selling securities issued by those companies or disclosing that material, non-public information to others who buy or sell those securities while in possession of that information (or disclose that information to others who buy or sell). Notwithstanding anything herein to the contrary, the Parties and their respective Representatives may disclose to any and all Persons, without limitation of any kind, the U.S. federal income tax treatment and tax structure of the transaction and all materials of any kind (including opinions and other tax analyses) that are provided to such Party relating to such tax treatment and tax structure, except where confidentiality is reasonably necessary to comply with securities laws. For this purpose, "tax structure" is limited to facts relevant to the U.S. federal income tax treatment of the transaction and does not include information relating to the identity of the Parties, their Affiliates, agents or advisors.

Section 11.13 Joint Efforts. To the full extent permitted by applicable Legal Requirements, neither this Agreement nor any ambiguity or uncertainty herein will be construed against any of the parties hereto, whether under any rule of construction or otherwise. On the contrary, this Agreement has been prepared by the joint efforts of the respective attorneys for, and has been reviewed by, each of the parties hereto.

Section 11.14 Specific Performance. The Members agree that irreparable damage will result if this Agreement is not performed in accordance with its terms, and the Members agree that any damages available at law for a breach of this Agreement would not be an adequate remedy. Therefore, to the full extent permitted by law, the provisions hereof and the obligations of the Members hereunder shall be enforceable in a court of equity, or other tribunal with jurisdiction, by a decree of specific performance, and appropriate injunctive relief may be applied for and granted in connection therewith. Such remedies and all other remedies provided for in this Agreement shall, however, be cumulative and not exclusive and shall be in addition to any other remedies that a Member may have under this Agreement, at law or in equity.

Section 11.15 Tariff Damages Collateral.

(a) Within one (1) Business Day of the Class A Member's receipt of the distribution of any amounts constituting the "First Subsequent Deposit" pursuant to Section 6.1(c), the Class A Member will provide a letter of credit from a major money center bank in favor of the Class B Member in the amount of such distribution, which letter of credit will be in form and substance reasonably satisfactory to the Class B Member. Within one (1) Business Day of the Class A Member's receipt of the distribution of any amounts constituting the "Second Subsequent Deposit" pursuant to Section 6.1(c), the Class A Member shall cause the face value of the letter of credit described in the preceding sentence to be increased by the amount of such distribution or, at the Class A Member's sole discretion, shall provide a second letter of credit from a major money center bank in favor of the Class B Member in such amount. The letter(s) of credit established and maintained under this Section 11.15(a) shall be substantially in the form attached hereto as Exhibit F, with such changes thereto as may be requested by the issuing bank and are reasonably satisfactory to the Class A Member and the Class B Member, and may be referred to as the "Tariff Damages Collateral". The Class A Member shall be under no obligation to replenish the Tariff Damages Collateral in the event of any draws thereon by the Class B Member.

(b) Up until such time as the Tariff Damages equal $0.00 pursuant to the terms of the ECCA, the letter(s) of credit constituting the Tariff Damages Collateral shall be renewed annually at least 15 days prior to expiration and, if such renewal does not occur, the Class B Indemnitees may draw upon the full amount of such letter(s) of credit and hold such funds in escrow as cash security as the Tariff Damages Collateral, but shall return to the Class A Member such Tariff Damages Collateral which has not been applied on or before June 30, 2025.

(c) Beginning on July 1, 2022, the amount of the Tariff Damages Collateral may be reduced once per month to the amount of the then-applicable Tariff Damages.

(d) For the avoidance of doubt, neither the Class A Member nor Mehetia (nor any of Mehetia's direct or indirect owners or any Affiliates of Mehetia or such owners) shall have any liability to the Class B Indemnitees for any Tariff Damages (or for any failure to renew the letter(s) of credit constituting the Tariff Damages Collateral) except that the Class B Indemnitees may draw on the then remaining Tariff Damages Collateral.

Section 11.16 Assumed Tax Benefits Collateral. Within one (1) Business Day of the Class A Member's receipt of any amounts constituting the "Third Subsequent Deposit" pursuant to Section 6.1(c), the Class A Member will provide a letter of credit from a major money center bank in favor of the Class B Member in the amount of such distribution, which letter of credit will be substantially in the form attached hereto as Exhibit F, with such changes thereto as may be requested by the issuing bank and are reasonably satisfactory to the Class A Member and the Class B Member (the "Assumed Tax Benefits Collateral"). The letter of credit will expire no sooner than September 30, 2020. The Class A Member shall be under no obligation to replenish the Assumed Tax Benefits Collateral in the event of any draws thereon by the Class B Member. For the avoidance of doubt, neither the Class A Member nor Mehetia (nor any of Mehetia's direct or indirect owners or any Affiliates of Mehetia or such owners) shall have any liability to the Class B Indemnitees for any reduction of the Assumed Tax Benefits (or for any failure to renew the letter(s) of credit constituting the Assumed Tax Benefits Collateral) except that the Class B Indemnitees may draw on the then remaining Assumed Tax Benefits Collateral.

Section 11.17 Survival. All representations, warranties, covenants and obligations made or undertaken by a Party in this Agreement or in any other Transaction Document are material, have been relied upon by the other Parties and, except as otherwise provided in Section 11.17 or elsewhere in this Agreement (or, with respect to any representations, warranties, covenants and obligations made or undertaken in any other Transaction Document, in such Transaction Document), shall continue in full force and effect, together with the associated rights of indemnification, indefinitely; provided that all indemnities and reimbursement obligations made pursuant to this Agreement shall survive dissolution and liquidation of the Company until expiration of the longest applicable statute of limitations (including extensions and waivers) with respect to the matter for which a Person would be entitled to be indemnified or reimbursed, as the case may be.

Section 11.18 Effective Date. This Agreement shall have no force or effect unless and until the transactions contemplated by the ECCA to take place on the Closing Date occur, at which time this Agreement shall automatically and without any further action, other than the execution hereof, become effective simultaneously with the other actions occurring on the Closing Date.

Section 11.19 Recourse Only to Member. The sole recourse of the Company for performance of the obligations of any Member hereunder shall be against such Member and its

assets and not against any assets or property of any present or future stockholder, partner, member, officer, employee, servant, executive, director, agent, authorized representative or Affiliate of such Member; provided however the foregoing shall not prohibit recourse, directly or indirectly, against Southern under the Class B Guaranty.

[*Remainder of this page left intentionally blank. Signature page follows.*]

IN WITNESS WHEREOF, each Member has caused this Third Amended and Restated Limited Liability Company Agreement to be signed by a duly authorized officer as of the date first above written.

CLASS A MEMBER:

DIAMOND STATE GENERATION HOLDINGS, LLC

By:

Name:

Title:

CLASS B MEMBER:

SP DIAMOND STATE CLASS B HOLDINGS, LLC

By:

Name:

Title:

IN WITNESS WHEREOF, the undersigned has caused this Third Amended and Restated Limited Liability Company Agreement to be signed by a duly authorized officer as of the date first above written.

ANNEX I

DEFINITIONS

[See attached]

ANNEX II

MEMBERSHIP INTERESTS

CLASS A MEMBERSHIP INTERESTS

Class A Member	Number of Class A Membership Interests Owned	Percentage of Class A Membership Interests Owned	Initial Capital Contribution (based on value of the Existing Project Closing)
Diamond State Generation Holdings, LLC	**100**	**100%**	

CLASS B MEMBERSHIP INTERESTS

Class B Member	Number of Class B Membership Interests Owned	Percentage of Class B Membership Interests Owned	Initial Capital Contribution
SP Diamond State Class B Holdings, LLC	**100**	**100%**	

SCHEDULE 4.2(d)

CAPITAL ACCOUNT BALANCE AND PERCENTAGE INTEREST

Member Name and Address	Capital Account Balance	Percentage Interest
Diamond State Generation Holdings, LLC 4353 North 1st Street San Jose, CA 95134 Attn: [*] Email: [*] Telephone: [*] with a copy of any notice sent, which will not constitute notice, to: Credit Suisse Securities (USA) LLC Eleven Madison Avenue New York, New York 10010 Attn: General Counsel – Americas	$[*]	100% of Existing Systems Income and Losses
SP Diamond State Class B Holdings, LLC c/o Southern Power Company 30 Ivan Allen Jr. Blvd., NW Bin SC 1108 Atlanta, GA 30308 Attention: [*] E-mail: [*] with copies to: Southern Power Company 30 Ivan Allen Jr. Blvd., NW Bin SC 1108 Atlanta, GA 30308 Attention: [*] Attention: [*] E-mail: [*][*] Telephone: [*]	$[*]	100% of New Systems Income and Losses

Schedule 4.2(d) - 1

Schedule 5.2

Revenue and Expense Statement Information

i. Revenue allocation % calculation (including Existing Systems Output Percentage and New Systems Output Percentage)

ii. Total revenue calculation (including Operating Revenue and Extraordinary Shared Facility Revenue)

iii. PJM charges support

iv. Total Red Lion and Brookside rental expense calculation

v. Other COGS – utilities/communication line expenses supports

vi. Professional Services Expenses – legal fees, etc. supports

vii. Other Miscellaneous Expenses

viii. Operating Expenses (in the aggregate)

ix. Specially Allocated Existing System Items and Specially Allocated New System Items

x. Existing Systems Income and Loss and New Systems Income and Loss

Schedule 5.2(a) - 1

EXHIBIT A

FORM OF CERTIFICATE FOR CLASS A MEMBERSHIP INTEREST

THE INTERESTS REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "***ACT***") OR ANY STATE SECURITIES LAWS. ACCORDINGLY, SUCH INTERESTS MAY NOT BE SOLD, TRANSFERRED OR OTHERWISE DISPOSED OF WITHOUT COMPLIANCE WITH SUCH ACT AND SUCH STATE SECURITIES LAWS, AND DIAMOND STATE GENERATION PARTNERS, LLC MAY REQUIRE AN OPINION OF COUNSEL SATISFACTORY TO IT THAT NO VIOLATION OF SUCH ACT AND SUCH STATE SECURITIES LAWS WILL RESULT FROM ANY PROPOSED SALE, TRANSFER OR OTHER DISPOSITION OF SUCH INTERESTS.

THIS CERTIFICATE EVIDENCES AN INTEREST IN DIAMOND STATE GENERATION PARTNERS, LLC AND SHALL BE A SECURITY FOR THE PURPOSES OF ARTICLE 8 OF THE UNIFORM COMMERCIAL CODE AS IN EFFECT IN THE STATE OF NEW YORK.

No. [A-1] Class A Membership Interests

Diamond State Generation Partners, LLC
a Delaware Limited Liability Company
Certificate of Interest

This certifies that [_____] is the owner of [100] Class A Membership Interests in Diamond State Generation Partners, LLC (the "***Company***"), which membership interests are subject to the terms of the Third Amended and Restated Limited Liability Company Agreement of Diamond State Generation Partners, LLC, dated as of [_____], 2019, as the same may be further amended, restated, supplemented or otherwise modified from time to time in accordance with the terms thereof (the "***Limited Liability Company Agreement***").

This Certificate of Interest may be transferred by the lawful holders hereof only in accordance with the provisions of the Limited Liability Company Agreement.

IN WITNESS WHEREOF, the said Company has caused this Certificate of Interest to be signed by its duly authorized signatory this [__] day of [_____], 2019.

Diamond State Generation Partners, LLC

By:_

Name:

Title:

[Reverse]

INSTRUMENT OF TRANSFER OF MEMBERSHIP INTEREST IN Diamond State Generation Partners, LLC

FOR VALUE RECEIVED, the undersigned does hereby sell, assign and transfer unto _____

(print or type name of assignee)

the membership interest evidenced by and within the Certificate of Interest herewith, and does hereby irrevocably constitute and appoint _____ as attorney to transfer said interest on the books of Diamond State Generation Partners, LLC, with full power of substitution in the premises.

Dated as of:

[_____]
By:_
Name:
Title:

EXHIBIT B

FORM OF CERTIFICATE FOR CLASS B MEMBERSHIP INTEREST

THE INTERESTS REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "***ACT***") OR ANY STATE SECURITIES LAWS. ACCORDINGLY, SUCH INTERESTS MAY NOT BE SOLD, TRANSFERRED OR OTHERWISE DISPOSED OF WITHOUT COMPLIANCE WITH SUCH ACT AND SUCH STATE SECURITIES LAWS, AND DIAMOND STATE GENERATION PARTNERS, LLC MAY REQUIRE AN OPINION OF COUNSEL SATISFACTORY TO IT THAT NO VIOLATION OF SUCH ACT AND SUCH STATE SECURITIES LAWS WILL RESULT FROM ANY PROPOSED SALE, TRANSFER OR OTHER DISPOSITION OF SUCH INTERESTS.

THIS CERTIFICATE EVIDENCES AN INTEREST IN DIAMOND STATE GENERATION PARTNERS, LLC AND SHALL BE A SECURITY FOR THE PURPOSES OF ARTICLE 8 OF THE UNIFORM COMMERCIAL CODE AS IN EFFECT IN THE STATE OF NEW YORK.

No. [B-1] Class B Membership Interests

Diamond State Generation Partners, LLC
a Delaware Limited Liability Company
Certificate of Interest

This certifies that [_____] is the owner of [100] Class B Membership Interests in [Project Company] (the "***Company***"), which membership interests are subject to the terms of the Third Amended and Restated Limited Liability Company Agreement of Diamond State Generation Partners, LLC, dated as of [_____], 2019, as the same may be further amended, restated, supplemented or otherwise modified from time to time in accordance with the terms thereof (the "***Limited Liability Company Agreement***").

This Certificate of Interest may be transferred by the lawful holders hereof only in accordance with the provisions of the Limited Liability Company Agreement.

IN WITNESS WHEREOF, the said Company has caused this Certificate of Interest to be signed by its duly authorized signatory this [___] day of [_____], 2019.

Diamond State Generation Partners, LLC

By:_

Name:

Title:

[Reverse]

INSTRUMENT OF TRANSFER OF
MEMBERSHIP INTEREST IN
Diamond State Generation Partners, LLC

FOR VALUE RECEIVED, the undersigned does hereby sell, assign and transfer unto _____

(print or type name of assignee)

the membership interest evidenced by and within the Certificate of Interest herewith, and does hereby irrevocably constitute and appoint _____ as attorney to transfer said interest on the books of Diamond State Generation Partners, LLC, with full power of substitution in the premises.

Dated as of:

[_____]
By:_
Name:
Title:

EXHIBIT C

FORM OF ASSIGNMENT AGREEMENT

This ASSIGNMENT OF MEMBERSHIP INTERESTS, dated as of [_____] [__], 20[__] (this "Assignment Agreement"), is by and between [_____], a [_____] (the "Assignor") and [_____], a [_____] (the "Assignee").

W I T N E S S E T H :

WHEREAS, Diamond State Generation Partners, LLC, a Delaware limited liability company (the "Company"), was formed by virtue of its Certificate of Formation filed with the Secretary of State of the State of Delaware on [_____], and is governed by the Third Amended and Restated Limited Liability Company Agreement of the Company, dated as of [__], 2019, executed by the Assignor and [_____], a [_____], with all amendments thereto (the "LLC Agreement");

WHEREAS, the Assignor is currently a [Class A Member][Class B Member] of the Company;

WHEREAS, pursuant to the LLC Agreement, the Assignor has agreed to transfer to Assignee and Assignee has agreed to accept from the Assignor, on the terms and subject to the conditions set forth in the LLC Agreement, [Class A] [Class B] Membership Interests of the Company;

WHEREAS, pursuant to the LLC Agreement, the parties thereto have agreed to admit the Assignee as a [Class A][Class B] Member of the Company; and

NOW, THEREFORE, in consideration of the mutual covenants and agreements and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned do hereby agree as follows:

1. Defined Terms. All capitalized terms not defined herein are used herein as defined in the LLC Agreement.

2. Instructions to Transfer to Assignee. As of the date hereof, the Assignor hereby assigns and transfers unto Assignee complete record and beneficial ownership of [__] [Class A][Class B] Membership Interests in the Company, together with all rights and benefits associated therewith and the Assignee hereby assumes from Assignor complete record and beneficial ownership of [__] [Class A][Class B] Membership Interests in the Company, together with all rights and benefits associated therewith. The Assignor hereby irrevocably instructs the Company to register on the books of the Company the transfer to Assignee of complete record and beneficial ownership of [__][Class A][Class B] Membership Interests in the Company previously owned by Assignor.

3. Further Assurances. Subject to the terms and conditions of the LLC Agreement, at any time, or from time to time after the date hereof, the Assignor and Assignee shall, at the other's reasonable request, and at the requesting party's expense, execute and deliver such instruments of transfer, conveyance, assignment and assumption, in addition to this Assignment Agreement, and take such other action as either of them may reasonably request in order to evidence the transfer effected hereby.

4. Successors and Assigns. This Assignment Agreement and all of the provisions hereof shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns.

5. Counterparts. This Assignment Agreement may be signed in any number of counterparts, each of which shall be deemed an original, with the same effect as if the signatures hereto were upon the same instrument. This Assignment Agreement shall become effective when each party hereto shall have received a counterpart hereof signed by the other party.

6. Governing Law. This Assignment Agreement shall be governed by, and construed and enforced in accordance with, the laws of the State of New York applicable to contracts performed in that State.

[Remainder of page intentionally left blank. Signature page to follow.]

IN WITNESS WHEREOF, each party hereto has caused this Assignment of Membership Interests to be signed on its behalf as of the date first written above.

[_____]
as the Assignor

By: _
Name:
Title:

[_____]
as the Assignee

By: _
Name:
Title:

EXHIBIT D

RESERVED

EXHIBIT E

MAJOR DECISIONS

1. Engage in any business or activity that is not related or incidental to, or consistent with, operation of the Existing Systems and New Systems and the activities contemplated by the Repurchase Agreement, CapEx Agreement, the MOMA and the Administrative Services Agreement;

2. Merge, consolidate, convert, or otherwise reorganize the Company with or into another entity or change the state or other jurisdiction where the Company is organized;

3. Convert or reorganize the Company into another entity form (including a corporation) or cause the Company to be taxed as a corporation for federal income tax purposes;

4. Amend or otherwise modify the LLC Agreement;

5. Dissolve the Company;

6. Adopt a business plan and/or budget, or amend, substitute, or modify any previously adopted business plan or budget, other than in accordance with Section 7.1(b);

7. Other than with respect to (i) transactions contemplated by the CapEx Agreement or the Repurchase Agreement or (ii) as necessary to keep the New Systems and the Existing Systems in full operation or to comply with Applicable Laws or the Tariff, or (iii) transactions having a value or potential cost to the Company that is less than $500,000, either (A) purchase, lease, or otherwise acquire or improve property of any kind or nature, or purchase, lease, or otherwise acquire any additional interest therein, or (B) dispose of any property;

8. Guarantee the obligations of any Person;

9. Institute, prosecute, or settle any claim, litigation or other proceeding involving the Company in excess of $500,000, other than any claim, litigation or other proceeding by and among the Parties to the Transaction Documents in connection therewith;

10. Release any Person from any liability or potential liability to the Company in excess of $500,000;

11. Confess judgment against the Company;

12. File for Bankruptcy or make an assignment for the benefit of creditors;

13. Agree to indemnify, defend, or hold harmless any person except as part of commercial arrangements in the Ordinary Course of Business;

14. Other than entering into, and binding or obligating the Company with respect to, the CapEx Agreement, the Repurchase Agreement, the ECCA, the Administrative Services Agreement and the MOMA (and any contracts specifically contemplated by those agreements), or as necessary to keep the New Systems and the Existing Systems in full operation or to comply with Applicable Laws or the Tariff, enter into any transaction, or bind or obligate the Company with respect to any agreement (or series of related agreements), that has (or have) a potential value or cost to the Company of more than $500,000, or agree on behalf of the Company to any material amendment, modification, alteration, waiver, or adjustment with respect to any such transaction;

15. Other than entering into the CapEx Agreement, the Repurchase Agreement, the ECCA, the Administrative Services Agreement and the MOMA, enter into, amend, restate, substitute, or modify, or make any other decision with respect to, any contract, agreement, transaction, or other arrangement between the Company and any Member or any affiliate of any Member;

16. Issue additional equity interests in the Company;

17. Grant any option, conversion right, right of first offer or refusal, or similar right to purchase any of the Company's assets or any equity interest in the Company, with the exception of the sale of scrap, damaged or obsolete equipment;

18. Incur any indebtedness for borrowed money;

19. Create any Encumbrance on all or part of the Company's assets, other than Permitted Liens;

20. Redeem or otherwise liquidate all or any portion of any equity interest in the Company, other than Class A Interests pursuant to this Agreement;

21. Submit any regulatory filings, except in the ordinary course of business consistent with past practice;

22. Establish any reserves from Company Distributable Cash other than in accordance with an established budget;

23. Prior to the Section 203 Order being obtained, take any action that would be reasonably likely to have an impact on the New Systems or New Project in excess of $500,000.00;

24. After the Section 203 Order has been obtained, enter into, amend, modify or terminate any energy marketing agreement or scheduling agreement, including that certain Energy Management Services Agreement dated as of March 2, 2012 between the Company and White Pine Energy Consulting, LLC;

25. Install any New Systems or BOF at the Brookside Facility

26. Terminate any services required to be provided to the Company under the Administrative Services Agreement;

27. Agree to setoff any amounts owed by or to the Company under any Transaction Documents or the CapEx Agreement; or

28. Agree to do any of the foregoing.

EXHIBIT F

FORM OF LETTER OF CREDIT

See attached.

THIS SAMPLE WORDING IS PRESENTED WITHOUT ANY RESPONSIBILITY ON OUR PART. THIS PROFORMA IS PROVIDED TO YOU AT YOUR REQUEST ONLY AS SUGGESTED WORDING FOR THE LETTER OF CREDIT. PLEASE NOTE THAT THE LETTER OF CREDIT IS IN DRAFT FORM ONLY AND REMAINS UNISSUED AND IS NOT AN ENFORCEABLE INSTRUMENT.

==========begin format

==========

Wells Fargo Bank, N.A.
U. S. Trade Services Standby Letters of Credit
794 Davis Street, 2nd Floor MAC A0283-023
San Leandro, CA. 94577-6922
Phone: [*]
Option 1 E-Mail: [*]

Irrevocable Standby Letter of Credit

Number: _____
Issue Date: _____

BENEFICIARY
SP DIAMOND STATE CLASS B HOLDINGS, LLC
C/O SOUTHERN POWER COMPANY
30 IVAN ALLEN JR. BLVD., NW
BIN SC 1108
ATLANTA, GA 30308
ATTENTION: [*]

APPLICANT
DIAMOND STATE GENERATION HOLDINGS, LLC
4353 NORTH FIRST STREET
SAN JOSE, CALIFORNIA 95134

LETTER OF CREDIT ISSUE AMOUNT USD [*] EXPIRY DATE: [*]

LADIES AND GENTLEMEN:

.

AT THE REQUEST AND FOR THE ACCOUNT OF DIAMOND STATE GENERATION HOLDINGS, LLC AT 4353 NORTH FIRST STREET, SAN JOSE, CA 95134 (“DSGH”), WE HEREBY ESTABLISH OUR IRREVOCABLE STANDBY LETTER OF CREDIT NO. _____ (THE “LETTER OF CREDIT”) IN FAVOR OF SP DIAMOND STATE CLASS B HOLDINGS, LLC (“BENEFICIARY”) IN THE AMOUNT OF USD [*] AVAILABLE WITH US AT OUR OFFICE LOCATED AT WELLS FARGO BANK, N.A., U.S. TRADE SERVICES, STANDBY LETTERS OF CREDIT, 794 DAVIS STREET, 2ND FLOOR, SAN LEANDRO, CA 94577-6922 BY PAYMENT AGAINST PRESENTATION OF THE FOLLOWING DOCUMENTS:

1. A DRAFT DRAWN ON US AT SIGHT IN THE FORM OF EXHIBIT A WITH THE ITEMS IN BRACKETS THEREIN COMPLETED.

2. BENEFICIARY'S SIGNED AND DATED STATEMENT WORDED AS FOLLOWS (WITH THE ITEMS IN BRACKETS THEREIN COMPLETED):

.

QUOTE
THE UNDERSIGNED, AN AUTHORIZED REPRESENTATIVE OF SP DIAMOND STATE CLASS B HOLDINGS, LLC HEREBY CERTIFIES THAT SP DIAMOND STATE CLASS B HOLDINGS, LLC IS ENTITLED TO DRAW THE AMOUNT OF $[_____] PURSUANT TO SECTION [7.1(C)] OF THAT EQUITY CAPITAL CONTRIBUTION AGREEMENT DATED [JUNE 14, 2019] BETWEEN DIAMOND STATE GENERATION HOLDINGS, LLC, DIAMOND STATE GENERATION PARTNERS, LLC, BLOOM ENERGY CORPORATION, AND SP DIAMOND STATE CLASS B HOLDINGS, LLC (THE "CONTRACT") AND FURTHER CERTIFIES THAT SUCH AMOUNT DRAWN UNDER WELLS FARGO BANK LETTER OF CREDIT NO. _____ REPRESENTS THE AMOUNT TO WHICH BENEFICIARY IS ENTITLED UNDER SUCH PROVISION OF THE CONTRACT.
UNQUOTE]

MULTIPLE AND PARTIAL DRAWING(S) ARE PERMITTED UNDER THIS LETTER OF CREDIT, PROVIDED, HOWEVER, THAT THE TOTAL AMOUNT OF ANY PAYMENT(S) MADE UNDER THIS LETTER OF CREDIT WILL NOT EXCEED THE TOTAL AMOUNT AVAILABLE UNDER THIS LETTER OF CREDIT. DRAWINGS MAY BE PRESENTED TO US AT OUR ABOVE OFFICE BY HAND DELIVERY OR DELIVERED TO US BY U.S. POSTAL SERVICE MAIL, REGISTERED MAIL OR CERTIFIED MAIL OR BY EXPRESS COURIER OR OVERNIGHT COURIER.

THIS EXPIRY DATE OF THIS LETTER OF CREDIT SHALL BE AUTOMATICALLY EXTENDED WITHOUT AN AMENDMENT HERETO FOR A PERIOD OF ONE YEAR FROM THE CURRENT EXPIRY DATE AND ANY FUTURE EXPIRY DATE, UNLESS AT LEAST 90 DAYS PRIOR TO THE EXPIRY DATE WE SEND YOU WRITTEN NOTICE BY EXPRESS COURIER THAT THIS LETTER OF CREDIT WILL NOT BE SO EXTENDED.

WE HEREBY ENGAGE WITH YOU THAT EACH DRAFT DRAWN UNDER AND IN COMPLIANCE WITH THE TERMS AND CONDITIONS OF THIS LETTER OF CREDIT WILL BE DULY HONORED IF PRESENTED TOGETHER WITH THE DOCUMENTS SPECIFIED IN THIS LETTER OF CREDIT AT OUR OFFICE LOCATED AT 794 DAVIS STREET, 2ND FLOOR, SAN LEANDRO, CA 94577-6922, ATTENTION: US TRADE SERVICES - STANDBY LETTERS OF CREDIT ON OR BEFORE THE ABOVE STATED EXPIRY DATE, OR ANY EXTENDED EXPIRY DATE IF APPLICABLE.

.

THIS IRREVOCABLE STANDBY LETTER OF CREDIT SETS FORTH IN FULL THE TERMS OF OUR UNDERTAKING. THIS UNDERTAKING IS INDEPENDENT OF AND SHALL NOT IN ANY WAY BE MODIFIED, AMENDED, AMPLIFIED OR INCORPORATED BY REFERENCE TO ANY PROJECT, DOCUMENT, CONTRACT OR AGREEMENT REFERENCED HEREIN OTHER THAN THE STIPULATED ICC RULES AND GOVERNING LAWS.

CANCELLATION PRIOR TO EXPIRATION: YOU MAY RETURN THIS LETTER OF CREDIT TO US FOR CANCELLATION PRIOR TO ITS EXPIRATION PROVIDED THAT THIS LETTER OF CREDIT IS ACCOMPANIED BY YOUR WRITTEN AGREEMENT TO ITS CANCELLATION. SUCH WRITTEN AGREEMENT TO CANCELLATION SHOULD SPECIFICALLY REFERENCE THIS LETTER OF CREDIT BY NUMBER, CLEARLY INDICATE THAT IT IS BEING RETURNED FOR CANCELLATION AND BE SIGNED BY A PERSON IDENTIFYING THEMSELVES AS AUTHORIZED TO SIGN FOR YOU.

EXCEPT AS OTHERWISE EXPRESSLY STATED HEREIN, THIS STANDBY LETTER OF CREDIT IS SUBJECT TO AND GOVERNED BY THE LAWS OF THE STATE OF CALIFORNIA AND THE INTERNATIONAL STANDBY PRACTICE 1998, INTERNATIONAL CHAMBER OF COMMERCE PUBLICATION NO. 590 AND, IN THE EVENT OF ANY CONFLICT, THE LAWS OF THE STATE OF CALIFORNIA WILL CONTROL.

WE HEREBY ENGAGE WITH YOU THAT EACH DEMAND PRESENTED TO US IN COMPLIANCE WITH THE TERMS AND PROVISIONS OF THIS LETTER OF CREDIT WILL BE DULY HONORED BY PAYMENT TO YOU.

Very Truly Yours,

WELLS FARGO BANK, N.A.

By: _____
Authorized Signature

The original of the Letter of Credit contains an embossed seal over the Authorized Signature.

Please direct any written correspondence or inquiries regarding this Letter of Credit, always quoting our reference number, to **Wells Fargo Bank, National Association**, Attn: U.S. Standby Trade Services

at either ***or***

794 Davis Street, 2nd Floor
MAC A0283-023
San Leandro, CA 94577-6922

401 N. Research Pkwy, 1st Floor
MAC D4004-017,
Winston-Salem, NC 27101-4157

Phone inquiries regarding this credit should be directed to our Standby Customer Connection Professionals

[*] (Hours of Operation: 8:00 a.m. PT to 5:00 p.m. PT)

[*] (Hours of Operation: 8:00 a.m. EST to 5:00 p.m. EST)

EXHIBIT A
WELLS FARGO BANK, N.A.
LETTER OF CREDIT NO. _____

SIGHT DRAFT

DATE: [INSERT DATE]

TO:
WELLS FARGO BANK, N.A.
ATTN; U.S. STANDBY TRADE SERVICES
794 DAVIS STREET, 2ND FLOOR
SAN LEANDRO, CA 94577-6922

AT SIGHT, PAY TO THE ORDER OF [INSERT BENEFICIARY NAME],

[INSERT AMOUNT OF DRAWING IN WORDS] UNITED STATES DOLLARS (US$[INSERT AMOUNT OF DRAWING IN NUMBERS]

DRAWN UNDER WELLS FARGO BANK, N.A. STANDBY LETTER OF CREDIT NO. _____.

[INSERT BENEFICIARY NAME]

[INSERT SIGNATURE BLOCK WITH SIGNATURE]

ANNEX I TO ECCA AND LLC AGREEMENT DEFINITIONS

"1940 Investment Company Act" means the Investment Company Act of 1940, as amended.

"Acceptable Credit Party" means a commercial bank or other financial institution which maintains an office or corresponding office in the United States, whose long-term unsecured debt is rated "A-" or higher by S&P and "A3" or higher by Moody's Investor Service, Inc. and which has a tangible net worth of at least $500,000,000.

"Accounting Firm" means any of Deloitte Touche Tohmatsu, Ernst & Young, KPMG International, PricewaterhouseCoopers or any nationally-recognized Affiliate thereof, reasonably approved by Class Majority Vote.

"Accounting Period" is defined in Section 5.1(d)(i) of the LLC Agreement.

"Act" is defined in the Preliminary Statements to the LLC Agreement.

"Adjusted Capital Account" means the Capital Account of a Member (a) increased by the amount of potential deficit that the Member is deemed obligated to restore, calculated as described in the last sentence of Treasury Regulation Section 1.704-2(g)(1) and the last sentence of Treasury Regulation Section 1.704-2(i)(5), and (b) decreased by expected items described in Treasury Regulation Section 1.704-1(b)(2)(ii)(d)(4), (5) and (6).

"Administrative Services Agreement" means the First Amended and Restated Administrative Services Agreement, dated as of June 14, 2019, between the Company and Bloom.

"Administrator" means Bloom or any replacement administrator under an Administrative Services Agreement.

"Affiliate" means, with respect to any Person, any other Person controlling, controlled by or under common control with such first Person. For purposes of this definition, the term "control" (and correlative terms) means (a) the ownership of 50% or more of the equity interest in a Person, or (b) the power, whether by contract, equity ownership or otherwise, to direct or cause the direction of the policies or management of a Person. Bloom will not be considered an Affiliate or owner of Mehetia.

"Agreement" means the LLC Agreement if used in the LLC Agreement or the ECCA if used in the ECCA.

"Annual Budget" is defined in Section 7.1(b) of the LLC Agreement.

"Applicable Laws" means all laws (including common law), constitutions, statutes, rules, regulations, ordinances, judgments, settlements, orders, decrees, injunctions, and writs of any Governmental Authority, in each case, having jurisdiction over Bloom, DSGH, the Company, Southern, the Administrator or the Project, as applicable (but excluding the Tariffs).

"Appraisal Method" means one appraiser shall be appointed by the holders of a majority of the Class A Membership Interests and one appraiser shall be appointed by the holders of a majority of the Class B Membership Interests, in each case, within 15 days of invocation of this procedure, which appraisers shall attempt to agree upon the fair market value of the Class B Membership Interests or Company property, as applicable. If either holders of the Class A Membership Interests or holders of the Class B Membership Interests do not appoint their respective appraiser within five (5) days after the end of such fifteen (15) day period, the determination of the appraiser appointed by the other Person (if so appointed within such period) shall be conclusive and binding on the Members. If the appraisers appointed by the holders of Class A Membership Interests and the holders of Class B Membership Interests are unable to agree upon the fair market value within thirty (30) days after the appointment of the second of such appraisers, the two appraisers shall appoint a third appraiser. In such case, the average of the two determinations of the appraisers that are closest in amount shall be conclusive and binding on the Members, unless the determination of any of the appraisers differs from the middle determination by more than twice the amount by which the remaining determination differs from the middle determination, in which case the most disparate appraisal shall be excluded, and the average of the remaining two determinations shall be conclusive and binding on the Members.

"Assumed Tax Benefits" is defined in Section 7.1(d) of the ECCA.

"Assumed Tax Benefits Collateral" is defined in Section 11.16 of the LLC Agreement.

"Assumed Tax Benefits Damages" is defined in Section 7.1(d) of the ECCA.

"Bankruptcy" of a Person means the occurrence of any of the following events: (a) the filing by such Person of a voluntary case or the seeking of relief under any chapter of Title 11 of the United States Code, as now constituted or hereafter amended (the "Bankruptcy Code"), (b) the making by such Person of a general assignment for the benefit of its creditors, (c) the admission in writing by such Person of its inability to pay its debts as they mature, (d) the filing by such Person of an application for, or consent to, the appointment of any receiver or a permanent or interim trustee of such Person or of all or any portion of its property, including the appointment or authorization of a trustee, receiver or agent under applicable law or under a contract to take charge of its property for the purposes of enforcing a lien against such property or for the purpose of general administration of such property for the benefit of its creditors, (e) the filing by such Person of a petition

seeking a reorganization of its financial affairs or to take advantage of any bankruptcy, reorganization, insolvency, readjustment of debt, dissolution or liquidation law or statute, or an answer admitting the material allegations of a petition filed against it in any proceeding under any such law or statute, (f) an involuntary case is commenced against such Person by the filing of a petition under any chapter of the Bankruptcy Code and within sixty (60) days after the filing thereof either the petition is not dismissed or the order for relief is not stayed or dismissed, (g) an order, judgment or decree is entered appointing a receiver or a permanent or interim trustee of such Person or of all or any portion of its property, including the entry of an order, judgment or decree appointing or authorizing a trustee, receiver or agent to take charge of the property of such Person for the purpose of enforcing a lien against such property or for the purpose of general administration of such property for the benefit of the creditors of such Person, and such order, judgment or decree shall continue unstayed and in effect for a period of sixty (60) days, or (h) an order, judgment or decree is entered, without the approval or consent of such Person, approving or authorizing the reorganization, insolvency, readjustment of debt, dissolution or liquidation of such Person under any such law or statute, and such order, judgment or decree shall continue unstayed and in effect for a period of sixty (60) days. The foregoing definition of "Bankruptcy" is intended to replace and shall supersede the definition of "Bankruptcy" set forth in Sections 18-101(1) and 18-304 of the Act.

"Base Case Model" means the financial model titled Project Leone Model_Southern Power (6.12.2019) – Base Case.xslm posted to the Project Leone Venue Deal Solutions hosted by Bloom Energy.

"Bloom" means Bloom Energy Corporation, a Delaware corporation.

"BOF" has the meaning provided in the CapEx Agreement.

"Brookside Facility" means all Systems and BOF located at 512 E. Chestnut Hill Road, Newark, DE 19713.

"Brookside Site" means the Site described in the Brookside Site Lease.

"Brookside Site Lease" means the Lease Agreement, dated as of April 19, 2012, between DDOT and the Company.

"Business Day" means any day other than (a) a Saturday or Sunday or (b) a day on which commercial banks in New York City are authorized or required to be closed.

"CapEx Agreement" means that certain Fuel Cell System Supply and Installation Agreement dated as of June 14, 2019 by and between Bloom and the Company.

"Capital Account" means an account for each Member calculated as described in Section 4.2(b) of the LLC Agreement and used to distribute assets at liquidation as described in Section 10.2 of the LLC Agreement.

"Capital Contribution" means, with respect to any Member, the amount of money and the initial Gross Asset Value of any property contributed to the Company with respect to the Membership Interests in the Company held or purchased by such Member.

"Cause" means fraud, gross negligence or willful misconduct of the Managing Member, solely in that capacity.

"Certificate" or "Certificate of Formation" is defined in the Preliminary Statements to the LLC Agreement.

"Change of Control" means with respect to an entity, an event in which a Person or Persons who prior to a transaction or series of transactions, possessed, whether directly or indirectly, legally or beneficially:

(a) 50% or more of the equity, capital or profits interests of such entity; or

(b) Control of such entity;

and as a result of a consummation of any transaction or series of transactions (including any merger or consolidation), such Person or Persons fails to maintain, whether directly or indirectly, legally or beneficially, either of the elements of control listed in clauses (a) or (b) above.

"Claims" is defined in Section 3.6(a) of the LLC Agreement.

"Class A Indemnified Costs" means, with respect to any Class A Member or the Company, any and all damages, losses, claims, liabilities, demands, charges, suits, Taxes, penalties, costs, and reasonable expenses (including court costs and reasonable attorneys' fees and expenses of one law firm for all Class A Indemnified Parties and the Company) incurred by such Class A Indemnified Parties or the Company, resulting from or relating to (i) any breach or default or misrepresentation by any Class B Member or an Affiliate of a Class B Member of any representation, warranty, covenant, indemnity or agreement under the ECCA or the LLC Agreement, (ii) any action taken, or any failure to take action, by a Class B Member or any Affiliate of a Class B Member that causes the Company to fail to qualify (or to lose qualification) as a "Qualified Fuel Cell Provider Project" under the QFCP-RC Tariff (except that any action taken, or failure to act, by Bloom or any subcontractor of Bloom pursuant to a contract with the Company will not be considered an action or failure of a Class B Member or its Affiliate), or (iii) any claim for fraud or willful misconduct on

the part of any Class B Member or any of Affiliate of a Class B Member relating to the ECCA or the LLC Agreement.

"Class A Indemnified Parties" means DSGH and any person to whom DSGH transfers any portion of its Class A Membership Interests in accordance with Article IX of the LLC Agreement, and each of their respective Affiliates and each of their respective shareholders, partners members, officers, directors, employees, agents, and other representatives, and their respective successors and assigns.

"Class A Member" is defined in the Preamble of the LLC Agreement.

"Class A Member Competitor" means (a) Persons involved with combustion engine development, commercialization or deployment, (b) Persons involved with fuel cell development, commercialization or deployment, (c) Persons involved with the development, commercialization or deployment of automobiles, and (d) Persons (other than natural persons) majority owned in countries with Intellectual Property risk.

"Class A Membership Interests" means membership interests in the Company that are held initially by DSGH and have the rights described in the LLC Agreement.

"Class B Guaranty" means that certain Guaranty Agreement dated as of the Effective Date, by Southern Power Company in favor of DSGH.

"Class B Indemnified Costs" with respect to any Class B Member or the Company, any and all damages, losses, claims, liabilities, demands, charges, suits, Taxes, penalties, costs, and reasonable expenses (including court costs and reasonable attorneys' fees and expenses of one law firm for all Class B Indemnified Parties and the Company) incurred by such Class B Indemnified Parties or the Company, resulting from or relating to (i) any breach or default or misrepresentation by a Class A Member or its Affiliate, as applicable, of any representation, warranty, covenant, indemnity or agreement under the ECCA or the LLC Agreement (as a Class A Member, Managing Member or Partnership Representative), (ii) any action taken, or any failure to take action, by the Class A Member or its Affiliates that causes the Company to fail to qualify (or to lose qualification) as a "Qualified Fuel Cell Provider Project" under the QFCP-RC Tariff, or (iii) any claim for fraud or willful misconduct on the part of such Class A Member or its Affiliate relating to the ECCA or the LLC Agreement.

"Class B Indemnified Parties" means Southern and any person to whom Southern transfers any portion of its Class B Membership Interests in accordance with Article IX of the LLC Agreement, and each of their respective Affiliates and each of their respective shareholders, partners members, officers, directors, employees, agents, and other representatives, and their respective successors and assigns.

"Class B Member" is defined in the Preamble of the LLC Agreement.

"Class B Membership Interests" means the membership interests in the Company that are initially held by Southern and having the rights described in the LLC Agreement.

"Class Majority Vote" is defined in Section 3.2(f) of the LLC Agreement.

"Clean Technologies" means Clean Technologies II, LLC.

"Closing Date" means the date that the LLC Agreement is executed by the parties thereto and the Initial Funding occurs.

"Code" means the Internal Revenue Code of 1986, as amended from time to time.

"Company" means Diamond State Generation Partners, LLC.

"Company Distributable Cash" means, as of any date, all cash, cash equivalents and liquid investments (excluding Capital Contributions, Repurchase Payments and Permitted Investments) held by the Company as of such date less all reasonable reserves that, in the reasonable judgment of the Managing Member, are necessary or appropriate for the operation of the Company consistently with the Prudent Operator Standard. Reasonable reserves shall consist of any combination of the following reserves as reasonably determined by the Managing Member, without duplication: (a) necessary for payment of expenses included in the annual budget of the Company, (b) necessary to prevent or mitigate an emergency situation, (c) established with the prior written consent of the Members (by Class Majority Vote), (d) necessary to allow the Company to meet expenses that are clearly identified and expected with reasonable certainty to become due, but that are not included in the annual budget of the Company, (e) necessary to ensure sufficient spare parts or the payment of operational and maintenance costs for the Project, and (f) any additional reserves approved by all of the Members.

"Company Minimum Gain" means the amount of minimum gain there is in connection with nonrecourse liabilities of the Company, calculated in the manner described in Treasury Regulation Sections 1.704-2(b)(2) and 1.704-2(d).

"Confidential Information" is defined in Section 11.12(a) of the LLC Agreement.

"Consult" or "Consultation" means to confer with, and reasonably consider and take into account the reasonable suggestions, comments or opinions of, another Person.

"Control" or "Controlled by" means the possession, directly or indirectly, of any of the following: (a) in the case of a corporation, more than 50% of the outstanding voting securities thereof; (b) in the case of a limited liability company, partnership, limited partnership or joint venture, the right to more than 50% of the distributions (including liquidating distributions) therefrom; (c) in the case of a trust or estate, including a business trust, more than 50% of the beneficial interest therein; and (d) in the case of any other entity,

more than 50% of the economic or beneficial interest therein; or in the case of any entity, the power or authority, through ownership of voting securities, by contract or otherwise, to exercise a controlling influence over the management of the entity.

"DDOT" means the Delaware Department of Transportation.

"Depreciation" means for each Fiscal Year or part thereof, an amount equal to the depreciation, amortization, or other cost recovery deduction allowable for United States federal income tax purposes with respect to an asset for such Fiscal Year or part thereof, except that if the Gross Asset Value of an asset differs from its adjusted basis for United States federal income tax purposes at the beginning of such Fiscal Year, the depreciation, amortization, or other cost recovery deduction for such Fiscal Year or part thereof shall be an amount which bears the same ratio to such Gross Asset Value as the United States federal income tax depreciation, amortization, or other cost recovery deduction for such Fiscal Year or part thereof bears to such adjusted tax basis. If such asset has a zero adjusted tax basis, the depreciation, amortization, or other cost recovery deduction for each taxable year shall be determined under a method reasonably selected by the Managing Member and agreed to by Members representing a Class Majority Vote.

"Designated Transfer" is defined in Section 9.6 of the LLC Agreement.

"Disqualified Entity" means (a) the United States, any state or political subdivision thereof, any possession of the United States or any agency or instrumentality of any of the foregoing; (b) any organization which is exempt from tax imposed by the Code (including any former tax-exempt organization within the meaning of Section 168(h)(2)(E) of the Code); (c) any Person who is not a "United States person" (within the meaning of Section 7701(a)(30) of the Code; (d) any Indian tribal government described in Section 7701(a)(40) of the Code; (e) any "tax-exempt controlled entity" under Section 168(h)(6)(F) of the Code; and (f) any partnership or other pass-through entity (including a disregarded entity) a direct owner of which is described in clauses (a)–(e) or this clause (f); provided, that any such Person shall not be considered a Disqualified Entity to the extent that (i) the exception under Section 168(h)(1)(D) of the Code applies with respect to the income from the Company for that Person, (ii) the Person is described within clause (c) of this definition and the exception under Section 168(h)(2)(B)(i) of the Code applies with respect to the income from the Company for that Person, or (iii) such Person avoids being a "tax-exempt controlled entity" under Section 168(h)(6)(F) of the Code by making an election under Section 168(h)(6)(F)(ii) of the Code.

"Distribution Date" means, in respect of every month, commencing the month following the Effective Date of the LLC Agreement, the date that falls on the last Business Day of such month.

"Dollars" or "$" means the lawful currency of the United States of America.

"DPL" means Delmarva Power & Light Company, a DPSC regulated utility company.

"DPL Agreements" means the service applications between the Company and DPL with respect to the REPS Act and the Tariffs, whereby DPL shall (a) serve as the agent for collection of amounts due from the Company (if any) and for disbursement of amounts due to the Company under the QFCP-RC Tariff and (b) sell to the Company natural gas under the Gas Tariff.

"DPSC" means the Delaware Public Service Commission, the Governmental Authority charged with regulating DPL and issuing the Tariffs.

"DSGH" means Diamond State Generation Holdings, LLC, a Delaware limited liability company.

"DSGH LLC Agreement" or "DSGH LLCA" means the Third Amended and Restated Limited Liability Company Agreement of DSGH dated as of June 14, 2019, by and between Clean Technologies and Mehetia.

"ECCA" means the Equity Capital Contribution Agreement with respect to the Company dated as of June 14, 2019 by and between Bloom, Southern, DSGH and the Company.

"Effective Date" is defined in the Preamble of the ECCA and in the Preliminary Statements of the LLC Agreement, as applicable.

"Encumbrance" means any charge, claim, community property interest, condition, equitable interest, lien, option, pledge, mortgage, security interest, right of first refusal or restriction of any kind, including any restriction on use, voting, transfer, receipt of income or exercise of any other attribute of ownership.

"Energy" means three-phase, 60-cycle alternating current electric energy produced by the Systems.

"Environmental Laws" means all Applicable Laws pertaining to the environment, human health, safety and natural resources, including, but not limited to, the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (42 U.S.C. § 9601 et seq.), and the Superfund Amendments and Reauthorization Act of 1986, the Resource Conservation and Recovery Act of 1976 (42 U.S.C. §§ 6901 et seq.), and the Hazardous and Solid Waste Amendments Act of 1984, the Clean Air Act (42 U.S.C. §§ 7401 et seq.), the Federal Water Pollution Control Act (also known as the Clean Water Act) (33 U.S.C. §§ 1251 et seq.), the Toxic Substances Control Act (15 U.S.C. §§ 2601 et seq.), the Safe Drinking Water Act (42 U.S.C. §§ 300f et seq.), the Endangered Species Act (16 U.S.C. §§ 1531 et seq.), the Hazardous Materials Transportation Act (49 U.S.C. §§ 1801 et seq.), and any

similar or analogous state and local statutes or regulations promulgated thereunder and decisional law of any Governmental Authority, as each of the foregoing may amended or supplemented from time to time in the future, in each case to the extent applicable with respect to the property or operation to which application of the term "Environmental Laws" relates.

"ERISA" means the Employee Retirement Income Security Act of 1974, as amended.

"Exchange Transaction" means the repurchase of the Existing Systems pursuant to the Repurchase Agreement and the purchase and sale of the New Systems pursuant to the CapEx Agreement.

"Exempt Wholesale Generator" means an "exempt wholesale generator" under PUHCA.

"Existing Project" is defined in the Preliminary Statements to the ECCA.

"Existing BOF" has the meaning provided in the CapEx Agreement.

"Existing Systems" is defined in the Preliminary Statements to the ECCA.

"Existing Systems Income and Losses" has the meaning set forth in Section 5.1(a) of the LLC Agreement.

"Existing Systems Output Percentage" has the meaning set forth in Section 5.1(d)(ii) of the LLC Agreement.

"Extraordinary Shared Facility Maintenance Expenses" has the meaning set forth in Section 5.1(d)(iii) of the LLC Agreement.

"Extraordinary Shared Facility Revenue" has the meaning set forth in Section 5.1(d)(iv) of the LLC Agreement.

"Federal Power Act" or "FPA" means the Federal Power Act of 1935, as amended, and the implementing regulations of FERC.

"FERC" means the Federal Energy Regulatory Commission and its successors.

"FERC 203 Application" means the application by the Company seeking the Section 203 Order.

"Final Contribution" means, with respect to any New System, the amount required by the Company to pay the second installment of the Purchase Price with respect to such New System and BOF, as required pursuant to the CapEx Agreement.

"Final Determination" is defined in Section 7.1(d) of the ECCA.

"Financial Statements" is defined in Section 3.1(h) of the ECCA.

"Fiscal Year" is defined in Section 7.9 of the LLC Agreement.

"Flow of Funds Memorandum" is defined in Section 2.2(a) of the ECCA.

"Funding" means the Initial Funding and/or a Subsequent Funding, as the context requires.

"Funding Date" means the date of any Funding.

"Funding Notice" means a notice in the form of Exhibit A to the ECCA.

"Funding Payments" means the payments made in connection with a Funding.

"Funding Termination Date" means December 31, 2019.

"GAAP" means generally accepted accounting principles as recognized by the American Institute of Certified Public Accountants, as in effect from time to time, consistently applied and maintained on a consistent basis for a Person throughout the period indicated and consistent with such Person's prior financial practice.

"Gas Tariff" means DPL's Service Classification "LVG-QFCP-RC" filed for gas service applicable to REPS Qualified Fuel Cell Provider Projects and approved by DPSC in Order no. 8062 dated October 18, 2011, as adopted and supplemented by DPSC's Findings, Opinion and Order No. 8079, dated December 1, 2011.

"Governmental Approval" means all filings, notifications, orders, certificates, determinations, registrations, permits, licenses, approvals and authorizations with or of any Governmental Authority or other entity pursuant to applicable Legal Requirements.

"Governmental Authority" means any governmental department, commission, board, bureau, agency, court or other instrumentality of any country, state, province, county, parish or municipality, jurisdiction, or other political subdivision thereof, or any regional transmission organization or independent system operator subject to the jurisdiction of FERC.

"Gross Asset Value" means, with respect to any asset, the asset's adjusted tax basis for federal income tax purposes, except as follows:

(a) the initial Gross Asset Value of any asset contributed by a Member to the Company shall be the Gross Fair Market Value of such asset as of the date of contribution; provided that the initial Gross Asset Values of the assets contributed

to the Company on the Closing Date shall be shown in Schedule 4.2(b) to the LLC Agreement;

(b) the Gross Asset Values of all Company assets shall be adjusted to equal their respective fair market values at the times described in Section 4.2(c) of the LLC Agreement;

(c) the Gross Asset Value of any item of Company assets distributed to any Member shall be adjusted to equal the Gross Fair Market Value of such asset on the date of distribution;

(d) the Gross Asset Values of all Company assets shall be adjusted to reflect any adjustments to the adjusted basis of such assets pursuant to Sections 734(b) or 743(b) of the Code, but only to the extent that such adjustments are required to be taken into account in determining Capital Accounts pursuant to Treasury Regulation Section 1.704-1(b)(2)(iv)(m); provided, however, that Gross Asset Values shall not be adjusted pursuant to this subsection (d) to the extent that the Managing Member determines that an adjustment pursuant to subsection (b) is necessary or appropriate in connection with a transaction that would otherwise result in an adjustment pursuant to this subsection (d); and

(e) if the Gross Asset Value of an asset has been determined or adjusted pursuant to subsection (a), (b) or (d) above, such Gross Asset Value shall thereafter be adjusted by the Depreciation taken into account with respect to such asset.

"Gross Fair Market Value" means, with respect to any asset, the fair market value of the asset as reasonably determined by the Managing Member and agreed to by Members representing a Class Majority Vote.

"Indebtedness" means any of the following, including any amounts owed under the Note Purchase Agreement by and among Diamond State Generation Holdings, LLC and the purchasers party thereto, dated as of March 20, 2013, the Notes issued thereunder, and any other agreements or instruments entered into in connection therewith:

(a) indebtedness for borrowed money owed to third parties;

(b) obligations for the deferred purchase price of property or services

(c) obligations evidenced by notes, bonds, debentures or other similar instruments (whether or not convertible) or arising under indentures;

(d) obligations arising out of any financial hedging, swap or similar arrangements;

(e) obligations as lessee that would be required to be capitalized in accordance with GAAP, whether or not recorded;

(f) obligations in connection with any letter of credit, banker's acceptance, guarantee, surety, performance or appeal bond, or similar credit transaction;

(g) interest payable with respect to Indebtedness referred to in clause (a) through (f); and

(h) the aggregate amount of all prepayment premiums, penalties, breakage costs, "make whole amounts," costs, expenses and other payment obligations that would arise if all such items under clauses (a) through (g) were prepaid, extinguished, unwound and settled in full as of such specified date.

"Indemnified Costs" means Class A Indemnified Costs or Class B Indemnified Costs, as the context requires.

"Indemnified Party" means a Class A Indemnified Party or Class B Indemnified Party, as the context requires.

"Indemnifying Party" means the Class A Member or either Class B Member, as the context requires.

"Indemnity Cap" is defined in Section 7.1(d) of the ECCA.

"Independent Accountant" means Ernst & Young LLP.

"Independent Engineer" means Leidos Engineering, LLC.

"Independent Engineer Report" means the report of the Independent Engineer to be dated on or before the Effective Date.

"Initial Funding" .is defined in Section 2.1 of the ECCA.

"Interconnection Agreement" means, with respect to (a) the Brookside Facility, that certain Standard Agreement for Interconnection and Parallel Operation of Generation Facilities, dated as of March 27, 2012, by and between Delmarva Power and Light Company and Buyer, with respect to PJM Generation Interconnection Request Queue Position X2-083; and (b) the Red Lion Facility, that certain Interconnection Service Agreement, dated as of June 19, 2012, by and among PJM Interconnection, L.L.C., Buyer, and Delmarva Power and Light Company, with respect to PJM Generation Interconnection Request Queue Position X1-097.

"Interconnection Facilities" means the portion of a Project interconnecting the applicable Systems to the Interconnection Point.

"Interconnection Point" means, with respect to (a) the Brookside Facility, the "Point of Interconnection" specified in the Interconnection Agreement for such Facility, and (b) the Red Lion Facility, the "Point of Interconnection" specified in the Interconnection Agreement for such Facility.

"Internal Rate of Return" means the discount rate that causes "A" to equal "B" in present-value terms where "A" is the sum of the present values as of the Effective Date, calculated using the Microsoft Excel "XIRR" function of (a) the Tax Credits allocated to the Class B Members (equal to twenty five percent (25%) of the Tax Credits associated with the New System prior to October 31, 2024 and one hundred percent (100%) of the Tax Credit on and after October 31, 2024), and (b) the tax savings from deductions and losses that the Class B Members are allocated, and (c) cash that is distributed to the Class B Members, and (d) any indemnity payments made by Bloom or the Class A Member to the Class B Members or any Class B Indemnified Party that substitute for amounts in clauses (a), (b) and (c), and where "B" is the sum of the present values as of the Effective Date, calculated using the Microsoft Excel "XIRR" function, of (d) the Capital Contributions that the Class B Members make to the Company (or are made to the Company on such Members' behalf), and (e) the tax detriment from (i) any taxable income or gain allocated to the Class B Members, and (ii) any gain recognized by the Class B Members under Section 731(a) of the Code as a result of distributions or deemed distributions from the Company, and (f) without duplication of amounts described in clause (e) hereof, any payment made by the Class B Members to any tax authority after and solely as a result of an audit with respect to the New Project or the Company.

"IP License" means that certain Intellectual Property License concerning certain IP Rights between Bloom and Southern Power Company dated as of June 14, 2019.

"IP Rights" is defined in Section 3.1(x) of the ECCA.

"IRS" means the Internal Revenue Service or any successor agency.

"ITC" means the investment tax credit under Section 48 of the Code.

"Joint Senate Resolution" means the Senate Joint Resolution No. 1, dated May 23, 2019, directing the DPSC to review the Qualified Fuel Cell Provider Tariff with the goal of finding ways to mitigate the future burden on DPL ratepayers.

"Knowledge" means, with respect to either Bloom or Southern, the actual knowledge of the persons set forth for Bloom or Southern, as applicable, listed below or their successors or replacements.

Name	Company
[*]	Bloom
[*]	Bloom
[*]	Bloom
[*]	Southern

"kW" means kilowatt or one thousand watts of energy.

"Legal Requirement" means any law (including common law), statute, act, decree, ordinance, rule, directive (to the extent having the force of law), order, treaty, code or regulation (including any of the foregoing relating to health or safety matters or any Environmental Law) or any interpretation of any of the foregoing, as enacted, issued or promulgated by any Governmental Authority, including all amendments, modifications, extensions, replacements or re-enactments thereof.

"Liabilities" means any Indebtedness, liability, debt or obligation whatsoever, whether known or unknown, asserted or unasserted, absolute or contingent, accrued or unaccrued, liquidated or unliquidated, incurred or due or to become due.

"LLC Agreement" or "LLCA" means the Third Amended and Restated Limited Liability Company Agreement of the Company, dated as of June 14, 2019, by and between Southern and DSGH.

"Major Decision" means the Managing Member causing the Company to take of any of the actions set forth on Exhibit E to the LLC Agreement.

"Majority Vote" is defined in Section 3.2(f) of the LLC Agreement.

"Managing Member" is defined in Section 8.2(a) of the LLC Agreement.

"Managing Member Transfer Date" is defined in Section 8.2(a) of the LLC Agreement.

"Marshall & Stevens" means Marshall & Stevens, Inc.

"Material Adverse Effect" means a material adverse effect in the aggregate on the business, assets, liabilities, financial condition or results of operations of the Company,

excluding any effect resulting from (a) effects of weather or meteorological events, (b) general industry strikes, work stoppages or other labor disturbances, or (c) the execution or delivery of the Transaction Documents or the transactions contemplated in them or the announcement of such transactions.

"Material Contract" means (a) a contract for the sale of Energy or transmission services of a Facility for a term of more than one year, (b) a contract, lease, indenture or security agreement under which the Company (i) has created, incurred, assumed or guaranteed any indebtedness for borrowed money or obligations under any lease that, in accordance with GAAP, or international financial reporting standards, as applicable, should be capitalized, (ii) has created a mortgage, security interest or other consensual encumbrance on any property with a fair market value of more than $250,000 (other than any Permitted Liens), or (iii) has a reimbursement obligation in respect of any letter of credit, guaranty, bond, or other credit or collateral support arrangement required to be maintained by the Company under the terms of any contract referred to in clause (a) above, (c) a contract for management, operation or maintenance of the Company or a Facility that requires payments of more than $250,000, (d) a product warranty or repair contract by or with a manufacturer or vendor of equipment owned or leased by the Company with a fair market value of more than $250,000, (e) any other contract that is expected to require payments by the Company, in the aggregate, of more than $250,000 per calendar year, (f) the Transaction Documents and Project Documents, and (g) the Tariffs other than the QFCP- RC Tariff. For the avoidance of doubt, the QFCP-RC Tariff shall not be considered a contract or a Material Contract.

"Maximum Aggregate Southern Portfolio Purchase Price" has the meaning provided in the CapEx Agreement.

"Mehetia" means Mehetia Inc., a Delaware corporation.

"Member" means any Person executing the LLC Agreement as of the date of the LLC Agreement as a member of the Company or any Person admitted to the Company as a member as provided in the LLC Agreement (each in the capacity as a member of the Company), but does not include any Person who has ceased to be a member of the Company.

"Member Nonrecourse Debt" means "partner nonrecourse debt" as defined in Treasury Regulation Section 1.704-2(b)(4). An example is where a Member or a person related to the Member makes a loan on a nonrecourse basis to the Company.

"Member Party" is defined in Section 3.6(a) of the LLC Agreement.

"Membership Interest" means the interest of a Member in the Company, including rights to distributions (liquidating or otherwise), allocations, and to vote, consent or approve, if any.

"Minimum Gain Attributable to Member Nonrecourse Debt" means the amount of minimum gain there is in connection with a Member Nonrecourse Debt, calculated in the manner described in Treasury Regulation Section 1.704-2(i)(3).

"MOMA" means the Amended and Restated Master Operations and Maintenance Agreement, dated as of June 14, 2019, between the Company and the Operator.

"Monthly Contribution" means, with respect to any New System, which is not an Initial Funding New System, that is commissioned during the immediately preceding calendar month, the amount equal to sum of sixty percent (60%) of the aggregate Purchase Price of such New Systems, as required pursuant to the CapEx Agreement.

"MW" means megawatt or one million watts of energy.

"NDA" is defined in Section 4.1 of the ECCA.

"New Project" is defined in the Preliminary Statements to the ECCA.

"New BOF" has the meaning provided in the Cap Ex Agreement.

"New Systems" means the Systems purchased by the Company pursuant to the CapEx Agreement from and after the Effective Date.

"New Systems Income and Losses" has the meaning set forth in Section 5.1(b) of the LLC Agreement.

"New Systems Output Percentage" has the meaning set forth in Section 5.1(d)(v) of the LLC Agreement.

"Non-Managing Member" means (i) the Class B Member, while the Class A Member is the Managing Member and (ii) the Class A Member, while the Class B Member is the Managing Member.

"Notice" has the meaning set forth in Section 11.1 of the LLC Agreement.

"Nonrecourse Deduction" means a deduction for spending that is funded out of nonrecourse borrowing by the Company or that is otherwise attributable to a "nonrecourse liability" of the Company within the meaning of Treasury Regulation Section 1.704-2.

"Operating Expenses" has the meaning set forth in Section 5.1(d)(vi) of the LLC Agreement.

"Operating Revenue" has the meaning set forth in Section 5.1(d)(vii) of the LLC Agreement.

"Operations Report" is defined in Section 7.1(a) of the LLC Agreement.

"Operator" means Bloom.

"Ordinary Course of Business" means the ordinary conduct of business consistent with past custom and practice (including with respect to quantity and frequency).

"Organizational Documents" means the Certificate of Formation and the LLC Agreement of the Company.

"Partnership Representative" is defined in Section 7.7(a) of the LLC Agreement.

"Party" means, for purposes of the ECCA, a party to the ECCA and for purposes of the LLC Agreement, a party to the LLC Agreement.

"Payment Date Amount" has the meaning set forth in the Repurchase Agreement.

"Percentage Interest" means the percentage interest shown for a Class A Member or Class B Member, as applicable, in Schedule 4.2(d) of the LLC Agreement, as updated from time to time.

"Permitted Encumbrance" means Encumbrances (a) provided for under the Transaction Documents, and (b) restrictions on transfer of the Membership Interests under any applicable federal, state or foreign securities law.

"Permitted Investments" means any of the following having a maturity of not greater than one year from the date of issuance thereof: (a) readily marketable direct obligations of the government of the United States of America or any agency or instrumentality thereof or obligations unconditionally guaranteed by the full faith and credit of the government of the United States of America, (b) insured certificates of deposit of or time deposits with any commercial bank that is a member of the Federal Reserve System, issues (or the parent of which issues) commercial paper rated as described in clause (c) below, is organized under the laws of the United States or any State thereof and has combined capital and surplus of at least $1,000,000,000 or (c) commercial paper issued by any corporation organized under the laws of any State of the United States and rated at least "Prime-1" (or the then equivalent grade) by Moody's Investors Service, Inc. or "A-1" (or the then equivalent grade) by Standard & Poor's Corporation.

"Permitted Liens" means (a) Liens for taxes not yet due or that are being contested in good faith by appropriate proceedings and for which adequate reserves have been established in accordance with GAAP (b) carriers', warehousemen's, mechanics', materialmen's, repairmen's, employees', contractors', operators' or other similar Liens or charges securing the payment of expenses not yet due and payable that were incurred in the Ordinary Course of Business of the Company or for amounts being contested in good faith

and by appropriate proceedings, (c) obligations or duties to any Governmental Authority arising in the Ordinary Course of Business (including under licenses and permits held by the Company and under all applicable laws, rules, regulations and orders of any Governmental Authority), (d) security interests granted to satisfy credit support obligations or margin requirements under any existing or subsequently entered into power purchase agreement, power sales agreement, natural gas supply agreement (including the DPL Agreements), or swap or hedge agreement, in each case, in which the Company (but not any Affiliate of the Company) is the counterparty to such agreement, (e) Permitted Encumbrances and (f) with respect to the Company, easements, rights-of-way, restrictions, reservations and other similar encumbrances and exceptions to title existing or incurred in the ordinary course of business that, in the aggregate, do not in any case materially detract from the value of the property subject thereto or materially interfere with the ordinary conduct of the business of the Company, taken as a whole.

"Permitted Transfer" has the meaning set forth in Section 9.5 of the LLC Agreement.

"Person" means an individual, corporation, partnership, limited liability company, association, trust, unincorporated organization, or other entity.

"PJM" means PJM Interconnection, LLC, a regional transmission organization.

"PJM Agreements" is defined in the QFCP-RC Tariff.

"PJM Grid" means the PJM electricity transmission grid.

"PJM Market" means the PJM-administered markets in which the Company is to sell all of its energy, capacity, and ancillary services pursuant to the QFCP-RC Tariff and the PJM Agreements, and any PJM successor market.

"Project" means, collectively, the Existing Project and the New Project.

"Portfolio" has the meaning provided in the MOMA.

"Project Documents" means (a) the DPL Agreements, (b) the PJM Agreements, (c) the Site Leases, (d) the Gas Services Agreements, (e) the Wholesale Market Participation Agreement, (f) the MOMA, (g) the CapEx Agreement, and (h) the Repurchase Agreement.

"Prudent Operator Standard" means that a Person will (a) perform its duties in compliance with the requirements of the Material Contracts, and (b) perform the duties in accordance with commercially reasonable applicable fuel cell industry standards, taking into account, (i) with respect to the New Systems, through the Recapture Period the need to maintain qualification for ITC and to avoid any ITC recapture event suffered by the Class B Member, and (ii) use sufficient and properly trained and skilled personnel.

"PUHCA" means the Public Utility Holding Company Act of 2005 and FERC's implementing regulations.

"Purchase Price" means the purchase price payable by the Company to Bloom for a New System pursuant to the CapEx Agreement.

"QFCP-RC Tariff" means DPL's Service Classification "QFCP-RC" for REPS Qualified Fuel Cell Provider Projects as approved by DPSC in Order no. 8062 dated October 18, 2011, as adopted and supplemented by DPSC's Findings, Opinion and Order No. 8079, dated December 1, 2011.

"Qualified Manager" means, with respect to any proposed Transfer, such Person is (a) an entity that (i) has (x) owned or operated for a period of at least three (3) years (within the then most recent four year period), and at the time of such Transfer continues to own and operate, solid oxide fuel cell power generating systems or (y) engaged a Person who has owned or operated for a period of at least three (3) years (within the then most recent four year period), and at the time of such Transfer continues to own and operate, solid oxide fuel cell power generating systems. For avoidance of doubt, if the MOMA remains in place with Bloom as the Operator, such Transferee shall be considered a Qualified Manager.

"Quarter" means a calendar quarter.

"RECs" means any credits, credit certificates, green tags or similar environmental or green energy attributes (such as those for greenhouse reduction or the generation of green power or renewable energy) created by a governmental agency or independent certification board or group generally recognized in the electric power generation industry, and generated by or associated with the Project or electricity produced therefrom, but excluding the ITC.

"Red Lion Facility" means all Bloom Systems and BOF located at 1493 River Road, New Castle, DE 19720.

"Red Lion Site Lease" means that certain Amended and Restated Lease Agreement, dated as of June 26, 2012, between DPL and the Company.

"Representatives" means, with respect to any Person, the managing member(s), the officers, directors, employees, representatives or agents (including investment bankers, financial advisors, attorneys, accountants, brokers and other advisors) of such Person, to the extent that such officer, director, employee, representative or agent of such Person is acting in his or her capacity as an officer, director, employee, representative or agent of such Person.

"REPS Act" means the Renewable Energy Portfolio Standards Act, as amended most recently by S.B. 124, enacted July 10, 2011 (Title 26, Chap. 1, section 351 et seq. of the Code of the State of Delaware).

"Repurchase Agreement" means the Repurchase Agreement, dated as of June 14, 2019, by and between the Company and Bloom.

"Repurchase Payments" means the Payment Date Amounts made by Bloom to the Company for the purchase of the Existing Systems under the Repurchase Agreement.

"Revenue and Expense Statement" is defined in Section 5.2(a) of the LLC Agreement.

"Schedules" means the schedules attached to the LLC Agreement or the ECCA, as the context requires.

"Second A&R LLCA" is defined in the Preamble to the LLC Agreement.

"Section 203 Order" means the order issued by FERC authorizing Southern to assume control of the Company under Section 203(a)(1) of the FPA.

"Securities Act" means the Securities Act of 1933, as amended.

"Shared Assets" means all tangible and intangible assets of the Company that include rights and obligations in connection with both the Existing Systems and the New Systems, including (a) the Shared Facilities, (b) the DPL Agreements, (c) the PJM Agreements, (d) the MOMA, (e) the Site Leases, (f) the Administrative Services Agreement, (g) the Governmental Approvals (other than those exclusively related to either the Existing Systems or the New Systems, if any), and (h) Shared BOF.

"Shared BOF" means, at any point in time, either (a) the BOF used by both the New Systems and the Existing Systems or (b) the BOF that is not New BOF or Existing System BOF.

"Shared Facilities" means all tangible assets located on a Site used by both the Existing Project and the New Project.

"Site" means the real property where the Project is located pursuant to the Site Leases.

"Site Leases" means, collectively, the Red Lion Site Lease and the Brookside Site Lease.

"Southern" means SP Diamond State Class B Holdings, LLC.

"Specially Allocated Existing System Items" has the meaning set forth in Section 5.1(d)(viii) of the LLC Agreement.

"Specially Allocated New System Items" has the meaning set forth in Section 5.1(d)(ix) of the LLC Agreement.

"Statement of Objections" is defined in Section 5.2(c) of the LLC Agreement.

"Subsequent Funding" is defined in Section 2.2(b) of the ECCA.

"Subsequent Funding Date" is defined in Section 2.2(b) of the ECCA.

"Subsidiary" means, with respect to any Person, any corporation, partnership, limited liability company, joint venture or other entity of which such Person (either alone or through or together with any other Person pursuant to any agreement, arrangement, contract or other commitment) owns, directly or indirectly, 50% or more of the stock or other equity interests the holders of which are generally entitled to vote for the election of the board of directors or other governing body of such corporation or other legal entity.

"System" means each proprietary solid oxide fuel cell power generating unit including the integrated assembly of mounting assemblies, metering, transformers, disconnects, switches, wiring devices and wiring interconnected with the PJM Grid and connected to DPL as the supplier of natural gas to fuel the System. Systems shall be comprised solely of the Existing Systems and the New Systems.

"System Replacement Period" is defined in the Preliminary Statements of the ECCA.

"Tariff Damages" is defined in Section 7.1(c) of the ECCA.

"Tariff Damages Collateral" is defined in Section 11.15 of the LLCA.

"Tariff Event" means any of the following (i) a revocation of the QFCP-RC Tariff, (ii) a failure of Bloom to be a Qualified Fuel Cell Provider (as defined in the MOMA), (iii) DSGP not qualifying (or losing qualification) for service under the QFCP-RC Tariff, (iv) the Portfolio not qualifying (or losing qualification) as a Qualified Fuel Cell Provider Project (as defined in the MOMA), or (v) an alteration, modification or reduction of the Tariff "Disbursement Rates" as compared to the "Disbursement Rates" set forth in the Base Case Model; *provided*, however, that no Tariff Event shall be deemed to have occurred as a result of any action of any Class B Indemnified Party or the Company without the prior written consent of Bloom (but any action taken by Bloom or any subcontractor of Bloom pursuant to a contract with the Company will not be considered an action of a Class B Indemnified Party or the Company).

"Tariffs" means the QFCP-RC Tariff and the Gas Tariff.

"Tax" (and, with correlative meaning, "Taxes" and "Taxable") means:

(a) any taxes, customs, duties, charges, fees, levies, penalties or other assessments, fees and other governmental charges imposed by any Governmental Authority, including, but not limited to, income, profits, gross receipts, net proceeds,

windfall profit, severance, property, personal property (tangible and intangible) production, sales, use, leasing or lease, license, excise, duty, franchise, capital stock, net worth, employment, occupation, payroll, withholding, social security (or similar), unemployment, disability, payroll, fuel, excess profits, occupational, premium, severance, estimated, alternative or add-on minimum, ad valorem, value added, turnover, transfer, stamp, or environmental tax, or any other tax, custom, duty, fee, levy or other like assessment or charge of any kind whatsoever, together with any interest, penalty, addition to tax, or additional amount attributable thereto; and

(b) any liability for the payment of amounts with respect to payment of a type described in clause (a), including as a result of being a member of an affiliated, consolidated, combined or unitary group, as a result of succeeding to such liability as a result of merger, conversion or asset transfer or as a result of any obligation under any tax sharing arrangement or tax indemnity agreement.

"Taxing Authority" means any Governmental Authority responsible for the administration or imposition of any Tax.

"Tax Returns" means any return, report, statement, information return or other document (including any amendments thereto and any related or supporting information) filed or required to be filed with any Governmental Authority in connection with the determination, assessment, collection or administration of any Taxes or the administration of any laws, regulations or administrative requirements relating to any Taxes, including after the Closing Date any IRS Schedule K-1 issued to Members by the Company, information return, claim for refund, amended return or declaration of estimated Tax.

"Third Party Claim" means any action, proceeding, demand or claim by a third party (it being understood that any Affiliate of a Member shall not be deemed to be a third party).

"Third Party Penalty Claim" is defined in Section 9.13 of the LLC Agreement.

"Transaction Documents" means the LLC Agreement, the ECCA, the Repurchase Agreement, the MOMA, the Administrative Services Agreement, the CapEx Agreement and the Class B Guaranty.

"Transfer" is defined in Section 9.1(a) of the LLC Agreement.

"Treasury" means the United States Department of the Treasury.

"Treasury Regulations" means the regulations promulgated under the Code, by the Treasury, as such regulations may be amended from time to time. All references herein to specific sections of the regulations shall be deemed also to refer to any corresponding provisions of succeeding regulations, and any reference to temporary regulations shall be deemed also to refer to any corresponding provisions of final regulations.

"UCC" means the Uniform Commercial Code, as the same may be in effect in the State of New York or any other applicable jurisdiction.

OTHER DEFINITIONAL PROVISIONS

All terms in the ECCA and the LLC Agreement, as applicable, shall have the defined meanings when used in any certificate or other document made or delivered pursuant thereto unless otherwise defined therein.

As used in the ECCA and the LLC Agreement and in any certificate or other documents made or delivered pursuant thereto, accounting terms not defined in the ECCA or the LLC Agreement or in any such certificate or other document, and accounting terms partly defined in the ECCA or the LLC Agreement or in any such certificate or other document to the extent not defined, shall have the respective meanings given to them under GAAP. To the extent that the definitions of accounting terms in the ECCA or the LLC Agreement or in any such certificate or other document are inconsistent with the meanings of such terms under GAAP, the definitions contained in the ECCA or the LLC Agreement or in any such certificate or other document shall control.

The words "hereof", "herein", "hereunder", and words of similar import when used in the ECCA and the LLC Agreement shall refer to the ECCA or the LLC Agreement, as the context requires, as a whole and not to any particular provision of the ECCA or the LLC Agreement. Section references contained in the ECCA and the LLC Agreement are references to Sections in the ECCA or the LLC Agreement, as applicable, unless otherwise specified. The term "including" shall mean "including without limitation".

The definitions contained in the ECCA and the LLC Agreement are applicable to the singular as well as the plural forms of such terms and to the masculine as well as to the feminine and neuter genders of such terms.

Any agreement, instrument or statute defined or referred to herein or in any instrument or certificate delivered in connection herewith means such agreement, instrument or statute as from time to time amended, modified or supplemented and includes (in the case of agreements or instruments) references to all attachments thereto and instruments incorporated therein.

Any references to a Person are also to its permitted successors and assigns.

All Article and Section titles or captions contained in the ECCA or the LLC Agreement, as applicable, or in any Exhibit, Annex or Schedule referred to therein and the table of contents of the ECCA and the LLC Agreement are for convenience only and shall not be deemed a part of the ECCA or the LLC Agreement, as the context requires, or affect the meaning or interpretation of the ECCA or the LLC Agreement, as applicable. Unless otherwise specified, all references in the ECCA or the LLC Agreement to numbered Articles

and Sections are to Articles and Sections of the ECCA or the LLC Agreement, as applicable, and all references herein to Annexes, Schedules or Exhibits are to annexes, schedules and exhibits to the ECCA or the LLC Agreement, as applicable.

Unless otherwise specified, all references contained in the ECCA or the LLC Agreement, in any Exhibit, Annex or Schedule referred to therein or in any instrument or document delivered pursuant thereto to dollars or "$" shall mean United States dollars.

The Parties to the ECCA have participated jointly in the negotiation and drafting of the ECCA. The Parties to the LLC Agreement have participated jointly in the negotiation and drafting of the LLC Agreement. In the event an ambiguity or question of intent or interpretation arises, the ECCA and the LLC Agreement shall be construed as if drafted jointly by the respective Parties thereto and no presumption or burden of proof shall arise favoring or disfavoring any Party by virtue of the authorship of any of the provisions of the ECCA or the LLC Agreement, as the context requires.

REDACTED EXHIBIT: This Exhibit contains certain identified information that has been excluded because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed. Redacted information is identified by [***].

Execution

PURCHASE, USE AND MAINTENANCE AGREEMENT

between

BLOOM ENERGY CORPORATION
as Seller

and

2018 ESA PROJECT COMPANY, LLC
as Buyer

dated as of June 28, 2019

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PURCHASE, USE AND MAINTENANCE AGREEMENT

This PURCHASE, USE AND MAINTENANCE AGREEMENT (this "Agreement"), dated as of June 28, 2019 (the "Agreement Date"), is entered into by and between BLOOM ENERGY CORPORATION, a Delaware corporation ("Seller"), and 2018 ESA Project Company, LLC, a Delaware limited liability company ("Buyer"). Seller and Buyer are referred to in this Agreement individually, as a "Party" and, collectively, as the "Parties".

RECITALS

WHEREAS, Seller is in the business of designing, engineering, constructing, commissioning, selling, operating, and maintaining on-site solid oxide fuel cell power generating Facilities comprised of Bloom Systems, BOF and, where applicable, Ancillary Equipment;

WHEREAS, Buyer is a company formed for the purpose of purchasing and owning Facilities for use in generation of electricity and provision of related services to ESA Customers pursuant to ESAs;

WHEREAS, Buyer desires to purchase, and Seller desires to sell, Facilities to be developed, designed, engineered, procured, constructed, and commissioned in connection with such ESAs, all on a turnkey basis pursuant to the terms and conditions of this Agreement; and

WHEREAS, Buyer desires to engage Seller to provide certain operations and maintenance services to the Facilities, and Seller desires to provide such operations and maintenance services, all in accordance with the terms and conditions of this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants, representations, warranties and agreements hereinafter set forth, and intending to be legally bound hereby, the Parties agree as follows:

AGREEMENT

ARTICLE I
DEFINITIONS

Section 1.1 Definitions. As used in this Agreement, capitalized terms not otherwise defined shall have the meanings set forth below:

"[***]" means [***].

"205 Authority" is defined in Section 3.10(1).

"205 [***]" is defined in Section 3.10(2).

"Actual kWh" means (a) with respect to any Facility, the actual electricity output in kWh produced by such Facility and measured by the Facility Meter, and (b) subject to adjustment for meter defects pursuant to an ESA, where appropriate in the context of this Agreement, aggregated together with the actual energy output of other Facilities.

"Additional Invoice Due Date" means any Business Day, not to occur more than one time per Calendar Quarter.

"Adjustment Quarter" is defined in Section 2.6(1).

"Administrative Services Agreement" means the "ASA" as defined in the MIPA.

"Affected Party" is defined in Section 12.6(1).

"Affiliate" of any Person means a Person that directly, or indirectly through one or more intermediaries, controls, or is controlled by, or is under common control with, the Person specified, provided that notwithstanding anything in this Agreement to the contrary, Seller is not an Affiliate of Buyer and no ESA Customer is an Affiliate of Buyer or Seller. For purposes of this Agreement, the direct or indirect ownership of over fifty percent (50%) of the outstanding voting securities of an entity, or the right to receive over fifty percent (50%) of the profits or earnings of an entity shall be deemed to constitute control. Such other relationships as in fact results in actual control over the management, business and affairs of an entity, shall also be deemed to constitute control.

"After-Tax Basis" means, with respect to any payment to be actually or constructively received, the amount of such payment (the "base payment") and any further payment (the "additional payment") to such recipient so that the sum of the base payment plus the additional payment shall, after deduction of the amount of all federal income taxes required to be paid by such recipient in respect of the receipt or accrual of the base payment and the additional payment, using an assumed rate equal to the Corporate Tax Rate (and ignoring state and local taxes), taking into account any federal income tax savings realized by the recipient as a result of the event giving rise to the payment, using an assumed rate equal to the Corporate Tax Rate, equals the amount required to be received.

"Aggregate Purchase Price" means, with respect to a given Facility, the sum of (i) the Purchase Price of such Facility, (ii) the Purchase Price Adders, if any, of such Facility, and (iii) any Taxes

due and payable pursuant to Section 2.3(3) for such Facility, in each case as adjusted under Section 2.6.

"Agreement" is defined in the preamble.

"Agreement Date" is defined in the preamble.

"Ancillary Equipment" means certain ancillary equipment installed in connection with a Bloom System pursuant to the design thereof, to allow such Facility to perform in accordance with the requirements of the applicable ESA. "Ancillary Equipment" may include, by way of example and without limitation, AOMs, Battery Solutions, Low-Pressure Gas Boosters, UPMs, and similar equipment. For the avoidance of doubt, "Ancillary Equipment" includes any Delayed Ancillary Equipment.

"Anti-Corruption Laws" means: (a) the U.S. Foreign Corrupt Practices Act of 1977, as amended; (b) the U.K. Bribery Act 2010, as amended; and (c) any other anti-bribery or anti-corruption laws, regulations or ordinances in any jurisdiction in which the Seller or its Affiliates is located or doing business.

"Anti-Money Laundering Laws" means applicable laws or regulations in any jurisdiction in which Seller is located or doing business that relates to money laundering, drug trafficking, terrorism financing, any predicate crimes to money laundering, or any financial record keeping, and reporting requirements related thereto.

"AOM" means an auxiliary output module, to be included in certain of the Facilities.

"Appraisal" means the appraisal of the fair market value of a Facility including a cost segregation report prepared by the Appraiser allocating the Buyer's basis in the Facility among the assets of the Facility.

"Appraisal Procedure" means within fifteen (15) days of a Party invoking the procedure described in this definition Buyer and Seller shall engage a Qualified Appraiser, mutually acceptable to them, to conclusively determine within fifteen (15) days after appointment the Fair Market Value of a Facility.

"Appraiser" means Marshall & Stevens Incorporated.

"Approved LDC" means, with respect to each Site, the local natural gas distribution company serving the ESA Customer at such Site. For the avoidance of doubt, natural gas supplied by any Approved LDC shall be deemed to satisfy Seller's requirements regarding the quality and composition of natural gas supplied to the Bloom Systems sold to Buyer hereunder.

"Assets" means, with respect to any Person, all assets and properties of every kind (whether real, personal or mixed, whether tangible or intangible), which assets and properties are owned or leased by such Person.

"Bankruptcy" or "Bankrupt" as to any Person means the filing of a petition for relief as to any such Person as debtor or bankrupt under the Bankruptcy Code or like provision of law (except if such petition is contested by such Person and has been dismissed within sixty (60) days); insolvency of such Person as finally determined by a court proceeding; filing by such Person of a petition or application to accomplish the same or for the appointment of a receiver or a trustee for such Person or a substantial part of its Assets; commencement of any proceedings relating to such Person under any other reorganization, arrangement, insolvency, adjustment of debt or liquidation law of any jurisdiction, whether now in existence or hereinafter in effect, either by such Person or by another, *provided*, that if such proceeding is commenced by another, such Person indicates its approval of such proceeding, consents thereto or acquiesces therein, or such proceeding is contested by such Person and has not been finally dismissed within sixty (60) days.

"Bankruptcy Code" means 11 U.S.C Chapter 11.

"Bankruptcy Laws" is defined in Section 11.4.

"Base Case Model" means the economic model titled "Project Oxygen Bloom Fund 8 Base Case Model 6-25-2019.xlsx," posted to the Electronic Data Room on or before the Agreement Date.

"Battery Solution" means, with respect to any Facility, an integrated battery solution, as described in the specifications set forth on Schedule 1.

"Bill of Sale" means a bill of sale substantially in the form set forth in Exhibit G.

"BloomConnect" " means a web-based data portal with datasets and pointers for access to such datasets through a dashboard interface that provides, with respect to a given Facility, (i) for a period of aggregated 15-minute intervals, full-time visibility into operational status, capacity, efficiency, fuel consumption and generation output, which may be acquired in downloadable format, and (ii) interactive graphs and animations that illustrate the benefits of sustainability, gas consumption, and energy generation, in each case tailored to the Portfolio.

"Bloom System" means a solid oxide fuel cell power generating system, capable of being powered by natural gas, that is designed, constructed and installed by Seller.

"BOF" means, for each Site, the balance of facility items included in each Facility including, as applicable, Electrical Interconnection Facilities, the natural gas supply facilities, the water supply facilities, the data communications facilities, the foundations for the Bloom Systems and any other facilities and equipment ancillary to the Bloom Systems and installed in connection with the Facility at each Site and all other things ancillary to the Facility and required on or in the vicinity of the Site which are necessary to achieve Commencement of Operations at each such Site or which are otherwise required by the applicable ESA or Site License for such Site, but excluding Ancillary Equipment.

"Business Day" means a day other than a Saturday, Sunday or other day on which banks in New York, New York, or San Francisco, California, are authorized or required to close.

"Buyer" is defined in the preamble.

"Buyer Default" is defined in Section 12.2.

"Buyer Indemnitee" is defined in Section 13.3(1).

"Buyer Manager" is defined in Section 4.6(2).

"Buyer's Notice" is defined in Section 3.6.

"Buyer Parent" means Project Oxygen Holdings, LLC, a Delaware limited liability company.

"Calendar Quarter" means each period of three months ending on March 31, June 30, September 30 and December 31.

"Capacity Warranty" means the Performance Warranty or the Performance Guaranty, as applicable.

"Certificate of COO" means a certificate, substantially in the form set forth in Exhibit F.

"Certificate of Delivery Milestone Completion" means a certificate, substantially in the form set forth in Exhibit E.

"Certificate of Deposit Milestone Completion" means a certificate, substantially in the form set forth in Exhibit D.

"Claiming Party" is defined in Section 12.6(1).

"Code" means the Internal Revenue Code of 1986, as amended.

"Commencement of Operations" means, with respect to any Facility, the completion and the performance of all of the following activities:

(a) all Bloom Systems, Ancillary Equipment and related BOF comprising such Facility has been Delivered;

(b) such Facility has been installed at the location specified in the applicable Site License and Placed in Service;

(c) (i) such Facility (A) has been attached to the load at the applicable Site, (B) is producing power at one hundred percent (100%) of the aggregate System Capacity of all Bloom Systems included in such Facility, and (C) is operating at or above the Minimum Efficiency Level, and (ii) Seller has provided Buyer with evidence reasonably satisfactory to Buyer of each of the foregoing;

(d) all Pre-COO Equipment Warranty Claims raised by Buyer in respect of such Facility shall have been addressed by Seller in accordance with Section 3.3(2);

(e) Seller has (i) performed and successfully completed all necessary acts under the applicable Interconnection Agreement (including performance testing) and (ii) obtained PTO from the applicable Person; and

(f) Seller shall have performed and successfully completed all obligations required to be completed on or before such date under the Transaction Documents and the applicable ESA, Site License, Incentive Agreements and any other applicable contract or agreement by which Buyer is bound or to which such Facility or the components thereof are subject (including, for the avoidance of doubt, obtaining all Permits, PTO and valid, binding and enforceable Interconnection Agreements and successfully completing all items that would, if not so completed, materially impact the operational capability, durability or reliability of the Facility);

provided, if the applicable ESA provides that items of Delayed Ancillary Equipment to be installed in connection with a Facility shall be installed or commissioned subsequent to Commencement of Operations of the Bloom System, in any case if not in breach or violation of, or default under, such ESA, "Commencement of Operations" of such Facility shall not require the completion of the installation and commissioning of such Delayed Ancillary Equipment items, but this proviso shall not relieve Seller of its obligations in Section 3.4(1)(xiv).

"Commencement of Operations Date" means, with respect to any Facility, the date on which it achieves Commencement of Operations.

"Commencement of Operations Date Deadline" means December 31, 2020.

"Competitor of Seller" means any Person, including its Affiliates, subsidiaries and parent, and any successors thereto, that (1) engages in the business of designing, engineering, fabricating, manufacturing, deploying, installing, operating or maintaining (A) combustion engines and generators that are between 50kW and 1.5MW, including the list set forth in Schedule 14.4(a), as may be amended from time to time pursuant to Section 14.4(5) (B) fuel cells for use in residential, commercial or industrial settings, including fuel cells that are hydrogen, phosphoric acid, proton exchange membrane, regenerative, zinc air, protonic ceramic, microbial, polymer electrolyte membrane, direct methanol, alkaline, phosphoric acid, molten carbonate, solid oxide and reversible, or (C) distributed energy resources, (2) is known by recent and unrefuted press release, credible news source, or securities filing, to be interested in, investigating or pursuing the development of fuel cells, (3) is not a "United States person" as defined in 26 U.S.C. 7701(a)(30) and (x) is owned, in whole or in part, directly or indirectly, by a government agency, or (y) has a score that is less than 37 on the most recent U.S. Chamber of Commerce's IP Index or, regardless of its score on such index, is organized under the laws of or headquartered in China, Russia or South Korea, or (4) is engaged in material litigation or another material dispute with Seller; *provided*, a Competitor of Seller shall not include (i) a passive investor with ownership interest in any Person that meets the foregoing definition, so long as such passive investor does not itself satisfy any of the foregoing descriptions or (ii) under any circumstances the Persons listed or set forth on Schedule 14.4(b), as may be amended from time to time pursuant to Section 14.4(5).

"Components" means any tangible materials, components and spare or replacement parts reasonably required for the construction, installation, commissioning, operation, maintenance and repair of a Facility.

"Confidential Information" is defined in Section 10.1.

"[***] ESA" means the ESA between Buyer and [***], dated as of December 26, 2018.

"Construction Update" is defined in Section 6.2(2).

"Contract" means any agreement, contract, instrument, obligation, commitment, covenant, understanding, promise, promissory note, bond, indenture, insurance policy, deed, lease, license, franchise, purchase order, sales order or other obligation, undertaking or arrangement (whether written or oral) that is legally binding.

"Corporate Tax Rate" means as of a given date of determination, the maximum allowable U.S. federal corporate income tax rate applicable to corporations but excluding S corporations.

"Credit Support" means any deposit, performance or payment assurance or amounts otherwise posted by any Person in support of any obligation or duty of such Person or another Person (whether in the form of a guarantee, letter of credit, payment or performance bond, cash or other deposit or otherwise).

"Data Room" means Egnyte (or similar FTP solution) (i) created and maintained by Seller, (ii) that provides upload, download and read only access, (iii) that promptly transmits an email alert to Buyer when any files are added, modified or deleted (identifying each such addition, modification or deletion) and (iv) to which Buyer has 24/7 electronic access to read, download and print files therein provided.

"DDP (Incoterms 2010)" means Delivered Duty Paid (DDP) as such term is used in the International Rules for the Interpretation of Trade Terms (identified as "INCOTERMS® 2010") as prepared by the International Chamber of Commerce.

"Delayed Ancillary Equipment" means, with respect to any ESA Customer, ESA and Site for which there is Delayed Battery Power Rating (kW) and Delayed Battery Energy Capacity (kWh) set forth in Schedule 1, the Battery Solutions contemplated to be delivered under such ESA with respect to such Site.

"Delivery" or "Delivered" means the physical delivery of a Bloom System or item of Ancillary Equipment or BOF to a Site.

"Delivery Date" means for each Facility, the date upon which the "Delivery Milestone" is achieved for such Facility, as set forth in the Certificate of Delivery Milestone Completion.

"Delivery Milestone" means, with respect to any Facility, the completion of the following activities:

(1) the Bloom Systems and all Ancillary Equipment (if any) comprising such Facility have been Delivered;

(2) BOF for such Bloom Systems necessary to place such Bloom Systems on concrete pad for such Bloom Systems has been Delivered [***];

(3) Such Bloom Systems have been placed upon such concrete pad and are available for installation, startup and commissioning;

(4) Seller has obtained, on behalf of itself, Buyer or the applicable ESA Customer (as applicable), in respect of such specific Facility, any approvals, drawings and notices described in clause (a) of the definition of "Deposit Milestone" that (i) are required to be obtained before Delivery pursuant to such ESA or such Site License and (ii) were not obtained in connection with the Deposit Milestone for such Facility's Tranche;

(5) Seller shall have performed and successfully completed (i) all obligations required to be completed on or before such date under this Agreement and the applicable Facility Contracts, Permits and Legal Requirements and (ii) all upgrades required to be performed in respect of the applicable Facility pursuant to an Interconnection Agreement (whether or not executed) or as otherwise required by a Transmitting Utility; and

(6) No portion of such Facility has been Placed in Service.

"Deposit Date" means, with respect to a Tranche, the date that such Tranche achieves the Deposit Milestone, as set forth in the Certificate of Deposit Milestone Completion.

"Deposit Milestone" means, for a Tranche, the achievement of each of the following activities:

(a) Seller has received (on behalf of Buyer or itself, as applicable) approval of Site plans and single-line drawings from one or more ESA Customers for Facilities with aggregate System Capacity equal to or greater than the aggregate System Capacity of Facilities included in such Tranche (and all other Tranches for which Seller previously delivered a Certificate of Deposit Milestone Completion to Buyer); provided, that if any Third Party Consents (including the issuance of notices to proceed, if applicable) are required from an ESA Customer or a Site License grantor (or either of their Affiliates), or if the satisfaction of any other conditions precedent is required (including the construction of separate buildings and other facilities), as a condition to Buyer or its subcontractors (including Seller) commencing installation pursuant to the applicable ESA or Site License, then such Third Party Consents shall have been received or achieved, and such other conditions precedent shall have been satisfied, as applicable;

(b) Seller has received all materials required for the commencement of fabrication of Bloom Systems with aggregate System Capacity equal to or greater than the aggregate System

Capacity of Facilities included in such Tranche, and all materials required as of such time to allow for completion of such fabrication in order to achieve Commencement of Operations of such Facilities (and all Facilities included in all other Tranches for which Seller previously delivered a Certificate of Deposit Milestone Completion to Buyer) within ninety (90) days; and

(c) Seller shall have performed and successfully completed all obligations required to be completed on or before such date under the Transaction Documents and the applicable Facility Contracts (including, for the avoidance of doubt, obtaining all Permits if required as a condition to the Deposit Milestone under any Facility Contract).

"Documentation" means all Bloom System documentation necessary for constructing, testing, operating, and maintaining a Facility, including testing documentation, engineering documentation, specifications, and operations and maintenance manuals, Training Materials, drawings, reports, standards, schematics, directions, samples and patterns, including any such Documentation required to be delivered prior to Commencement of Operations.

"Efficiency" means the quotient of E/F, where (i) E = the electricity produced by the applicable Facility, measured in BTUs (British Thermal Units) at an assumed conversion rate of 3,412 BTUs per kWh, and (ii) F = the fuel consumed by such Facility, measured in BTUs on a lower heating value basis as determined by the mass flow controller included in the applicable Facility.

"Efficiency Warranty" is defined in Section 5.3.

"Electrical Interconnection Facilities" means, with respect to any Facility, the equipment and facilities required to safely and reliably interconnect such Facility to the transmission system of the Transmitting Utility, including the collection system between the related Bloom System, transformers and all switching, metering, communications, control and safety equipment, including the facilities described in any applicable Interconnection Agreement.

"Electronic Data Room" means the electronic data room known as the "Shared Drive" for "Bloom Project Fund VIII", available through www.dfsvenue.com, established by the Seller in anticipation of the transactions contemplated by this Agreement and the MIPA.

"Energy" means three-phase, 60-cycle alternating current electric energy constituting the Actual kWh.

"Energy Tolling Agreement" means an energy services agreement, power purchase agreement, or similar agreement, by and between Buyer and an ESA Customer, a New Customer or a customer, as the case may be.

"Environmental Law" means any Legal Requirement which pertains to health, safety, welfare, pollution, any Hazardous Material, or the environment (including but not limited to ground or air or water or noise pollution or contamination, and underground or above ground tanks) or protection of natural, cultural, archaeological or biological resources and shall include without limitation, the

Solid Waste Disposal Act, 42 U.S.C. § 6901 et seq.; the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. § 9601 et seq., as amended by the Superfund Amendments and Reauthorization Act of 1986; the Hazardous Materials Transportation Act, 49 U.S.C. § 1801 et seq.; the Federal Water Pollution Control Act, 33 U.S.C. § 1251 et seq.; the Clean Air Act, 42 U.S.C. § 7401 et seq.; the Toxic Substances Control Act, 15 U.S.C. § 2601 et seq.; the Safe Drinking Water Act, 42 U.S.C. § 300f et seq.; and any other state or federal environmental statutes, and all rules, regulations, orders and decrees now or hereafter promulgated under any of the foregoing, as any of the foregoing now exist or may be changed or amended or come into effect in the future.

"Environmental Requirements" means any Environmental Law, any Permit issued pursuant to Environmental Law and any agreement or restriction (including but not limited to any condition or requirement imposed by any insurance or surety company), as the same now exists or may be changed or amended or come into effect in the future, which pertains to health, safety, welfare, any Hazardous Material, the environment or protection of natural, cultural, archaeological or biological resources.

"Equinix" means Equinix, Inc.

"Equinix ESA" means each of the ESAs listed on Schedule 1 with an ESA Customer of Equinix.

"Equipment Fee" means, with respect to each Facility, amounts due in connection with achievement of the Deposit Milestone or Delivery Milestone for such Facility.

"ESA" means each Energy Tolling Agreement between Buyer and an ESA Customer listed on Schedule 1, as the same may be updated from time to time by the mutual agreement of the Parties (including pursuant to Section 2.9). If any such agreement is executed and delivered in respect of more than one Facility, then such agreement with respect to each individual Facility shall constitute and be deemed to mean one (1) "ESA" hereunder (i.e., a single agreement with an ESA Customer in respect of three (3) Facilities shall be deemed to be three (3) ESAs hereunder). If any such agreement is in the form of a master agreement with Facility-specific confirmations attached, then with respect to each applicable Facility, "ESA" shall be deemed to mean such master agreement and such confirmation applicable thereto.

"ESA Customer" means each counter-party to an ESA.

"ESA Remarketing Activities" is defined in Section 4.8(1).

"ESA Warranties" means the payment obligations of Buyer to each respective ESA Customer (i) arising out of any performance guarantee, any power performance shortfall, any efficiency warranty (or other guarantee or warranty, including availability, output, minimum production, peak demand reduction, demand charge reduction, backup power provision, islanding, net metering or otherwise) or (ii) as a reimbursement to such ESA Customer for any deficiency in the benefits received by such ESA Customer under the applicable state incentive programs for any ESA.

"ESA Warranty Reimbursement Payment" is defined in Section 5.8(1).

"Event Log" means a written log substantially in the form of Exhibit I that includes (subject to the reporting criteria, event types and descriptions contained therein) information in respect of certain facts, events or circumstances in connection with the Facilities.

"Extended Warranty Period" means, with respect to each Facility, the period commencing on the first (1st) anniversary of the date such Facility achieves Commencement of Operations and ending on the thirtieth (30th) anniversary of the date of Commencement of Operations of such Facility.

"Facility" means, collectively, the Bloom Systems and the BOF at a particular Site and interconnected behind a single utility meter, sharing a single Commencement of Operations, and thereafter operated as a unified whole. For the avoidance of doubt, "Facility" includes, where applicable, any Ancillary Equipment installed in connection with the Bloom Systems at a particular Site. Where an ESA provides for multiple "Phases" at a Site (i.e., discrete installations of Bloom Systems to be installed behind a single Transmitting Utility meter), each Phase shall be understood to be a separate "Facility" for purposes of this Agreement.

"Facility Contracts" means, with respect to a Facility, (A)(i) the ESA, (ii) the Site License, (iii) the Interconnection Agreement, (iv) any Third Party Consents, (v) any Incentive Agreements, and (vi) any Governmental Approvals, and (B)(i) any Contract between the Seller or the Buyer, on the one hand, and any other Person (other than Seller's or Buyer's Affiliates, respectively), on the other hand, that governs the rights and obligations of such parties arising under or in connection with the Facility (provided, if Buyer is a party to such Contract and such Contract was not executed and delivered on or before the Agreement Date (or as and when otherwise expressly contemplated herein), such Contract shall only be a Facility Contract if Seller and Buyer have so agreed in writing), and (ii) to Seller's Knowledge, any Contract between the applicable ESA Customer and a Person other than Buyer, Seller or a Seller Affiliate that governs the rights and obligations of such parties arising under or in connection with the Facility, which Contracts described in the foregoing clauses (B)(i) or (B)(ii) would, in the course of Seller's performance of its obligations under this Agreement or Buyer's performance of its obligations under the applicable ESA or Site License, require Seller or Buyer (respectively) to satisfy or comply with, on its own behalf or its counterparty's behalf, any terms or conditions contained in such Contract; *provided, however*, Facility Contracts shall not include (1) any contracts solely between Seller and its Service Providers, including general construction, subcontracts, or procurement contracts, (2) except for the Interconnection Agreement, the ESA and the Site License, any supply agreement between the ESA Customer (or one of its Affiliates) and a supplier, for the supply of gas, water, high-speed internet service, or other materials and services other than electricity, (3) any services agreement between the ESA Customer and a service provider related to the care and management of the real property on which the Site is located or any agreement between the ESA Customer and another Person granting such ESA Customer rights in real property (unless (x) related specifically to the Site or Facility or (y) described in Section 9.2 of the Equinix ESA), and (4) any Contract of which Seller does not have Knowledge.

"Facility Meter" means, with respect to a Facility, the revenue quality electricity generation meter located at the metering point and approved by the Transmitting Utility, which shall register all Energy produced by a Facility and delivered to the Interconnection Point.

"Facility Services" is defined in Section 4.1(1).

"Facility Services Warranty" is defined in Section 5.1.

"Facility Transfer" is defined in Section 3.6.

"Fair Market Value" means, with respect to any Facility, the price at which such asset would change hands between a willing buyer and a willing seller, neither being under any compulsion to buy or to sell, and both having reasonable knowledge of the relevant facts, and specifically with respect to the Facility or any portion thereof, as determined consistently with Section 4.05 of Revenue Procedure 2007-65.

"FERC" means the Federal Energy Regulatory Commission and any successor.

"Force Majeure Event" means any event or circumstance that (a) prevents in any material respect the performance a Party from performing its obligations under this Agreement; (b) was not reasonably foreseeable by such Party; (c) was not (i) within the reasonable control of such Party, (ii) the result of the negligence or willful misconduct of such Party or its personnel, or (iii) the result of a breach of this Agreement or any other Transaction Document by such Party; and (d) such Party is unable to reasonably mitigate, delay, avoid or cause to be avoided with the exercise of due diligence such event or circumstance. "Force Majeure Event" may include, provided that the conditions in (a) through (d) in the foregoing sentence are met, (1) inability of Buyer to obtain or maintain market-based rate authority from FERC to operate the Facilities (except to the extent such inability results from a Buyer-initiated change in Buyer's business from that contemplated as of the Agreement Date), (2) an act of God, including severe weather events, wildfires and hurricanes (but, in each case, only to the extent such event is not reasonably foreseeable, based on recent or frequent prior occurrence, in the geographic location in which it occurs, and for which reasonable precautions would not prevent such prevention of performance hereunder), (3) imposition of military authority, war, civil disturbances, strike (if affecting the general labor market and not Seller or any of its Service Providers or Affiliates, specifically), terrorist activities and (unless initiated at a Facility or caused in connection with the installation, operation or maintenance of a Facility or Component thereof) fire and explosions, (4) the external power delivery system (a/k/a the grid) (excluding any Electric Interconnection Facilities owned by Buyer or an ESA Customer) being out of the required specifications or totally failing (a/k/a brownout or blackout), or electric grid curtailment by the Transmitting Utility, or (5) the curtailment, interruption or issuance of operational flow orders by the delivering pipeline or local utility company supplying natural gas to any Site. Notwithstanding the foregoing, Force Majeure Event does not include (I) the lack of economic resources of a Party, (II) Seller's (or its' suppliers, vendors' or manufacturers') failure to timely design, transport or deliver any Facility (or any Component thereof), or one of Seller's suppliers', vendors' or manufacturers' failures to timely manufacture any Facility (or any Component thereof), (III) a Seller Default, (IV) unavailability of (or higher prices for) materials, goods, labor, services, supplies or

components to be performed or provided, or necessary for Seller to perform, under this Agreement, (V) failure of a Facility, Bloom System or any Ancillary Equipment, Component, or BOF a part thereof, which failure is not characterized by all of the foregoing clauses (a) through (d), (VI) changes in Legal Requirements (it being acknowledged by the Parties that Section 12.9 shall apply in respect of such changes, rather than any relief in respect of a Force Majeure Event), (VII) the supply of natural gas from any source other than an Approved LDC or (VIII) to the extent it would otherwise constitute a Force Majeure Event, any act or omission by Seller, Seller Affiliate or a Service Provider or representative at any tier that result in a termination of the Equinix ESA based on a breach of Section 7.1(h)(i) of the Equinix ESA. If an event or circumstance gives rise to a Force Majeure Event as defined herein under this Agreement, but such event or circumstance does not also constitute a 'Force Majeure Event' (or similar term) as defined under the applicable ESA or Site License (depending on which Facilities are affected), then for the purposes of any rights and obligations of the parties under this Agreement that relate to corresponding rights or obligations under such ESA or Site License such event or circumstance will not constitute a Force Majeure Event under this Agreement.

"FPA" means the Federal Power Act, as amended.

"Funding Suspension Event" means, as of a given date of determination, (A) more than one Facility has not achieved Commencement of Operations by sixty (60) days after payment of the portion of the Aggregate Purchase Price set forth in Section 2.3(2) for such Facility (provided, that if any actions or deliverables that were required to be performed, provided or obtained, respectively, for the applicable Facility to achieve Commencement of Operations were not performed, provided or obtained, respectively, and such failure to perform, provide or obtain is reasonably subject to cure within thirty (30) days after such sixtieth (60th) day, then no Funding Suspension Event shall occur until the thirtieth (30th) day after such sixtieth (60th) day, as long as Seller continues to pursue such cure using its best efforts), or (B) failure to comply with Section 3.4(1)(xv); provided, with respect to any Facility for which the foregoing events occur, (i) if each such Facility is removed from the Scheduled Portfolio pursuant to the terms herein or (ii) the documentation required to be delivered under Section 3.4(1)(xv) for each such Facility is delivered, in each case the Funding Suspension Event shall be deemed resolved.

"GAAP" means United States generally accepted accounting principles consistently applied.

"General Product Warranty" is defined in Section 5.5(1).

"Governmental Approvals" means (a) any authorizations, consents, approvals, licenses, rulings, permits, tariffs (including emissions tariffs), rates, certifications, variances, orders, judgments, decrees by or with a relevant Governmental Authority and (b) any notice to, any declaration of, or with, or any registration or filing by, or with, any relevant Governmental Authority. Governmental Approvals do not include Permits.

"Governmental Authority" means any foreign, federal, state, local or other governmental, regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, court, tribunal, arbitrating body or other governmental authority,

including NERC, any Person that NERC has delegated its authority to under the Federal Power Act or any Person that operates an interstate or other wholesale electric transmission system; provided, that any Transmitting Utility, in its capacity as counterparty to any Interconnection Agreement but solely in such capacity, shall not be considered or deemed to be a Governmental Authority hereunder.

"Hazardous Material" means and includes those substances, pollutants, contaminants, elements or compounds which are contained or regulated as a hazardous substance, toxic pollutant, pesticide, air pollutant, or as defined in any Environmental Law, or is otherwise included in the definition of "Hazardous Materials," "Hazardous Substance" or a similar term in an ESA or a Site License.

"IE" means [***], or if [***] is unavailable, another third-party, independent engineering consultant of similar capabilities and reputation chosen by agreement of the Buyer and Seller.

"IE Certificate" means a certificate, substantially in the form set forth in Exhibit J.

"Incentive Agreement" means the agreements listed on the applicable schedule of the Administrative Services Agreement.

"Indemnifiable Loss" means any claim, demand, suit, loss, liability, damage (including any liquidated damages or rights of set-off), obligation, payment, fine, cost or expense (including the cost and expense of any investigation, action, suit, proceeding, assessment, judgment, settlement or compromise relating thereto and reasonable attorneys' fees and reasonable disbursements in connection therewith), whether involving claims solely between the Parties (or between the parties to any other Transaction Document) or by a Third Party (including any ESA Customer) against a Party (or against any party to any other Transaction Document) unless otherwise expressly stated.

"Indemnified Party" is defined in Section 13.5(1).

"Indemnifying Party" is defined in Section 13.5(1).

"Indexed ESA is defined in Section 4.9.

"Installation Fee" means, with respect to each Facility, amounts due in connection with the achievement of Commencement of Operations for such Facility, less the Equipment Fee.

"Installation Services" is defined in Section 3.4(1).

"Intellectual Property" shall mean any or all of the following and all rights therein, whether arising under the laws of the United States or any other jurisdiction: (i) all patents, utility models and patent applications (and all reissues, divisions, re-examinations, renewals, extensions, provisionals, continuations and continuations-in-part thereof), patent disclosures and inventions (whether patentable or not); (ii) all trade secrets, know-how and confidential and proprietary information; (iii) all copyrights and copyrightable works (including Software and computer programs) and registrations and applications therefor and any renewals, modifications and extensions thereof; (iv) all moral and economic rights of authors and inventors, however denominated, throughout the world;

(v) unregistered and registered design rights and any registrations and applications for registration thereof; (vi) trademarks, service marks, trade names, service names, brand names, trade dress, logos, slogans, corporate names, trade styles, domain names and other source or business identifiers, whether registered or not, together with all applications therefor and all extensions and renewals thereof and all goodwill associated therewith; (vii) semiconductor chip "mask" works, and registrations and applications for registration thereof, (viii) database rights; (ix) all other forms of intellectual property, including waivable or assignable rights of publicity or moral rights; and (x) any similar, corresponding or equivalent rights to any of the foregoing anywhere in the world.

"Interconnection Agreement" means an agreement between the ESA Customer (or Buyer, as may be required) and the applicable Transmitting Utility granting permission to interconnect a Facility to the transmission or distribution system of such Transmitting Utility.

"Interconnection Point" means, with respect to each Facility, the point at which title and risk of loss with respect to the electricity produced by such Facility passes to the applicable ESA Customer.

"Investor" is defined in Section 2.10.

"Invoice Due Date" means, as of a given month, with respect to any package of materials delivered pursuant to Section 2.4(2), the requested date for payment provided therein, which date shall be a Business Day (i) during the final seven (7) days of the calendar month in which such materials were delivered and (ii) at least ten (10) Business Days after the date such materials were delivered.

"Invoice Package" is defined in Section 2.3(5).

"IP License" is defined in Section 11.1.

"IRS" means the Internal Revenue Service or any successor agency.

"ITC" means an investment tax credit pursuant to Code Sections 38(b)(1), 46 and 48(a).

"Kaiser" means the ESA Customer under any Kaiser ESA.

"Kaiser ESA" means each of the ESAs listed on Schedule 1, the ESA Customer party to which is either Kaiser Foundation Hospitals, a California nonprofit public benefit corporation, Kaiser Foundation Health Plan, Inc., a California nonprofit public benefit corporation, or either of their Affiliates.

"Kaiser Purchaser Equipment" is defined in Section 3.2(3).

"Knowledge" means (a) as to any Person other than a natural person, the actual knowledge (as well as any knowledge that would have reasonably been obtained after due inquiry) of such Person and its managers, directors, officers and employees who have responsibility for the transactions contemplated by this Agreement, and (b) in respect of any Person who is a natural Person, the actual knowledge (as well as any knowledge that would have reasonably been obtained after due inquiry) of such Person.

"kW" means kilowatt.

"kWh" means kilowatt-hour.

"Legal Requirement" means any law, statute, act, decree, ordinance, common law decision, rule, directive (to the extent having the force of law), tariff, order, treaty, code or regulation or any interpretation of any of the foregoing, as enacted, issued or promulgated by any Governmental Authority, including all amendments, modifications, extensions, replacements or re-enactments thereof, in each case applicable to or binding upon such Person or any of its properties or to which such Person or any of its property is subject.

"Liens" means any lien, security interest, mortgage, hypothecation, encumbrance or other restriction on title or property interest.

"Long-Term Agreement" means, that certain long-term agreement, dated as of the Agreement Date, between Seller and Buyer.

"Low-Pressure Gas Booster" means a component designed to increase the pressure of natural gas supplied to a Facility by the applicable local natural gas distribution company serving an applicable ESA Customer at the applicable Site to the level required for the ordinary operation of such Facility.

"Managers" means Operations Manager and Buyer Manager.

"Manufacturer's Warranty Period" means, for each Facility, the period beginning on the date the applicable Facility achieves the requirements of subsections (a), (c), (d), (e) and (f) of the definition of "Commencement of Operations" and ending on the first (1st) anniversary of the date of Commencement of Operations of such Facility.

"Material Adverse Effect" means, for any Person or Facility, as applicable, any change, effect or occurrence that, individually or in the aggregate, is or could reasonably be expected to be materially adverse to (a) the business, earnings, assets, results of operations, property or condition (financial or otherwise) of such Person or Facility, as applicable, (b) the validity or enforceability of any Transaction Document, any applicable ESA, any applicable Site License or the transactions contemplated by this Agreement, or (c) any Person's (including any ESA Customer's) ability to perform its obligations under any Transaction Document, any applicable ESA, any applicable Site License (including any material adverse effect on any customer that has, or could reasonably be expected to have, a material adverse impact on such customer's ability to fully perform under any applicable ESA).

"Maximum Aggregate Portfolio Purchase Price" means two hundred forty-nine million dollars ($249,000,000).

"Maximum Liability" means, with respect to (a) claims arising with respect to any Facility, the Aggregate Purchase Price for such Facility, and (b) claims arising with respect to more than one

Facility, the total Aggregate Purchase Price of each of the Facilities with respect to which such claim arises.

"Milestone(s)" means each of the (i) Deposit Milestone, (ii) Delivery Milestone, and (iii) the achievement of Commencement of Operations.

"Milestone Date" means each of the (i) Deposit Date, (ii) Delivery Date, and (iii) the Commencement of Operations Date.

"Minimum Efficiency Level" means an Efficiency quotient of [***] ([***]%).

"Minimum kWh" means the product of (x) the number of hours in the applicable period *minus* the number of hours for each Facility, as of the last day of the applicable period following Commencement of Operations with respect to the applicable Facility, in each case to the extent not caused or contributed to by a breach of or failure to perform Seller's obligations hereunder (whether by Seller or its employees, agents, Service Providers or representatives), during which (i) the operation of such Facility was subject to an exclusion set forth in Section 5.6, (ii) such Facility was not delivering Energy during any period during which (A) the applicable ESA is subject to a day-for-day extension with respect to which the Warranty Period is subject to extension pursuant to Section 4.1(3) hereof, or (B) the applicable ESA Customer is liable for the payment of deemed delivered energy, and (iii) the period during which Seller ramps such Facility before or following the periods referred to in subsections (i)-(ii) of this definition, and (y) the Minimum Power Product for the applicable period. An example of a calculation of the Minimum kWh is set forth in Annex A.

"Minimum Power Product" means (1) when this term is used for the Performance Warranty, the aggregate System Capacity of the Bloom Systems in the Portfolio in kW for the applicable Calendar Quarter multiplied by [***] percent ([***]%), and (2) when this term is used for the Performance Guaranty, the aggregate System Capacity of the Bloom Systems in the Portfolio in kW for the applicable calendar year multiplied by [***] percent ([***]%), as may be updated pursuant to Section 5.2(5). An example of a calculation of the Minimum Power Product is set forth in Annex A.

"MIPA" means that certain Membership Interest Purchase Agreement, dated as of the Agreement Date, between Seller and Buyer Parent.

"MIPA Representations" means Sections 3.1, 3.2(b), 3.20, 4.1, 4.2, 4.3(b), 4.7, and 4.9 of the MIPA.

"MW" means megawatt.

"NERC" means the North American Electric Reliability Corporation or any successor.

"New Customer" means a counter-party to an Energy Tolling Agreement that is not an ESA as of the Agreement Date. With respect to any applicable Facility, any mention of the "ESA Customer" in this Agreement shall be construed to include the ESA Customers as of the Agreement Date, and any New Customer approved in accordance with Section 2.9, unless otherwise permitted herein,

and any mention of an "ESA" in this Agreement shall be construed to mean the ESAs as of the Agreement Date and any Energy Tolling Agreement approved in accordance with Section 2.9, unless otherwise permitted herein.

"New Customer Site" means a parcel of land licensed, or to be licensed, from a New Customer to Buyer under a site license agreement that is not a Site License as of the Agreement Date, together with all easements appurtenant, easements in gross, license agreements and other rights running in favor of Buyer which provide access to the applicable Facility. Any mention of the "Site" in this Agreement shall be construed to mean any New Customer Site that is approved in accordance with Section 2.9, unless otherwise permitted herein, and any mention of a Site License in this Agreement shall be construed to mean the Site Licenses as of the Agreement Date and any site license approved in accordance with Section 2.9, unless otherwise permitted herein.

"Non-Scheduled Facility" is defined in Section 2.9(6).

"Operations Manager" is defined in Section 4.6(1).

"Party" and "Parties" have the meanings set forth in the preamble.

"Payment Certificate" means a Certificate of Deposit Milestone Completion, a Certificate of Delivery Milestone Completion, or a Certificate of COO, as applicable.

"Payment Notice" means a notice delivered from Seller to Buyer once per calendar month pursuant to Section 2.4(3) substantially in the form set forth in Exhibit H.

"Performance Guaranty" is defined in Section 5.2(1).

"Performance Guaranty Bank" means, with respect to the Performance Guaranty, a tracking account maintained by Seller setting forth the "banked" differences in kWh based on calculation of the Performance Guaranty with respect to the Portfolio during each calendar year of the Warranty Period.

"Performance Guaranty Payment Cap" means the product of (x) $[***] multiplied by (y) the aggregate Purchase Price paid by Buyer for all Facilities Purchased under this Agreement prior to the applicable date.

"Performance Guaranty Payment Rate" means $[***] per kWh.

"Performance Standards" is defined in Section 3.9.

"Performance Warranty" is defined in Section 5.4(1).

"Performance Warranty Bank" means, with respect to the Performance Warranty, a tracking account maintained by Seller setting forth the "banked" differences in kWh based on calculation of the Performance Warranty with respect to the Portfolio during the Warranty Period.

"Permits" means all Governmental Approvals that are necessary under applicable Legal Requirements or this Agreement to have been obtained at such time in light of the stage of development of the Scheduled Portfolio (and the applicable Facility and Site) to site, construct, install, test, operate, maintain, repair, own, use, remove, replace or decommission each Facility as contemplated in this Agreement.

"Permitted Liens" means any (a) Liens that are released or otherwise terminated at or prior to the date of achievement of the Purchase Date of the encumbered assets; (b) obligations or duties to any Governmental Authority arising in the ordinary course of business (including under licenses and Permits held by Buyer, to the extent de minimis in nature, and under all Legal Requirements); (c) obligations or duties under easements, leases or other property rights, in each case to the extent comprising a part of and referenced in the terms and conditions of the Site License, (d) Liens that arise from due and unpaid liabilities of Seller under this Agreement that are not dischargeable by timely payment of such liabilities (provided, that the circumstances described in clause (e)(ii) of this definition of "Permitted Liens" characterize any such Lien described in this clause (d)); (e) mechanics', materialmen's, repairmen's and other similar liens arising in the ordinary course of business or incident to the construction, improvement or restoration of a Facility in respect of obligations (i) that are not yet due or (ii) that are being contested in good faith by appropriate proceedings so long as (x) such proceedings shall not involve any material risk of forfeiture, sale or loss of any part of such Facility (y) do not exceed $1,000,000 in the aggregate and (z) the payment thereof is fully covered by cash reserves, bonds or other security reasonably acceptable to Buyer; and (f) any other Liens agreed to in writing by Seller and Buyer.

"Person" means any individual, partnership, limited liability company, joint venture, corporation, trust, unincorporated organization, or governmental entity or any department or agency thereof.

"Placed in Service" means, (A) with respect to any Facility (other than any Delayed Ancillary Equipment that is not intended to generate electricity (e.g., a Battery Solution)) the completion and performance of all of the following activities: (1) obtaining the necessary Governmental Approvals for the operation of such Facility and the sale of power generated by the Facility in accordance with clause (4) of this definition, (2) satisfactory completion of critical tests necessary for the synchronization and interconnection of such Facility in accordance with clause (3) of this definition and for the proper operation of such Facility in accordance with clause (4) of this definition, (3) synchronization of such Facility onto the electric distribution and transmission system of the applicable Transmitting Utility and receipt of PTO, and (4) the commencement of regular, continuous, daily operation of such Facility and (B) with respect to any Delayed Ancillary Equipment that is not intended to generate electricity (e.g., a Battery Solution), such Delayed Ancillary Equipment is first placed in a condition or state of readiness and availability for its specifically assigned function, including by having been interconnected with the rest of such Facility; it being understood that (i) any references herein to "any of the events described in clauses (2) through (4) of the definition of 'Placed in Service'" shall be interpreted to mean the foregoing clause (B) with respect to any Delayed Ancillary Equipment and (ii) notwithstanding this definition, any reference to "Facility" (including in connection with the phrase "Placed in Service") shall include Delayed Ancillary Equipment where applicable.

"Placed in Service Date" means, with respect to a Facility, the date upon which such Facility is Placed in Service.

"Placed in Service Deadline" is defined in Section 3.4(1)(xii)(B).

"Portfolio" means, on an aggregate basis, all Bloom Systems, BOF and Ancillary Equipment to be owned by Buyer that are purchased pursuant to this Agreement and that have been incorporated into Facilities that have been, or are to be, Placed in Service and that have not thereafter been removed from the Portfolio and/or repurchased by Seller pursuant to the terms of this Agreement.

"Portfolio Warranty" is defined in Section 5.5(1).

"Power Module" means the complete assembly that contains the solid oxide fuel cell sub-system, contained by the hot box, that generates electrical power.

"PTO" means permission to interconnect a Facility with the distribution or transmission facilities of the Transmitting Utility.

"Pre-COO Equipment Warranty" is defined in Section 3.3(1).

"Pre-COO Equipment Warranty Period" is defined in Section 3.3(1).

"Pre-PIS Remarketing Activities" is defined in Section 4.8(2).

"Project Criteria" means the criteria set forth on Schedule 2.9.

"Project Information Spreadsheet" means, with respect to each Facility included in an Invoice Package, a certificate substantially in the form of Exhibit C covering such Facility.

"Project Model" means a financial model developed using the Base Case Model, as updated solely to the extent set forth in Section 2.6.

"Project Package" means, with respect to a proposed New Customer Site: (A) a copy of the following draft agreements in proposed execution form: (i) the ESA that is proposed to apply to such Site, (ii) the Site License that is proposed to apply to such Site, (iii) applicable Incentive Agreements, if any and (iv) draft Interconnection Agreements, if available; (B) if such New Customer Site includes a New Customer, reasonably detailed credit and other relevant information in respect of such New Customer; (C) a financial model based on (and containing substantially similar information to) the Project Model including the New Customer Site and, if applicable, the New Customer, in the hypothetical portfolio therein; and (D) anything else reasonably requested by Buyer to assist in its review.

"Project Review Period" means, with respect to a New Customer Site and the related New Customer, a period of fifteen (15) Business Days, as may be extended pursuant to Section 2.9.

"Prudent Electrical Practices" means those practices, methods, equipment, specifications and standards of safety and performance, as the same may change from time to time, as are commonly used by a significant portion of the grid-tied fuel cell electrical generation industry operating in the United States and/or approved or recommended by the NERC as good, safe and prudent engineering practices in connection with the design, construction, operation, maintenance, repair and use of electrical and other equipment, facilities and improvements of electrical generating facilities, including any applicable practices, methods, acts, guidelines, standards and criteria of FERC and all applicable Legal Requirements.

"Purchase" is defined in Section 2.5.

"Purchase Date" means, with respect to a Facility, the date that the conditions set forth in Section 2.5(2) (as such conditions may be waived by Buyer in its sole discretion) are satisfied with respect to such Facility, as such date is evidenced in the Bill of Sale for such Facility.

"Purchase Order" means Buyer's purchase order for a Facility or Facilities to be purchased by Buyer in substantially the form of Exhibit A.

"Purchase Price" means, with respect to a given Facility, the price for the design, installation and purchase of the Bloom Systems and BOF part of such Facility, based on the aggregate System Capacity thereof, as may be adjusted pursuant to Section 2.6.

"Purchase Price Adder(s)" means, with respect to a given Facility, the price for the design, installation and purchase of any Ancillary Equipment included in such Facility, as set forth on Schedule 2.3 hereto.

"QBR" means during the Warranty Term, a quarterly business review between Buyer (or its Affiliate) and Seller.

"Qualified Appraiser" means a nationally recognized third-party appraiser reasonably acceptable to Buyer and Seller which shall (i) be qualified to appraise power systems similar to the Bloom Systems, and experienced in such businesses in the general geographic region of the relevant Facility, and (ii) not be associated with either Buyer or Seller or any Affiliate thereof. If the Parties cannot agree on a third-party appraiser within fifteen (15) days of a Party invoking the Appraisal Procedure, then Marshall & Stevens Incorporated shall act as the Qualified Appraiser.

"Quarterly Report" means a report including (A) an Event Log, (B) a forecasted balance of the Performance Guaranty Bank to be calculated pursuant to Section 5.2, and (C) the balance of the Performance Warranty Bank pursuant to Section 5.4(4).

"Raw Data" means a series of measurements of energy generation or other delivery, taken at pre-defined 15-minute intervals of each day from a revenue grade meter, used to calculate energy generation and to permit simple integration of software applications that standardize invoicing for each ESA Customer.

"Reinstallation Deadline" is defined in Section 3.4(1)(xii)(B).

"Release" means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing of any Hazardous Material.

"Representatives" of a Party means such Party's authorized representatives, including its professional and financial advisors.

"Repurchase Value" means, with respect to any Facility (including Underperforming Facilities), the greater of (a) the Fair Market Value of such Facility (as determined under the Appraisal Procedure if Buyer and Seller cannot agree as to that Fair Market Value within ten (10) days), and (b) 100% of the Aggregate Purchase Price for such Facility reduced, on each anniversary of the Commencement of Operations Date of such Facility commencing with the second such anniversary, in a straight-line manner by a value equal to the fraction of (i) 1, over (ii) the term of the applicable ESA plus [***] ([***]), examples of which are set forth on Schedule 1.2.

"ROFR Threshold" is defined in Section 3.6(1).

"Sanctioned Country" means, at any time, a country, region or territory which is itself the subject or target of any Sanctions.

"Sanctioned Person" means, at any time, (a) any Person listed in any Sanctions-related list of designated Persons maintained by the Office of Foreign Assets Control of the U.S. Department of the Treasury, the U.S. Department of State or in any Presidential Executive Order, (b) any Person operating, organized or resident in a Sanctioned Country or (c) any Person owned or controlled by any such Person or Persons described in the foregoing clauses (a) or (b).

"Sanctions" means all economic or financial sanctions or trade embargoes imposed, administered or enforced from time to time by the U.S. government, including those administered by the Office of Foreign Assets Control of the U.S. Department of the Treasury or the U.S. Department of State.

"SCADA" means the supervisory control and data acquisition systems.

"Scheduled Portfolio" means, as of a given date of determination, the Customers, Sites and Facilities set forth in Schedule 1 (excluding Non-Scheduled Facilities), as may be amended from time to time.

"Seller" is defined in the preamble.

"Seller Attributes" is defined in Section 3.2(4).

"Seller Corporate Safety Plan" is set forth on Schedule 3.9.

"Seller Default" is defined in Section 12.1.

"Seller Deliverables" means, with respect to each Facility, the items listed in Schedule 3.4(1)(xv).

"Seller Indemnitee" is defined in Section 13.2.

"Seller's Intellectual Property" is defined in Section 11.1.

"Seller's Offer Notice" is defined in Section 3.6(2).

"Service Fees" is defined in Section 4.3(1).

"Service Fee Adders" means an addition to the Service Fees for certain Facilities based on the Ancillary Equipment included in such Facilities, as set forth on Schedule 4.3(1) hereto, as the same may be updated from time to time by the mutual written agreement of the Parties.

"Service Provider" is defined in Section 14.14.

"Service Technicians" is defined in Section 4.2(4).

"Set-Off Amount" is defined in Section 4.3(6).

"Shipment" means for each Bloom System, shipment of such Bloom System from Seller's manufacturing facility to the Site DDP (Incoterms 2010).

"Shipment Date" means for each Bloom System, the date of Shipment.

"Side Letter Agreement" means that certain Side Letter Agreement, dated as of the date hereof, by and between Buyer and Seller.

"Site" means the parcel of land licensed from an ESA Customer to Buyer under a Site License and all easements appurtenant, easements in gross, license agreements and other rights running in favor of Buyer which provide access to the applicable Facility (including, as applicable, a New Customer Site).

"Site License" means each agreement between Buyer and an ESA Customer regarding the license or similar contractual arrangement providing Buyer with the right of access to a Site for the purposes of performing Buyer's obligations pursuant to the applicable ESA.

"Site Preparation Services" means preparing each Site for installation of a Facility, obtaining the required Permits to develop, construct, commission, operate and maintain the Facility, providing for natural gas interconnection facilities, the Electrical Interconnection Facilities and any other ancillary facilities and equipment between the Facility and the applicable Transmitting Utility and otherwise performing the tasks required to prepare each Site for the Facility to ultimately attain Commencement of Operations.

"Software" shall mean all computer software that is necessary for Buyer to own, operate, maintain and repair the Facilities in compliance with the terms of this Agreement, the ESAs, the Incentive Agreements and the Site Licenses.

"Software License" is defined in Section 11.2(1).

"Spares" is defined in Section 2.8.

"Specifications" means the specifications for the Bloom Systems and Battery Solutions, as applicable, as set forth in Schedule 3.3(1).

"State Sanctions List" means a list that is adopted by any state Governmental Authority within the United States of America to the extent applicable to any Facility and pertaining to Persons that engage in investment or other commercial activities in Iran or any other country that is a target or Sanctions.

"System Attributes" means, with respect to a given Facility, any environmental attributes, energy credits, incentives or other rights, credits, benefits or interests arising in connection with the ownership or operation of such Facility (including capacity attributes and ancillary services). For the avoidance of doubt, System Attributes do not include the ITC.

"System Capacity" means, with respect to a Bloom System, the "System Capacity" set forth on the applicable specification sheet provided by the manufacturer of such Bloom System. The aggregate System Capacity of the Bloom Systems comprising each Facility shall (i) be reflected in the Bill of Sale delivered by Seller to Buyer with respect to such Facility and (ii) shall not exceed the System Capacities for such Bloom Systems set forth in the applicable ESAs and the Base Case Model and subsequent Project Models.

"Tax" (and, with correlative meaning, "Taxes" and "Taxable") means:

(i) any taxes, customs, duties, charges, fees, levies, penalties or other assessments imposed by any federal, state, local or foreign taxing authority, including, but not limited to, income, gross receipts, windfall profit, severance, property, production, sales, use, license, excise, franchise, net worth, employment, occupation, payroll, withholding, social security, alternative or add-on minimum, ad valorem, transfer, stamp, or environmental tax, or any other tax, custom, duty, fee, levy or other like assessment or charge of any kind whatsoever, together with any interest, penalty, addition to tax, or additional amount attributable thereto; and

(ii) any liability for the payment of amounts with respect to payment of a type described in clause (i), including as a result of being a member of an affiliated, consolidated, combined or unitary group, as a result of succeeding to such liability as a result of merger, conversion or asset transfer or as a result of any obligation under any tax sharing arrangement or tax indemnity agreement.

"Tax Equity Items" means each of the items listed on Schedule 1.1.

"Tax Equity Investment" is defined in Section 2.10.

"Tax Loss" means any and all federal income tax detriments suffered by Buyer, determined assuming a corporate tax rate equal to the Corporate Tax Rate and including any loss, disallowance, reduction

of, recapture, or inability to claim, in each case, in whole or in part, the ITC or any federal income tax depreciation benefit, plus any penalties, interest or additions to tax relating thereto.

"Tax Proceeding" is defined in Section 10.3(5).

"Tax Records" means any and all records, reports or other documentation required to be maintained by Seller with respect to each Facility (A) under Sections 6.1(1)(i) and (ii), to support (I) the ITC eligibility of such Facility, (II) the date upon which such Facility was "placed in service" within the meaning of Section 48(a) of the Code, (III) the date upon which the construction of such Facility began within the meaning of Section 48(a)(6) of the Code and Notice 2018-59 and (IV) the determination that such Facility has not been taken out of service or otherwise subject to recapture of the ITC pursuant to Section 50 of the Code; and (B) under Section 4.2(3), to support compliance with the so-called "80/20 rule" in accordance with the principles set forth in Revenue Ruling 94-31.

"[***] Site" means the Site and related Facility for the ESA Customer listed as "[***]" in Schedule 1.

"Term" means the period which (a) shall commence on the Agreement Date and (b) shall, unless terminated earlier under ARTICLE XII of this Agreement or unless extended by mutual agreement of the Parties, terminate on the date that is the last day of the Warranty Period for the last Facility subject to the Warranty Period.

"Third Party Claim" means any claim, action, or proceeding made or brought by any Person who is not (a) a Party to this Agreement, or (b) an Affiliate of a Party to this Agreement.

"Third Party Consents" means all consents, waivers, approvals and permissions that are necessary to have been obtained from any Persons (other than Buyer or any Governmental Authority), in each case, under applicable Facility Contracts, at such time in light of the stage of development of the Scheduled Portfolio (and the applicable Facility and Site) to site, construct, install, test, operate, maintain, repair, own, use, remove, replace or decommission each Facility as contemplated in this Agreement, in each case in accordance with such applicable Contracts so as not to cause any breach, violation, inaccuracy or conflict thereunder or to demonstrate such Person's confirmation, ratification or other approval of the achievement of any milestone, however defined, under such Contract; provided, for the avoidance of doubt, that Governmental Approvals and Permits shall not be deemed to be Third Party Consents hereunder, and provided, further, PTO is not a Third-Party Consent.

"Third Party Warranty" is defined in Section 3.7.

"Tolling Rate" means with respect to any period and any ESA, the specified rate used for the supply of electricity or for the conversion of natural gas into electricity in the calculation of the fees owed to Buyer by the ESA Customer pursuant to such ESA. Tolling Rates are set forth on a dollar-per-kWh ($/kWh) basis or a dollar-per-MMBtu ($/MMBtu) basis, as indicated in the applicable ESA.

"Training Materials" is defined in Section 14.15.

"Tranche" means an amount of Facilities, measured on the basis of the aggregate System Capacity of the Bloom Systems comprising such Facilities (in kW), for which Seller is invoicing Buyer pursuant to Section 2.3(1).

"Tranche Notice" is defined in Section 2.2.

"Transaction" is defined in Section 10.1.

"Transaction Documents" means this Agreement, the MIPA, the Long-Term Agreement, the Administrative Services Agreement, the Side Letter Agreement, and the Payment Certificates.

"Transmitting Utility" means, with respect to a Facility, the local electric utility company in whose territory the Facility is located.

"Underperforming Facility" means any Facility that fails to deliver, in any Calendar Quarter which caused the Portfolio to fail to satisfy the Performance Warranty, a number of kWh greater than or equal such Facility's *pro rata* portion of the Minimum kWh in such Calendar Quarter.

"UPM" means an uninterruptible ultracapacitor to be included in certain of the Facilities.

"Warranty Correction Date" means the date on which Seller has completed the repair, modification or replacement of a Facility or Facilities or component thereof under the Efficiency Warranty or the Performance Warranty, as notified to Buyer in writing.

"Warranty Period" means, for each Facility, the Manufacturer's Warranty Period, as extended or renewed by Buyer pursuant to Section 4.1(2) or Section 4.1(3), in which case the Warranty Period shall mean the specified end date of the Warranty Period as so extended or renewed, unless the applicable ESA expires or terminates prior to such date, in which case the Warranty Period shall end on the date on which such ESA expires or terminates. For the avoidance of doubt, the Warranty Period shall in all events end, with respect to each Facility, at the expiration of the Extended Warranty Period.

"Warranty Specifications" means the Performance Warranty, the Performance Guaranty, and the Efficiency Warranty.

Section 1.2 Other Definitional Provisions.

(1) All exhibits, annexes, and schedules attached to this Agreements are incorporated herein by this reference and made a part hereof for all purposes. References to sections, exhibits, annexes and schedules are, unless otherwise indicated, references to sections, exhibits, annexes and schedules to this Agreement. References to a section shall mean the referenced section and all sub-sections thereof. Any exhibit, annex, or schedule defined or referred to herein means (unless otherwise indicated herein) such exhibit, annex or schedule as from time to time amended, amended and restated, modified or supplemented in writing.

(2) As used in this Agreement and in any certificate or other documents made or delivered pursuant hereto or thereto, financial and accounting terms not defined in this Agreement or in any such certificate or other document, and financial and accounting terms partly defined in this Agreement or in any such certificate or other document to the extent not defined, will have the respective meanings given to them under GAAP. To the extent that the definitions of financial and accounting terms in this Agreement or in any such certificate or other document are inconsistent with the meanings of such terms under GAAP, the definitions contained in this Agreement or in any such certificate or other document will control.

(3) The words "hereof", "herein", "hereunder", and words of similar import when used in this Agreement will refer to this Agreement as a whole and not to any particular provision of this Agreement. Section references contained in this Agreement are references to Sections in this Agreement unless otherwise specified. The term "including" will mean "including without limitation".

(4) The definitions contained in this Agreement are applicable to the singular as well as the plural forms of such terms and to the masculine as well as to the feminine and neuter genders of such terms.

(5) Any agreement or instrument defined or referred to herein or in any instrument or certificate delivered in connection herewith means (unless otherwise indicated herein) such agreement or instrument as from time to time amended, amended and restated, modified or supplemented in writing and includes (in the case of agreements or instruments) references to all written attachments thereto and written instruments incorporated therein.

(6) Any references to a Person are also to its successors and permitted assigns.

(7) References to any statute, code or statutory provision are to be construed as a reference to the same as it exists and is updated from time to time, and include references to all bylaws, instruments, orders and regulations for the time being made thereunder or deriving validity therefrom unless the context otherwise requires.

(8) Reference to days shall mean calendar days unless the term "Business Day" is used.

(9) The singular includes the plural and the plural includes the singular;

(10) In the computation of periods of time from a specified date to a later specified date, the words "to" and "until" each mean "to but excluding" and the word "through" means "to and including"; and

(11) The word "including" shall be construed as "including without limitation".

ARTICLE II
PURCHASE AND SALE

Section 2.1 Appointment of Seller. Subject to Section 14.13, Buyer hereby appoints Seller to act as Buyer's provider of Bloom Systems, Ancillary Equipment, BOF, Installation Services, and Facility Services, and Seller hereby accepts such appointment and agrees to provide all such Bloom Systems, Ancillary Equipment, BOF, Installation Services, and Facility Services, inclusive of all labor, equipment, and tests therefor, in accordance with the terms and conditions set forth in this Agreement. Seller's entire consideration for supplying the Bloom Systems, Ancillary Equipment and BOF shall be the Equipment Fee portion of the Aggregate Purchase Price for such Facility, and Seller's entire consideration for supplying the Installation Services with respect to a Facility through Commencement of Operations for such Facility shall be the Installation Fee portion of the Aggregate Purchase Price for such Facility, and in each case Seller shall bear the financial risk regarding any cost overruns, claims from subcontractors and other liabilities, in accordance with the terms hereof. Following Commencement of Operations with respect to a Facility, Seller shall be entitled to Services Fees in respect of Facility Services rendered with respect to such Facility as described in Section 4.3.

Section 2.2 Purchase Orders. In connection with the Agreement Date and thereafter not later than fifteen (15) Business Days prior the first date of each Calendar Quarter, Seller will provide to Buyer a tranche notice substantially in the form hereto attached as Exhibit B (each, a "Tranche Notice"), which shall contain (a) the aggregate System Capacity of the Facilities that Seller reasonably expects will satisfy the applicable Deposit Milestones in such Calendar Quarter, and (b) a draft Purchase Order from Buyer for such Facilities. So long as no Seller Default or Funding Suspension Event has occurred and is continuing hereunder, Buyer will, within five (5) Business Days of such notice, submit to Seller an executed Purchase Order for such Facilities. So long as no Buyer Default has occurred and is continuing hereunder, Seller shall promptly accept each such Purchase Order by countersigning and returning it to Buyer; provided that the failure of Seller to countersign or return to Buyer a Purchase Order shall not invalidate such Purchase Order, and Seller shall be obligated to deliver the Bloom Systems, Ancillary Equipment and BOF comprising such Facility under such Purchase Order as contemplated by this Agreement.

Section 2.3 Invoicing of Purchase Price. Seller shall invoice Buyer hereunder as follows:

(1) On or after the Deposit Date for a Tranche, a portion of the Purchase Price for such Tranche in the amount of [***] dollars per kW ($[***]/kW), calculated on the basis of the System Capacity of the Bloom Systems to be included in the Facilities comprising such Tranche (and not calculated in any way to include any Purchase Price Adders).

(2) On or after the Delivery Date of each Facility,

(i) in the event that such Facility was previously included in a Tranche for which Buyer has made payment of a portion of the Purchase Price, [***] dollars per kW ($[***] /kW) for each Bloom System in such Facility calculated based on the System Capacity of such Bloom Systems, *plus* (2) [***] percent [***]% of the Purchase Price Adders (excluding the Purchase Price Adder for any Delayed Ancillary Equipment) applicable to such Facility, if any; or

(ii) subject to Section 2.4(1)(ii)(B), (1) in the event that such Facility was not previously included in a Tranche for which Buyer has made payment of a portion of the Purchase Price, [***] dollars per kW ($[***]/kW) for each Bloom System in such Facility calculated based on the System Capacity of such Bloom System, plus (2) [***] percent ([***]%) of the Purchase Price Adders (excluding the Purchase Price Adder for any Delayed Ancillary Equipment) applicable to such Facility, if any.

(3) On or after the Commencement of Operations Date for each Facility, (1) the remainder of the Aggregate Purchase Price (but not including the Purchase Price Adder for, or Taxes with respect to, any Delayed Ancillary Equipment), if any, not previously paid, as may be calculated, and adjusted from time to time, in accordance with Section 2.6, for such Facility, *including* (2) one hundred percent (100%) of the Taxes to be paid by Buyer pursuant to Section 2.3(6) for such Facility (except for Taxes with respect to any Delayed Ancillary Equipment).

(4) On or after (i) the Delivery Date for Delayed Ancillary Equipment, the Purchase Price Adder for such Delayed Ancillary Equipment and (ii) the Commencement of Operations Date for Delayed Ancillary Equipment, the remainder of the Aggregate Purchase Price, if any, not previously paid for such Delayed Ancillary Equipment, as adjusted from time to time in accordance with Section 2.6, *including* one hundred percent (100%) of the Taxes solely with respect to such Delayed Ancillary Equipment, to be paid by Buyer pursuant to Section 2.3(7).

(5) Each invoice issued pursuant to Sections 2.3(1) through 2.3(3), with respect to each Facility covered thereunder, shall contain the documents and other information described in the following clauses (i) through (vii) (such documents and other information, or (if applicable) the documents and other information described in Section 2.3(6)(i) through (iii), issued in respect of any invoice are collectively an "Invoice Package"):

(i) a Certificate of Deposit Milestone Completion, a Certificate of Delivery Milestone Completion, and/or a Certificate of COO, as applicable;

(ii) a completed Project Information Spreadsheet, which shall include:

(A) Buyer's Purchase Order number;

(B) the Tranche (indicated by the invoice date) in which such Facility is deemed to be included;

(C) the Site on which such Facility will be installed;

(D) the serial number and System Capacity of each Bloom System comprising such Facility;

(E) a components list of all Ancillary Equipment to be installed in connection with such Facility, if any;

(F) the Aggregate Purchase Price, including details of (x) all amounts previously paid towards or credited against the Purchase Price and any Purchase Price Adders (excluding any Delayed Ancillary Equipment), if applicable, and (y) all amounts remaining due and payable on the Aggregate Purchase Price, including Taxes;

(G) other than with respect to Facilities that are reasonably expected to be Placed in Service on or before December 31, 2019, a detailed description of (i) the year "construction began" and (ii) the method used for the "beginning of construction" with respect to such Facility, and evidence satisfactory to the Buyer of the factual means by which Seller complied with such method;

(H) the Delivery Date or expected Delivery Date, as applicable;

(I) the Purchase Date or expected Purchase Date, as applicable;

(J) the Commencement of Operations Date or expected Commencement of Operations Date, as applicable;

(iii) solely with respect to any invoice issued pursuant to Section 2.3(2) or Section 2.3(3), a list of, and copies of, all then applicable Permits, PTO (only pursuant to Section 2.3(3), to the extent PTO is memorialized in writing), other Governmental Approvals, Third Party Consents, Incentive Agreements, Interconnection Agreements and other Facility Contracts, to the extent not yet delivered and required to have been obtained as of such date;

(iv) a waiver and release of liens by Seller as general contractor hereunder, conditioned only upon final payment of the Aggregate Purchase Price for the Facility, substantially in the statutorily prescribed form required by the applicable state Governmental Authority in which the Site is located (and, if there is no such prescribed form, then in form and substance reasonably satisfactory to Buyer);

(v) with respect to any Facility that is related thereto, the applicable Tax Equity Item;

(vi) solely with respect to any invoice issued pursuant to Section 2.3(2), each of the Delivery Milestone Deliverables set forth on Schedule 2.5 to the extent not yet delivered; and

(vii) solely with respect to any invoice issued pursuant to Section 2.3(3), the Seller Deliverables identified on Schedule 3.4(1)(xv) as required to be delivered before the Commencement of Operations Date to Buyer and each of the COO Milestone Deliverables set forth on Schedule 2.5 to the extent not yet delivered.

(6) Each invoice and Invoice Package delivered pursuant to Section 2.3(4), with respect to the Delayed Ancillary Equipment covered thereunder, shall contain the documents and other information described in the following clauses (i) through (iii):

(i) a Certificate of Delivery Milestone Completion, and/or a Certificate of COO, as applicable;

(ii) a completed Project Information Spreadsheet, which shall include:

(A) Buyer's Purchase Order number;

(B) the Site on which such Delayed Ancillary Equipment will be installed;

(C) a components list of such Delayed Ancillary Equipment,

(D) with respect to the Facility of which the Delayed Ancillary Equipment comprises a part, the Aggregate Purchase Price of such Facility, including details of (x) all amounts previously paid towards or credited against the Purchase Price and any Purchase Price Adders, if applicable, (y) the Purchase Price Adder for the Delayed Ancillary Equipment, and (z) all amounts remaining due and payable on the Aggregate Purchase Price, including Taxes;

(E) the Delivery Date;

(F) the Purchase Date or expected Purchase Date, as applicable;

(G) the Commencement of Operations Date or expected Commencement of Operations Date, as applicable;

(H) the increased Tolling Rate in the related ESA contemplated in Section 2.4(1)(iv); and

(iii) a waiver and release of liens by Seller as general contractor hereunder, conditioned only upon final payment of the Aggregate Purchase Price for such Delayed Ancillary Equipment (substantially in the statutorily prescribed form required by the applicable state Governmental Authority in which the Site is located (and, if there is no such prescribed form, then in form and substance reasonably satisfactory to Buyer)).

(7) Buyer shall pay all state and local sales, use or other transfer Taxes (other than state real estate or controlling interest transfer Taxes) required to be paid by Buyer and attributable to the transfer of the Facility to Buyer, except that Seller shall be responsible for and pay any Taxes arising as a result of any components of such Facility or any Facility being acquired from a source outside of the United States; provided that any Taxes that are required by applicable law to be paid prior to the date upon which Buyer is obligated to pay such Taxes pursuant to Section 2.3(3) or Section 2.3(4), as applicable, shall be paid by Seller when due and shall be reimbursed by Buyer in accordance with (i) this Section 2.3(7) and (ii) Section 2.3(3) or Section 2.3(4), as applicable.

Section 2.4 Payment of Purchase Price.

(1) Buyer shall pay all outstanding invoices in respect of any portion of the Aggregate Purchase Price (including the Purchase Price Adder for Delayed Ancillary Equipment) on a monthly basis in accordance with the terms of this Section 2.4; *provided,* Buyer's obligation to pay any amounts due and payable under any such invoice shall be subject to the satisfaction by Seller of the following conditions precedent:

(i) with respect to an invoice delivered pursuant to Section 2.3(1) and Section 2.3(5) for a Tranche that reached the Deposit Milestone Date, (A) Seller shall have executed and delivered a complete Certificate of Deposit Milestone Completion, together with the remaining Invoice Package, to Buyer, (B) Seller shall have not included in such invoice any amounts for Purchase Price Adders or Taxes, and (C) no Funding Suspension Event shall have occurred and remains un-remedied;

(ii) with respect to an invoice delivered pursuant to Section 2.3(2) and Section 2.3(5) for a Facility that reached the Delivery Date, (A) Seller shall have executed and delivered a completed Certificate of Delivery Milestone Completion, together with the remaining Invoice Package, to Buyer, (B) if such Facility was not previously included in a Tranche for which Buyer has made an earlier payment of a portion of the Purchase Price as described in Section 2.3(2)(ii), Buyer shall have consented to such invoice, (C) Seller shall have not included in such invoice any Taxes, and (D) no Funding Suspension Event shall have occurred and remains un-remedied;

(iii) with respect to an invoice delivered pursuant to Section 2.3(3) and Section 2.3(5) for a Facility that reached the Commencement of Operations Date, Seller shall have executed and delivered a completed Certificate of COO, together with the remaining Invoice Package;

(iv) with respect to an invoice delivered pursuant to Section 2.3(4) and Section 2.3(6) for Delayed Ancillary Equipment that reached the Delivery Date, (A) the related ESA shall provide for an increased Tolling Rate that reflects the addition of such Delayed Ancillary Equipment, which increase is legally enforceable against the applicable ESA Customer, (B) Seller shall have executed and delivered a completed Payment Certificate, together with the remaining Invoice Package, to Buyer, (C) Seller shall have not included in such invoice any Taxes, and (D) no Funding Suspension Event shall have occurred and remains un-remedied;

(v) with respect to an invoice delivered pursuant to Section 2.3(4) and Section 2.3(6) for Delayed Ancillary Equipment that reached the Commencement of Operations Date, Seller shall have executed and delivered a completed Certificate of COO, together with the remaining Invoice Package, to Buyer;

(2) Not less than ten (10) Business Days prior to the Invoice Due Date for all invoices to be paid by Buyer for the applicable calendar month, and in no event more than one time during

a single calendar month (except as otherwise set forth in this Section 2.4(2)), Seller shall deliver to Buyer (A) a draft Payment Notice setting forth the anticipated aggregate amounts due and payable towards the Aggregate Purchase Price for the Tranche and/or all Facilities included in such Payment Notice to be paid in such month and (B) a draft invoice and draft Invoice Package (containing as many of the documents and information comprising such Invoice Package as Seller is able to provide as of such date) for such Tranche and/or Facilities; provided, that not more than one time per Calendar Quarter, Seller may provide written notice to Buyer of an Additional Invoice Due Date no later than ten (10) Business Days prior to such Additional Invoice Due Date (and Seller shall make all deliveries listed in clauses (A) and (B) of this Section 2.4(2) not later than (10) Business Days prior to such Additional Invoice Due Date for all invoices applicable thereto). If Buyer has no comments or objections on such draft Payment Notice, invoice or Invoice Package, it shall be deemed to have provided consent as required under Section 2.4(1)(ii)(B) for invoices delivered as described therein.

(3) Not less than three (3) Business Days prior to the applicable Invoice Due Date or Additional Invoice Due Date, for all invoices to be paid by Buyer for such calendar month (or applicable to such Additional Invoice Due Date), Seller shall deliver to Buyer:

(i) an executed Payment Notice, setting forth the actual aggregate amounts due and payable towards the Aggregate Purchase Price for the Tranche and/or all Facilities included in such Payment Notice, which amount shall in no event exceed the amount notified by Seller to Buyer in such applicable draft Payment Notice; and

(ii) a final invoice and Invoice Package, including Payment Certificates evidencing the achievement of all applicable Milestones achieved as of such date for all Milestones achieved by the applicable Tranche and/or Facilities; provided, that Tranches (or portions thereof) and/or Facilities that were not included in the applicable draft Payment Notice shall not be added to the executed Payment Notice without the prior written consent of Buyer.

(4) Subject to Seller's delivery of a complete invoice, Invoice Package and Payment Notice pursuant to Section 2.4(3), Buyer shall, on the applicable Invoice Due Date or Additional Invoice Due Date indicated in the executed Payment Notice delivered by Seller, make the applicable payment towards the Aggregate Purchase Price for each Tranche and/or Facility included in such Payment Notice for which Seller has delivered Payment Certificates, an invoice and the Invoice Package evidencing the satisfaction of the applicable Milestone(s).

(5) If Buyer defaults in any payment when due for any Facility (other than with respect to amounts being disputed in good faith), Seller may, on not less than five (5) Business Days prior notice to Buyer, at its option and without prejudice to its other remedies (until all such outstanding payment defaults have been cured), (i) suspend performance of its obligations hereunder for such Facility, or defer delivery of such Facility to Buyer and (ii) require that the payment of the portion of the Aggregate Purchase Price for future Facilities required under Section 2.3(2) and Section 2.3(2)(ii) above be made immediately prior to the Shipment of the applicable Bloom Systems, but Seller

shall not be able to otherwise suspend performance of its obligations hereunder for other Facilities for which no such default exists.

(6) With respect to any payment due from one party to the other pursuant to this Agreement, unless being contested in good faith, interest shall accrue daily at the lesser of a monthly rate of one percent (1.0%) or the highest rate permissible by law on the unpaid balance.

(7) If an ESA is terminated with respect to a Facility after such Facility reaches the Delivery Milestone, but prior to the date such Facility achieves any of the events described in clauses (2) through (4) of the definition of "Placed in Service", then (at Buyer's sole discretion) such Facility shall be deemed to be removed from the Scheduled Portfolio, and Seller shall (A) refund any payments previously paid by Buyer for such Facility, in accordance with Section 2.6 and (B) remove such Facility in accordance with Section 4.10(1). If, as of the Commencement of Operations Date Deadline, Buyer has made payments pursuant to Section 2.4 for a Facility (or Delayed Ancillary Equipment) for which none of the events described in clauses (2) through (4) of the definition of "Placed in Service" has been achieved, then (at Buyer's sole discretion) (x) such payments made shall be refunded in accordance with Section 2.6 and (y) such Facility (or Delayed Ancillary Equipment) shall, if any Component thereof has been Delivered, be removed in accordance with Section 4.10(1). With respect to a given Facility, payments made hereunder with respect to the Equipment Fee for each Facility shall be, from and after the Placed in Service Date, irrevocable and non-refundable, and non-cancellable, except as expressly set forth herein.

(8) The Aggregate Purchase Price for a Facility shall be allocated, for purposes of Section 1060 of the Code and the Treasury Regulations thereunder, consistently with the cost segregation allocation information provided in the Appraisal with respect to such Facility and in accordance with Treasury Regulations Section 1.1060-1(e). The Parties shall make consistent use of the cost segregation allocation information reflected in the Appraisal for all income Tax purposes and in all filings, declarations and reports with the IRS (or where applicable, state and local taxing authorities) in respect thereof, including any reports that may be filed under Section 1060 of the Code, and in any proceeding related to the determination of any Tax, neither Buyer nor Seller shall contend or represent that such is not a correct allocation for income Tax purposes. The Parties shall allocate and report to the appropriate taxing authorities any adjustments to the Purchase Price, including as a result of any payment made subsequent to the applicable Purchase Date pursuant to Section 2.3(3), any adjustments pursuant to Section 2.6 or any payment for indemnification hereunder, in accordance with Treasury Regulations Section 1.1060-1(e) and this Section 2.4(8).

Section 2.5 Purchase and Sale of Facilities.

(1) Upon the satisfaction of the conditions set forth in Section 2.5(2) (as may be waived by Buyer in its sole discretion) with respect to a Facility, Seller shall sell, assign, convey, transfer and deliver to Buyer, and Buyer shall purchase, assume and acquire from Seller, all of Seller's right, title and interest in and to such Facility, effective as of the Purchase Date (a "Purchase").

(2) Conditions Precedent to the Purchase Date. Buyer's obligation to purchase, assume, and acquire a Facility from Seller shall be subject to Seller's satisfaction, as of the Purchase Date, of the following conditions precedent (as may be waived by Buyer in its sole discretion):

(i) (x) None of the events described in clauses (2) through (4) of the definition of "Placed in Service" shall have commenced or occurred, (y) the representation and warranty made by Seller in Section 8.1(12)(i) shall be true and correct as though made on the Purchase Date and (z) Seller shall have performed all of its obligations under Section 3.4(1)(i);

(ii) Seller shall have delivered a Bill of Sale for such Facility to Buyer, dated as of the Purchase Date for such Facility; and

(iii) Seller shall have delivered all invoices for such Facility in respect of the Deposit Date and the Delivery Date, together with the respective Invoice Packages.

Section 2.6 Purchase Price Adjustment for Portfolio Price Changes.

(1) Not less than ten (10) Business Days prior to the end of each Calendar Quarter (for purposes of this Section 2.6, the "Adjustment Quarter"), Seller shall deliver to Buyer a Project Model that reflects (i) with respect to each Facility that has achieved Commencement of Operations during and prior to the Adjustment Quarter, (A) the final Aggregate Purchase Price of such Facility, (B) the dates on which Buyer paid each portion of the Purchase Price, Purchase Price Adders, if any, Purchase Price Adders for Delayed Ancillary Equipment, if any, and Taxes for such Facility, the amount of such payments, and any adjustments thereto, (C) such Facility's actual Commencement of Operations Date, and (D) the installation and commissioning of any Delayed Ancillary Equipment with respect to a Facility that is or will be performed after such Facility's Commencement of Operations Date, (2) with respect to each Facility that Seller reasonably expects to achieve Commencement of Operations following the delivery of such Project Model, (A) the dates on which Buyer has paid, or is expected to pay, each portion of the Purchase Price, the Purchase Price Adders, if any, Purchase Price Adders for Delayed Ancillary Equipment, if any, and Taxes for such Facility and the amount of such payments, and (B) the date on which Seller reasonably expects (x) such Facility to achieve its Delivery Milestone and Commencement of Operations and (y) any Delayed Ancillary Equipment in respect of such Facility to achieve its Delivery Milestone and Commencement of Operations, (3) the addition or removal of any Facilities or parts thereof as may be required pursuant to amendments to ESAs (or otherwise, including by operation of Sections 2.9, 4.7 or 4.8) during such Adjustment Quarter, (4) any refunds required pursuant to Section 2.4(7) or Section 3.4(1)(xii)(B), (5) any adjustments made pursuant to Section 5.2(5), if applicable, (6) any adjustments to Tolling Rates in ESAs, (7) any adjustments to the System Capacity of any Facility, (8) any reduction of the Aggregate Purchase Price of any Facility pursuant to Section 2.6(3), (ix) if the Project Information Spreadsheet indicates (or will indicate when delivered) that construction of such Facility within the meaning of Notice 2018-59 did not begin before January 1, 2020, a corresponding adjustment to the amount of the ITC percentage associated with such Facility and (x) any reimbursements or adjustments to the Tolling Rate pursuant to performance by Kaiser of

any portion of the services under any Kaiser ESA. Each Project Model delivered pursuant to this Section 2.6(1) shall contain a change log listing all changes made or proposed to be made, compared with the immediately preceding Project Model (or, in respect of the first Project Model delivered hereunder, compared with the Base Case Model).

(9) Within five (5) Business Days of Buyer's receipt of the Project Model, the Parties will mutually agree on an adjusted Aggregate Purchase Price for the Facilities, which shall be used as (i) the final Aggregate Purchase Price for all Tranches and Facilities invoiced and paid in the current (and then-expiring) Adjustment Quarter, and (ii) the Aggregate Purchase Price for purposes of all invoices delivered in the following Calendar Quarter (until the date of the next adjustment made pursuant to this Section 2.6). Within five (5) Business Days after such determination of the adjusted Aggregate Purchase Price, Buyer shall amend and reissue each invoice (not including any accompanying materials or lien waivers) previously delivered by Seller to Buyer for the current (and then-expiring) Adjustment Quarter to reflect the adjusted Aggregate Purchase Price determined pursuant to this Section 2.6(2). For the avoidance of doubt, no adjustments shall be made hereunder with respect to any payments from Buyer to Seller made in any Calendar Quarter prior to the Adjustment Quarter, except to the extent any information reportable under this Section 2.6 with respect to any such prior Calendar Quarter was not included or was incorrect when reported pursuant to this Section 2.6.

(10) Under no circumstance will (A) the combined Aggregate Purchase Price of all Facilities purchased hereunder, as may be adjusted pursuant to this Section 2.6, exceed the Maximum Aggregate Portfolio Purchase Price, (B) Buyer be obligated to make any payment in respect of the Aggregate Purchase Price of any Facility after Buyer has paid in full the Maximum Aggregate Portfolio Purchase Price or (C) Seller invoice Buyer under Section 2.4 or Buyer have any obligation to make payment under Section 2.4 after the Commencement of Operations Date Deadline, in each case unless otherwise agreed upon by both parties in writing. It is Seller's responsibility to manage the forecasting and invoicing of payments in respect of the Aggregate Purchase Price such that Buyer never pays more, in the aggregate, than the Maximum Aggregate Portfolio Purchase Price. If at any time it is discovered that Buyer has paid, in respect of its obligations to pay the Aggregate Purchase Price, more in the aggregate than the Maximum Aggregate Portfolio Purchase Price, Seller shall refund or reimburse to Buyer such excess amount. Any amount in excess of the Maximum Aggregate Portfolio Purchase Price that is refunded shall be deemed to have reduced pro rata the Aggregate Purchase Price of all Facilities.

(11) Following the reissuance of invoices pursuant to Section 2.6(2), if Buyer has made any over-payments or under-payments in respect of such invoices, Seller shall apply such over-payments as a credit against, or such under-payments as an addition to, the amount owed by Buyer with respect to the invoices to be paid on the final Invoice Due Date of the Adjustment Quarter (or, if such Invoice Due Date has passed, the next Invoice Due Date after the reissuance of invoices pursuant to Section 2.6(2)); *provided, however*, that if such adjustment results in Buyer owing no payments to Seller with respect to such invoices but fails to fully compensate Buyer for prior over-payments, Seller shall remit the remaining balance of any over-payments to Buyer within thirty (30) days following the applicable Invoice Due Date.

(12) Seller represents and warrants that as of the date each Project Model is delivered, the static coded cells reflecting specifics about each Facility on the "System Master Tab", as evidenced by blue font therein (the "Static Cells"), will be true and accurate in all material respects as of such date. Seller will not change the contents of any Static Cells or any calculations in the "Formula Bar" of the Project Model without the prior written consent of Buyer. Except as expressly provided in the foregoing two sentences, Seller makes no representation, warranty or guaranty regarding (i) any other information set forth in the Project Model, including the amount of Buyer's expected investment tax credit or depreciation or underwriting assumptions in the Project Model, or (ii) Buyer's expected rate of return as a result of the purchase of the Facilities hereunder.

Section 2.7 Purchase Price. Unless expressly stated otherwise, the Aggregate Purchase Price shall be the full consideration paid or to be paid by Buyer in exchange for all of Seller's obligations under Article III, and Buyer shall have no obligation to make further payment with respect to such performance hereunder. Seller shall bear any cost overruns in connection with any services provided by a Service Provider.

Section 2.8 Spare Parts.

(1) At any time, but not more frequently than once a month, Buyer may order from Seller up to [***] of critical replacement parts, including Power Modules and inverters ("Spares"), at Seller's cost of direct procurement or manufacture. Seller will procure or manufacture (as applicable) and deliver to Buyer (DDP Incoterms, at a location to be agreed between the Parties, it being understood that agreement as to location is not required if Buyer elects for Seller to store such Spares pursuant to this Section 2.8) at such cost, together with a bill of sale and any other necessary documentation evidencing transfer of ownership to Buyer, such Spares within [***] from when both Parties execute and deliver a complete purchase order for such Spares (provided, that if Seller is diligently pursuing such procurement, manufacture and delivery, and if delivery is reasonably practicable within an additional thirty (30) days, then Seller shall have such additional thirty (30) days to deliver such Spares), which shall be executed and delivered by each Party promptly upon finalization of the terms of such purchase and sale, which may include the payment by Buyer of Seller's costs in accordance with a milestone schedule. The parties will negotiate the customary terms and provisions of such purchase and sale in good faith. At Buyer's election, Seller will store the Spares for a market storage fee and otherwise upon terms to be agreed in the related purchase order (provided, that Seller shall segregate any Spares owned by Buyer hereunder from the other inventory and equipment of Seller or any other Person, as applicable, and shall identify such Spares as belonging to Buyer throughout the period of such storage).

(2) On the date that is [***] after delivery of the Spares from Seller to Buyer, Seller shall repurchase back from Buyer such Spares at the same price Buyer paid for such Spares, unless Buyer notifies Seller in writing not later than thirty (30) before the end of such period of Buyer's desire to continue to own such Spares. In the event of such repurchase, the Parties will negotiate terms and provisions in good faith, after which Buyer will transfer ownership from itself to Seller, and (unless Seller is already storing such Spares) deliver to Seller, together with a bill of sale and any other necessary documentation evidencing transfer of ownership to Buyer, such Spares.

(3) With respect to any Spares that Buyer has purchased from Seller pursuant to Section 2.8(1), Buyer may, at any time, notify Seller in writing of its desire to provide such Spares to Seller for Seller's use in performing the Installation Services or Facilities Services, after which notification Seller shall use its commercially reasonable efforts to use such Spares in its performance hereunder; *provided*, in no circumstance will the use of such Spares change or reduce Buyer's obligation to pay any portion of the Aggregate Purchase Price or Service Fees or as a credit against any amounts that are or become due to Seller hereunder.

Section 2.9 Substitutions.

(1) If (i) an ESA is terminated as to a Facility before the applicable Facility reaches its Delivery Milestone or (ii) in connection with any ESA Remarketing Activities or Pre-PIS Remarketing Activities, Buyer may, in either case, in its sole discretion notify Seller in writing of its election to substitute a New Customer Site for a Site in the Scheduled Portfolio, where in each such case such New Customer Site was not approved as of the Agreement Date. If Buyer so notifies Seller, then, no more than one time a month during the period from the Agreement Date until the Commencement of Operations Deadline, Seller will present one or more New Customer Sites, and if applicable, New Customers, for Buyer's review by delivery of a Project Package for each such proposed New Customer Site. Buyer will approve each proposed New Customer Site that meets the Project Criteria in its reasonable discretion; *provided*, in no event shall Buyer have any obligation to make payment for or accept a New Customer Site that, when added to the Scheduled Portfolio and aggregated with all other payments of Aggregate Purchase Prices in respect of Facilities hereunder, would cause the Maximum Aggregate Portfolio Purchase Price to be exceeded.

(2) Buyer will have the Project Review Period to determine if either (i) the New Customer Site and, if applicable, New Customer, meet the Project Criteria or (ii) if the New Customer Site and, if applicable, New Customer, do not meet the Project Criteria, whether, in Buyer's sole discretion, to approve such New Customer Site and New Customer. On or before the expiration of the Project Review Period, Buyer will notify Seller in writing of its approval or rejection of a given New Customer Site, or if applicable, New Customer, presented that month. Buyer may extend the Project Review Period by written notice to Seller if it determines, in its reasonable discretion, that further due diligence is required. For the avoidance of doubt, nothing in this Agreement or the Administrative Services Agreement shall grant, or be deemed to grant, to Seller or its Affiliates any authority to sign Energy Tolling Agreements or ESAs (or assignments thereof) on Buyer's behalf.

(3) Upon Buyer's written approval of a New Customer Site and, if applicable, a New Customer, such New Customer Site shall automatically be deemed a Site, if applicable, the related energy services agreement or similar arrangement shall automatically be deemed an ESA (and (x) Seller shall obtain from such New Customer an executed copy of such ESA and deliver the same to Buyer, and (y) Buyer shall execute and deliver such ESA to Seller and such New Customer, in each case with reasonable promptness), and if applicable, such New Customer shall be deemed an ESA Customer. Within ten (10) days of such approval, (i) Schedule 1 hereto, and (ii) Schedule 1 to the Administrative Services Agreement (from and after the effective date of the Administrative Services Agreement) and (iii) the Project Model (subject to the terms and conditions of Section 2.6)

shall automatically be updated by delivery thereof by Seller to Buyer. This Agreement shall be deemed to be automatically amended to reflect the inclusion of such updated Schedule.

(4) If Buyer has approved a New Customer Site and, if applicable, a New Customer, in connection with a termination of an ESA after the applicable Facility's Placed in Service Date, Seller shall remove such Facility in accordance with Section 4.10(2) and relocate and install such Bloom System and applicable Ancillary Equipment and BOF at the New Customer Site.

(5) Buyer shall have the right in its sole discretion to reject from inclusion in the Scheduled Portfolio any Facility proposed to be added into the Scheduled Portfolio after the Agreement Date, in respect of which an ESA is proposed to be executed and delivered by an Affiliate of Kaiser who is not in the "Kaiser Credit Group" (as such term is defined in the Kaiser ESAs).

(6) Non-Scheduled Facilities.

(i) The Sites and related ESAs identified as "Non Scheduled Facilities" in Schedule 1 hereto are "Non-Scheduled Facilities". Seller shall not install or operate any Facility in connection with a Non Scheduled Facility without Buyer's express written consent. At any time prior to its grant of such consent, Buyer may elect, in its sole discretion, for any Non Scheduled Facility to be assigned from the applicable ESA affected thereby, upon which time Seller shall facilitate and accomplish such assignment, together with a release in writing of any liabilities and obligations of Buyer in respect of such Non Scheduled Facility, such that the applicable Non Scheduled Facility does not comprise a part of any such ESA.

(ii) Seller and Buyer hereby agree that, until Buyer provides its written consent pursuant to Section 2.9(6)(i): (1) title to and risk of loss with respect to any Non Scheduled Facility, or any equipment in connection therewith, shall not at any time pass to Buyer, (2) to the extent Buyer has any obligations with respect to such Non Scheduled Facility under the applicable ESA, Seller shall perform such obligations for no additional consideration hereunder in accordance with (i) the requirements set forth therein, which shall include any obligations of Buyer under any such ESA in respect of such Non Scheduled Facility to make any payments to the applicable ESA Customer and (ii) the Performance Standards and (3) Buyer shall have no obligations in connection the Non Schedule Facilities hereunder.

Section 2.10 Tax Equity Investment.

(1) Seller acknowledges that Buyer is, as of the Agreement Date, negotiating with a potential tax equity investment partner (the "Investor") to consummate a tax equity investment for the purpose of financing the transactions contemplated hereby (the "Tax Equity Investment"). In connection with the Tax Equity Investment:

(i) Seller shall at its sole cost and expense (A) allow sufficient access to its premises and facilities as is reasonably necessary for the Investor and its Representatives and third-party consultants engaged in connection with the Tax Equity Transaction to

complete applicable reviews and reports (including access to the Electronic Data Room and, upon Buyer's request, the Data Room); (B) use its reasonable best efforts to obtain and deliver to Buyer and Investor the Tax Equity Items as soon as is reasonably practicable; (C) respond in a reasonably timely manner to written (including by email) inquiries from Buyer, the Investor and either of their Representatives; (D) make itself and its Representatives reasonably available for meetings and telephone calls with Buyer, the Investor and either of their Representatives; (E)(I) provide a legal opinion regarding governmental approval authorization, (II) to the extent requested by Investor, engage appropriately qualified legal counsel for the purpose of responding to requests for written legal opinions and memoranda (and preparing, executing and delivering such legal opinions and memoranda), (III) monitor the ongoing engagement of such legal counsels to ensure they are using reasonable best efforts to timely prepare, execute and deliver such written legal opinions and memoranda, and (IV) provide to such legal counsel such information and documents as may become necessary in the exercise of such legal counsels' reasonable best efforts to timely prepare, execute and deliver such legal opinions; (F) use its reasonable best efforts to cooperate, including, if required, engaging legal counsel and assisting in the preparation and filing of applications and other materials with Buyer and the Investor in the timely seeking of any Governmental Approvals that Buyer or the Investor indicates in writing are necessary or desirable in connection with the Tax Equity Investment, including the [***] ; and

(ii) Seller shall use its reasonable best efforts to provide such additional cooperation as may be requested by Buyer, the Investor or either of their respective Representatives in connection with the Tax Equity Investment, including the execution and delivery of such additional documents and instruments, and the performance of additional acts, as may be necessary or appropriate to effectuate, carry out and perform the Tax Equity Investment.

(2) Until the expiration pursuant to Section 2.10(5) of Seller's obligations under Section 2.10, under no circumstances shall Seller cause or suffer the occurrence of any of the events described in clauses (2) through (4) of the definition of "Placed in Service" with respect to any Facility except for the Facilities listed on Schedule 3.10.

(3) Notwithstanding anything to the contrary herein and for the avoidance of doubt, Buyer shall be permitted to share Confidential Information with the Investor and its Representatives for purposes of negotiating and consummating the Tax Equity Investment, in each case as though such Persons were Buyer's own Representatives.

(4) The Parties agree that immediate and irreparable damage for which monetary damages, even if available, would not be an adequate remedy, would occur in the event that Seller does not perform its obligations under, or otherwise breaches, this Section 2.10. Seller acknowledges and agrees that (a) Buyer shall be entitled to an injunction, specific performance, or other equitable relief, as provided in this Section 2.10(4), to prevent breaches of this Section 2.10 and to enforce specifically the terms and provisions hereof, and (b) the right of an injunction, specific enforcement

or other equitable relief, as provided in this Section 2.10(4), is an integral part of the transactions contemplated hereby and without that right, Buyer would not have entered into this Agreement. Seller agrees that it shall not oppose the granting of an injunction, specific performance or other equitable relief on the basis that Buyer has an adequate remedy at law or that an award of an injunction, specific performance or other equitable relief is not an appropriate remedy for any reason at law or equity. Seller acknowledges and agrees that Buyer shall not be required to provide any bond or other security in connection with any such proceeding. The rights to specific performance, injunction or other equitable relief provided in this Section 2.10(4) are in addition to any other remedy to which Buyer is or may be entitled to under this Agreement.

(5) The obligations of Seller set forth in this Section 2.10 shall automatically expire upon the earlier of (i) consummation of the Tax Equity Investment, (ii) September 15, 2019, or (iii) delivery by Buyer to Seller of a written notice referencing this Section 2.10 and stating that, as of the date of such notice, Buyer no longer has any intention to pursue the Tax Equity Investment; provided, that any amounts due and owing as of such expiration shall survive such expiration until discharged.

Section 2.11 Administrative Services Agreement.

The Parties agree to use their commercially reasonable efforts to execute and deliver to one another, as promptly as is reasonably practicable on or after the Agreement Date, the Administrative Services Agreement.

ARTICLE III
DELIVERY AND INSTALLATION OF FACILITIES AND OTHER WORK

Section 3.1 Access to Site. Seller shall be responsible for ascertainment of the suitability of the Sites, the environment around the Sites, the Sites' soil condition and other ground conditions for the construction and operation of the Facilities and the performance by Seller of all of its obligations hereunder in accordance with Section 3.9. As between Seller and Buyer, Seller shall be solely responsible for all Site Preparation Services at Seller's cost. Buyer shall provide Seller with access to the Sites in a manner consistent with the applicable ESAs and Site Licenses to permit Seller to deliver and install each Facility at the applicable Sites and to connect the applicable Facility to the distribution and transmission facilities of the Transmitting Utility, as applicable. If, prior to the Facility's achievement of any of the events described in clauses (2) through (4) of the definition of "Placed in Service" with respect to any Facility, an ESA Customer requires a change in the location of a Site from that specified in a Purchase Order or applicable Site License, whether temporary or permanent, and such change in location is permitted under the applicable ESA, (a) Buyer shall submit a written notice to Seller setting forth the details of such location change (unless an ESA Customer has notified Seller directly, in which case Seller shall notify Buyer), (b) Seller shall administer and perform the Site Preparation Services as required for that changed location to the extent required and in accordance with the relevant ESA and Site License, and (c) Seller shall bear all costs associated with such relocation; *provided, however* to the extent the applicable ESA Customer reimburses Buyer for (or otherwise pays Buyer in respect of) such costs

pursuant to the terms of the applicable ESA, then Buyer shall remit such payments to Seller to the extent of Seller's bearing costs under this clause (c).

Section 3.2 Delivery; Title; Risk of Loss.

(1) Delivery of each Facility (and each Bloom System and each item of Ancillary Equipment and BOF comprising such Facility) shall be DDP (Incoterms 2010) to its Site, in accordance with the Uniform Commercial Code then in effect. Title to each Bloom System and each item of Ancillary Equipment (other than Delayed Ancillary Equipment, if applicable) and BOF shall pass to Buyer upon the Purchase Date of such Facility, and such title shall be good and marketable and free of all Liens, except for Permitted Liens. Title to any Delayed Ancillary Equipment shall pass to Buyer upon the Purchase Date for such Delayed Ancillary Equipment, and such title shall be good and marketable and free of all Liens, except for Permitted Liens. From and after the Purchase Date of each Facility or any Delayed Ancillary Equipment, all risk of loss or damage to such Facility or Delayed Ancillary Equipment shall be borne by Buyer.

(2) Buyer has all title, right and interest in and to all of the System Attributes arising under and in connection with each Facility purchased by Buyer hereunder. It is understood that Schedule 1 sets forth (i) the System Attributes to which ESA Customers are entitled under their respective ESAs, for which Seller will, on behalf of Buyer, administer, and (ii) the System Attributes that Buyer has agreed to transfer to Seller pursuant to this Section 3.2(2). To the extent any such ESA Customer is entitled to System Attributes (or any financial benefit or reimbursement in respect thereof) pursuant to its ESA or Site License, Seller shall obtain and maintain such System Attributes on behalf of and for the benefit of such ESA Customer, and shall provide to such ESA Customer such financial benefit or reimbursement (if applicable), in each case without any additional consideration hereunder. In the event the proceeds of, or monies in respect of, any System Attributes are received by a Party who is not entitled to such proceeds or monies pursuant to this Section 3.2(2), such receiving Party shall promptly remit such proceeds or monies to the entitled Person. In the event an ESA obligates Buyer to consult or cooperate with the applicable ESA before obtaining any System Attributes in the future, Seller shall perform such consultation and cooperation on behalf of Buyer.

(3) Solely with respect to Kaiser ESAs in which Buyer has agreed to install and perform any other obligations (including making any payments) with respect to "Purchaser Equipment" (as such term is defined in the Kaiser ESAs) ("Kaiser Purchaser Equipment"), Seller and Buyer hereby agree that (1) the Kaiser Purchaser Equipment does not and shall not be deemed to comprise a part of the Facility pursuant to this Agreement, and the ownership of such Kaiser Purchaser Equipment shall be as set forth in the applicable Kaiser ESA, (2) title to and risk of loss with respect to the Kaiser Purchaser Equipment, or any Component thereof, shall not at any time pass to Buyer, (3) to the extent "Provider" has any obligations with respect to the Kaiser Purchaser Equipment under the applicable Kaiser ESAs, Seller shall perform such obligations for no additional consideration hereunder in accordance with (i) the requirements set forth therein, which shall include any obligations of Buyer under any Kaiser ESA in respect of Kaiser Purchaser Equipment to make any payments to Kaiser, or perform any repairs and replacements for Kaiser and (ii) the Performance

Standards. Buyer shall have no obligations in connection the Kaiser Purchaser Equipment hereunder, including any obligation to seek any remedy under Article V in respect of any Kaiser Purchaser Equipment.

(4) Capacity Markets. In consideration of Seller's obligations hereunder, Buyer hereby assigns and transfers to Seller the capacity attributes arising under and in connection with any Facility in respect of which such assignment and transfer is expressly referenced and identified in Schedule 1 (such assigned and transferred capacity attributes are the "Seller Attributes"), to the extent such attributes can be transferred (and except to the extent any ESA Customer has a right or interest therein under its ESA), and any and all proceeds thereof. For the avoidance of doubt, Seller is responsible for all of the administration of the Seller Attributes and Buyer shall have no obligation in connection therewith. Buyer shall have no obligation to seek any remedy under Article V in respect of any Seller Attributes.

Section 3.3 Pre-COO Equipment Warranty.

(1) Subject to Section 5.6 and Section 13.5, Seller warrants to Buyer that, with respect to each Facility, during the period commencing on the achievement of the Delivery Milestone and continuing until achievement of Commencement of Operations for such Facility (the "Pre-COO Equipment Warranty Period"), (i) each Bloom System and each Battery Solution for such Facility shall conform to the Specifications for Bloom Systems and Battery Solutions, respectively, set forth on Schedule 3.3(1), and (ii) each such Facility and its Components shall be free from defects in design, materials and workmanship that prevent such Facility from achieving Commencement of Operations (collectively, the "Pre-COO Equipment Warranty").

(2) Seller shall correct, at Seller's sole expense, all Bloom Systems, items of Ancillary Equipment or BOF provided, or Installation Services performed, by it or its subcontractors under this Agreement which proves to be in breach of the Pre-COO Equipment Warranty during the Pre-COO Equipment Warranty Period for such Facility. Any action by Buyer for a breach of the Pre-COO Equipment Warranty with respect to a Facility must be brought prior to achievement of Commencement of Operations for such Facility; provided, however, that such limitation shall not bar Buyer from raising a warranty claim under the General Product Warranty for such Facility (including with respect to any action for breach of the Pre-COO Equipment Warranty that is waived before completion of warranty work for purposes of a Facility's achieving any conditions precedent to any Milestone hereunder). WITHOUT LIMITING SELLER'S OBLIGATION TO INDEMNIFY BUYER PURSUANT TO SECTION 5.8, AND/OR WITH RESPECT TO CLAIMS PURSUANT TO SECTION 13.3, BUYER'S SOLE REMEDY FOR A BREACH OF THE PRE-COO EQUIPMENT WARRANTY SHALL BE THE CORRECTION OF DEFECTIVE FACILITY PURSUANT TO THIS SECTION 3.3(2).

(3) The Pre-COO Equipment Warranty may only be transferred in accordance with Section 14.4.

(4) Any period of time in which the Pre-COO Equipment Warranty is in breach for a Facility shall not extend the Pre-COO Equipment Warranty Period for such Facility beyond its Commencement of Operations Date.

Section 3.4 Installation Services.

(1) Seller shall, and shall cause each of its Service Providers to, perform all development, design, engineering, procurement, construction, and commissioning services necessary in connection with the installation, interconnection, testing, start-up, and commissioning the Facilities to achieve Commencement of Operation (collectively, "Installation Services"), including the following activities:

(i) Seller shall cause to be performed all studies, reports and applications (in the name of Buyer) that are necessary for interconnection of each Facility to the distribution and transmission facilities of the applicable Transmitting Utility.

(ii) Seller shall obtain and maintain, or cause to be obtained and maintained (where required, in the name of Buyer or each ESA Customer, as the case may be), all Permits, PTOs and Third Party Consents necessary to design, install, commission, construct, occupy, operate and maintain each Facility at each Site, including related performance assurance or other credit support requirements (including as required pursuant to any ESA, Site License, Incentive Agreement or Legal Requirements); *provided*, that Seller shall have no liability for any failure to obtain or maintain any Permit or Third Party Consent to the extent attributable to a breach by Buyer of its obligations in this Agreement or a breach by an ESA Customer of its ESA; *provided*, *further*, that absent Buyer's willful misconduct, the preceding proviso shall not limit the rights and duties of the Parties under Section 3.4(1)(xii).

(iii) Without limiting Seller's obligations pursuant to this Section 3.4, Seller shall perform all design, permitting and installation work in accordance with Schedule 3.4(1)(iii), including any and all upgrades required to be performed in respect of the applicable Facility pursuant to the requirements of the Interconnection Agreement (whether or not executed) or as otherwise required by the applicable Transmitting Utility.

(iv) Seller shall deliver any and all approvals and notices required to be delivered under the ESAs and Site Licenses in accordance with the terms thereof.

(v) Without limiting Seller's obligations pursuant to this Section 3.4, Seller shall perform all commissioning work in accordance with the provisions of Schedule 3.4(1)(v).

(vi) Seller shall install the Bloom Systems, the BOF and the Ancillary Equipment at each Site using items that are new and undamaged at the time of such use or installation.

(vii) Seller shall pay all amounts owed to its subcontractors and vendors in connection with the performance of the Installation Services on a timely basis and shall hold Buyer harmless against any claims asserted by such subcontractors and vendors.

(viii) Until the Commencement of Operations Date for a Facility (excluding any Delayed Ancillary Equipment), Seller shall be responsible for providing physical security of such Facility, and thereafter Seller shall perform, on Buyer's behalf, Buyer's obligations and duties to the applicable ESA Customer pursuant to its ESA and Site License to provide physical security for such Facility to the extent such performance is required thereunder.

(ix) If requested by Buyer, Seller shall provide operator training and associated training materials to personnel and representatives of Buyer sufficient to instruct Buyer on operation of such Facility in connection with safety requirements and in conformance with Prudent Electrical Practices.

(x) Prior to Commencement of Operations of each Facility, Seller shall perform a performance test not less stringent than the testing applied to its fuel cell power generating systems for any other major customer of Seller of each Bloom System incorporated into such Facility and the applicable BOF and Ancillary Equipment in the presence of Buyer (if Buyer elects to attend), and such Bloom Systems and applicable BOF and Ancillary Equipment shall have passed such test; *provided*, Delayed Ancillary Equipment may be tested later in the presence of Buyer (if Buyer elects to attend). Seller shall, upon request by Buyer, inform Buyer of the date on which it expects to conduct the performance test of any Facility (or, if applicable, Delayed Ancillary Equipment) and cooperate with Buyer to provide Buyer with the opportunity to observe such testing to the extent practicable, *provided*, that in no event shall Seller be required to delay the performance of any performance test in order to allow Buyer to witness such test if all other pre-testing requirements have been satisfied.

(xi) At Buyer's request, Seller shall provide to Buyer, prior to the Commencement of Operations for each Facility (unless Buyer informs Seller that it may, under the terms of the applicable ESA, be provided thereafter, in which case Seller shall provide it by the deadline set forth in the ESA (but not later than the date on which it is provided to the applicable ESA Customer)), an "issued for construction" set in native electronic format, or, in the case of Delayed Ancillary Equipment, an updated set, if applicable, which shall include site information, permitting information, codes, project team contacts, project description, general construction notes, overall site plan, foundation plan, layout plan, detailed site plan, and other drawings and a product data sheet. Seller shall deliver to Buyer any other documentation necessary to establish placement in service for purposes of section 48 of the Code.

(xii) Commencement of Operations.

(A) Subject to Section 3.4(1)(xiv), promptly following achievement of the Delivery Milestone for each Facility, Seller shall provide installation, inspection,

commissioning and start-up for such Facility in accordance with the Performance Standards, and Seller shall use commercially reasonable efforts to cause such Facility to achieve Commencement of Operations within ninety (90) days of the date of achievement of the Deposit Milestone for such Facility, as set forth in Certificate of Deposit Milestone Completion for such Facility, but in no event later than any deadline for such Commencement of Operations that is applicable to such Facility in its ESA. Seller shall promptly certify in writing to Buyer when each Facility achieves Commencement of Operations by delivery of a Certificate of COO. Without limitation of the foregoing, each Facility shall be connected by Seller to the applicable natural gas source, water source, SCADA, and Electrical Interconnection Facilities no later than the Commencement of Operations Date thereof;

(B) If any Facility does not achieve any of the events described in clauses (2) through (4) of the definition of "Placed in Service" by the earlier of (i) one hundred eighty (180) days of the payment of the portion of Aggregate Purchase Price set forth in Section 2.3(2) for such Facility and (ii) the applicable deadline in the Facility's ESA (such earlier date, the "Placed in Service Deadline"), then Buyer shall have the right, in its sole discretion, to elect in writing that Seller (I) remove such Facility from the initial Site and restore such Site in accordance with Section 4.10(2) and (II) relocate the Bloom Systems to a substitute Site or (subject to and in accordance with Section 4.8(2)) a New Customer Site, whether in the Scheduled Portfolio or otherwise, subject to compliance with Facility Contracts and agreement with ESA Customers or New Customers, as applicable, entirely as a part of the Installation Services and at Seller's cost and expense, and if Buyer makes such election, Seller shall complete performance of such obligations on or before the date that is ninety (90) days after the Placed in Service Deadline (such ninetieth (90^{th}) day, the "Reinstallation Deadline"). If (x) Buyer does not exercise such right, which it may or may not do in its sole discretion, in respect of any Facility within five (5) Business Days of the Placed in Service Deadline thereof or (y) Buyer exercises such right with respect to any Facility, and such Facility has not achieved any of the events described in clauses (2) through (4) of the definition of "Placed in Service" before the earlier of (p) the Reinstallation Deadline or (q) the Commencement of Operations Date Deadline, then Seller shall refund all payments previously paid by Buyer for such Facility, in accordance with Section 2.6 and remove such Facility from the applicable Site in accordance with Section 4.10(1). If Seller reasonably anticipates that any Facility is reasonably likely to not achieve any of the events described in clauses (2) through (4) of the definition of "Placed in Service" on or before its Placed in Service Deadline, Seller shall promptly notify Buyer in writing, and in any event no later than ten (10) Business Days in advance of such Placed in Service Deadline. Nothing in this Section 3.4(1)(xii)(B) shall limit Buyer's rights and remedies hereunder under Section 2.4(7), Section 2.9, Section 12.8 or if there is a Seller Default.

(C) Neither Section 12.6 nor Section 12.9 shall provide any excuse or justification for delay or reduction of Seller's requirements to timely perform its obligations, including in respect of Buyer's remedies, under this Section 3.4(1)(xii).

(xiii) [*Intentionally omitted*.]

(xiv) If any ESA provides that items of Delayed Ancillary Equipment may be installed or commissioned after the Commencement of Operations Date, Seller may install or commission such Delayed Ancillary Equipment after such Commencement of Operations Date, but Seller shall complete such installation and commissioning in accordance with the applicable Facility Contracts, and Seller shall perform and successfully complete all necessary acts under the applicable Interconnection Agreement (including performance testing) and shall have obtained permission from the applicable Person granting Buyer permission to interconnect, if applicable, such Delayed Ancillary Equipment with the distribution or transmission facilities of the Transmitting Utility, and in no event may Seller continue any such installation, commissioning or interconnecting after the Commencement of Operations Date Deadline.

(xv) Post COD Deliverables.

(A) With respect to each Facility, Seller shall use commercially reasonable efforts to deliver by uploading to the Data Room a final executed IE Certificate by the Invoice Due Date of the month in which such Facility's Commencement of Operations Date occurs, but in no event later than thirty (30) days after such Commencement of Operations Date; *provided, however*, if the IE Certificate is not final due to any event or circumstance that prevented the IE from performing its obligations within such period, and Seller is diligently and in good faith working to facilitate IE's complete review, such period shall be automatically extended for a period of thirty (30) additional days (but no longer than sixty (60) days from the date such Facility achieves its Commencement of Operations).

(B) With respect to each Facility, Seller shall deliver by uploading to the Data Room each of the following within sixty (60) days of such Facility's Commencement of Operations Date: (I) Seller Deliverables set forth on Schedule 3.4(1)(xv) specified to be delivered before the Commencement of Operations Date to Buyer thereon, (II) to the extent not yet delivered, in connection with Delayed Ancillary Equipment, any lists and copies of items described in Section 2.3(5)(iii), including lists and copies of Permits, PTO, other Governmental Approvals, Third Party Consents, Incentive Agreements, Interconnection Agreements and other Facility Contracts, and (III) each of the Post-COO Deliverables set forth on Schedule 2.5, to the extent not yet delivered (provided, that Seller shall use its commercially reasonable efforts to (x) provide the lists and copies described in this clause (III) as soon as is reasonably practicable during the performance of Installation Services,

and (y) provide updates to Buyer if such lists and copies are amended, modified or supplemented).

(C) Lien Waivers. With respect to each Facility, no later than (i) ten (10) Business Days after a Facility reaches its Commencement of Operations Date, pursuant to Section 3.4(4), Seller shall deliver final and unconditional waivers and releases of Liens for such Facility from Seller, and (ii) ninety (90) days after a Facility reaches its Commencement of Operations Date, pursuant to Section 3.4(4), final and unconditional waivers and releases of Liens for such Facility from all subcontractors performing any Installation Services at the applicable Site, substantially in the statutorily prescribed form required by the applicable state Governmental Authority in which the Site is located (and, if there is no such prescribed form, then in form and substance reasonably satisfactory to Buyer); provided, that the foregoing requirements in this Section 3.4(1)(xv)(C) shall only apply to subcontractors that have agreed to provide or perform equipment or services in respect of such Facility for purchase price or fees in excess of $[***] in the aggregate.

(D) UCC-1 Fixture Filing. No later than ten (10) days after a Facility reaches the Commencement of Operations Date, Seller will file a UCC-1 fixture filing, naming the Buyer as "Secured Party" (or any other applicable capacity of the Buyer) and the Customer as "Debtor", in the real estate recording jurisdiction in which the Site is located, and upon making such filing Seller shall notify Buyer of the same; provided Seller shall not make any such filing without receipt of express written authorization from the ESA Customer, as "Debtor", to make such filing; provided, further, if, despite commercially reasonable efforts, if the ESA Customer will not provide such consent, each of Buyer and Seller shall cooperate to find a solution that is mutually agreeable to both parties thereto to protect Buyer's interest in the applicable Facility and ensure any such filing, if done, is permitted as a matter of law without consent of the ESA Customer.

(xvi) Following Commencement of Operations of a Facility, Seller shall promptly remove all waste materials and rubbish from and around the Site as well as all of its tools, construction equipment, machinery, and surplus materials as reasonably necessary to restore each Site to a condition reasonably satisfactory to such ESA Customer or as otherwise required by the applicable Site License or ESA.

(xvii) Seller's supply of the Bloom Systems, Ancillary Equipment (if applicable) and BOF hereunder, and performance of the Installation Services therefor, shall be fully comprehensive of all services, labor, and equipment necessary to complete installation of a fully commissioned and operating Facility in accordance with this Agreement, the applicable ESA, the applicable Interconnection Agreement, and the applicable Site License.

(2) Seller shall be responsible, at its sole cost and expense, for obtaining, maintaining and complying with all Permits required to perform the Installation Services under this Agreement,

including related performance assurance or other credit support requirements. Without in any way limiting the foregoing, Buyer agrees to cooperate with and assist Seller in obtaining such Permits, at Seller's cost and expense.

(3) Seller shall cause all Installation Services to be performed in a good and workmanlike manner, free from defective materials, and in accordance with the Performance Standards, free and clear of Liens other than Permitted Liens.

(4) Seller shall promptly pay all subcontractors under this Agreement (including, for clarification, subcontractors working off-Site) and shall, at the time of each payment made to any such subcontractor, obtain a conditional or final lien waiver (in each case, substantially in the statutorily prescribed form required by the applicable state Governmental Authority in which the Site is located (and, if there is no such prescribed form, then in form and substance reasonably satisfactory to Buyer)), and promptly provide Buyer with a copy of such lien waiver; provided, that the foregoing requirements in this Section 3.4(4) to provide Buyer with copies of lien waivers shall only apply to subcontractors that have agreed to provide or perform equipment or services in respect of the applicable Facility for purchase price or fees in excess of $[***] in the aggregate. Seller shall discharge any Liens by such subcontractors within thirty (30) days of obtaining Knowledge thereof. Seller shall release all Liens in favor of Seller on each Facility upon final payment of the Aggregate Purchase Price for such Facility. Upon the failure of Seller to discharge a Lien required to be discharged under this Section 3.4(4), or else promptly to provide a bond in an amount and from a surety acceptable to Buyer to protect against such Lien, in each case, within thirty (30) days after Seller is aware of the existence thereof, Buyer may, but shall not be obligated to, pay, discharge or obtain a bond or security for such Lien and, upon such payment, discharge or posting of security therefor, shall be entitled immediately to recover from Seller (and Seller shall indemnify and hold harmless Buyer for) the amount thereof, together with all reasonable and necessary expenses, including attorneys' fees, actually incurred by Buyer in connection with such payment or discharge, or to set off all such amounts against any amounts owed by Buyer to Seller hereunder.

Section 3.5 Insurance.

(1) Seller shall maintain and comply with the insurance described in (and comply with the terms and conditions set forth in) Annex B until the end of the Warranty Period with respect to each Facility (including during performance of Installation Services and Facility Services, as applicable), and, to the extent any ESA or Site License contains additional or more stringent insurance requirements (including the addition of any named or additional insureds), Seller shall on Buyer's behalf satisfy and maintain compliance with such requirements.

(2) Promptly after the Agreement Date, and each year, promptly after effecting the renewal of its insurance policies, Seller shall provide to Buyer copies of any certificates of insurance evidencing its compliance with Annex B.

Section 3.6 Right of First Refusal. In the event that Buyer or its Affiliates desires to sell or otherwise transfer title to any Facility or Facilities that is not in conjunction with the assignment or other transfer of the direct or indirect equity interests of Buyer, as permitted pursuant to

Section 14.4 (if not in conjunction as so described, a "Facility Transfer"), to a transferee other than an ESA Customer or an Affiliate of Buyer, Buyer shall first promptly notify Seller of the proposed purchase price and any material economic terms and conditions ("Buyer's Notice"). The Buyer's Notice shall constitute the Buyer's offer to sell the Facility or Facilities to Seller:

(1) If such Facility Transfer is for a Facility or Facilities that in the aggregate are less than [***]% of the Portfolio (measured as the System Capacity of the Facility or Facilities to be transferred over the System Capacity of the Portfolio) (the "ROFR Threshold"), the Buyer's notice shall be irrevocable and Seller shall have an exclusive right of first refusal to purchase such Facility or Facilities on the same terms and conditions of such sale outlined in the Buyer's Notice for a period of 10 Business Days after receipt of such terms and conditions in the Buyer's Notice; and

(2) if such Facility Transfer is for a Facility or Facilities that in the aggregate are equal to or greater than the ROFR Threshold, Seller will have the option to make an offer to purchase such Facility or Facilities before the end of the period of ten (10) Business Days after receipt of such terms and conditions in the Buyer's Notice by delivering a written offer to Buyer on the terms specified in the Buyer's Notice ("Seller's Offer Notice"). Any Seller's Offer Notice so delivered to Buyer shall be binding upon delivery and be irrevocable by Seller. Buyer agrees to bargain in good faith on any terms not stated in the Seller's Offer Notice.

(3) In the event that Seller elects to purchase such Facility or Facilities, Seller shall, promptly following payment of the purchase price, remove such Facility or Facilities at Seller's cost, including the remediation of the Site in which the such Facility or Facilities were located in accordance with Section 4.10(2).

(4) In the event that Seller declines to purchase such Facility or Facilities, or fails to respond within the applicable period, or if Buyer and Seller fail to agree on and execute a purchase and sale agreement within sixty (60) calendar days after the date of Buyer's receipt of Seller's Offer Notice, Seller shall be deemed to have waived its rights to purchase such Facility or Facilities pursuant to this Section 3.6(2), and Buyer shall have the right thereafter, without further notice to Seller, to effect any such Facility Transfer; provided, if the purchase price of any Facility Transfer offered to any such third-party decreases by more than ten (10%) percent of the original purchase price or there are material changes in material terms favorable to a potential independent buyer that a reasonable independent buyer would reasonably believe to be materially beneficial after Seller has waived its rights to purchase such Facility or Facilities pursuant to this Section 3.6, then Buyer shall notify Seller in writing of the change and shall give Seller another option to purchase the Facility or Facilities pursuant to clause (1) or (2) of this Section 3.6, as applicable, at the reduced purchase price or pursuant to such changed terms. Any Facility Transfer must be effected in accordance with the terms and conditions of the applicable ESA or ESAs. Buyer may not make a Facility Transfer to a direct Competitor of Seller without the express written consent of Seller.

(5) Any Facility Transfer shall have no effect whatsoever on the terms and conditions of this Agreement with respect to the remaining Facilities not subject to such Facility Transfer.

(6) Notwithstanding anything to the contrary herein, this Section 3.6 shall in no way restrict an assignment or other transfer of this Agreement or a Party's rights, interests or obligations hereunder pursuant to the terms of Section 14.4, and the Parties acknowledge and agree that any restrictions applicable to such an assignment or transfer are set forth in Section 14.4.

(7) Subject to clause (6) above, if Buyer effects a Facility Transfer pursuant to this Section 3.6, (A) Buyer may assign and delegate its rights and obligations under this Agreement solely with respect to those Facilities subject to such Facility Transfer to the applicable purchaser or (B) Buyer will facilitate and Seller will use commercially reasonable efforts to enter into an agreement with such purchaser for the operation and maintenance of such Facilities with terms substantially similar to the operation and maintenance terms set forth herein, after which this Agreement shall no longer be deemed to be effective with respect to those Facilities subject to such Facility Transfer.

Section 3.7 Third Party Warranties. If any express or implied warranties, indemnities, guaranties, remedies, covenants and other rights which any subcontractor or supplier has made to Seller with respect to any good, service, or other deliverable furnished under this Agreement in respect of a Facility (each a "Third Party Warranty"), including third party Software, would provide any additional rights to Buyer beyond the warranties under ARTICLE V, then (a) such Third Party Warranty providing additional rights will be for the benefit of and passed through to Buyer to the fullest extent possible, (b) Seller hereby transfers and assigns (and shall transfer and assign in the future, to the extent not hereby transferred and assigned) to Buyer all of Seller's right, title and interest under such Third Party Warranty to exercise such additional rights (and shall execute and deliver any documents as and when required to effect the foregoing transfers and assignments), and (c) Seller hereby appoints Buyer as attorney-in-fact coupled with an interest to exercise and enforce all such additional rights in the name of either Buyer or Seller. Nothing in this Section 3.7 will limit Seller's obligations to Buyer under ARTICLE V or Section 3.3.

Section 3.8 Access; Cooperation. Seller shall provide to Buyer such other information that is in the possession of Seller or its Affiliates or is reasonably available to Seller regarding the permitting, engineering, construction, or operations of Seller, its subcontractors or the Facilities, and other data concerning Seller, its subcontractors or the Facilities that Buyer may, from time to time, reasonably request in writing, subject to Seller's obligations of confidentiality to third parties with respect to such information.

Section 3.9 Performance Standards. For the purpose of this Agreement, Seller shall perform all of its duties and obligations under this Agreement, including the Installation Services and the Facility Services, in accordance and consistent with each of the following (unless the context requires otherwise), including to such standards as are required of Buyer in respect of duties and obligations for which Seller bears responsibility under this Agreement: (A) plans and specifications attached hereto or provided pursuant to any Permit, ESA, Site License or Interconnection Agreement; (B) all Permits and other applicable Legal Requirements; (C) the manufacturer's recommendations and warranties with respect to all equipment and all maintenance and operating manuals or service agreements, whenever furnished or entered into, including any subsequent

amendments or replacements thereof, issued by the manufacturer, provided they are consistent with generally accepted practices in the fuel cell industry; (D) the requirements of all applicable insurance policies; (E) any applicable provisions of the Site Licenses, including any landlord rules and regulations; (F) Prudent Electrical Practices; (G) the relevant provisions of each Interconnection Agreement and PTO; (H) each ESA and Site License; (I) each Incentive Agreement; (J) the requirements in respect of any applicable System Attribute in respect of which any services are being provided by Seller or its Affiliate (x) hereunder or (y) under the Administrative Services Agreement, (K) the Seller Corporate Safety Plan (as updated by Seller from time to time, with a copy provided promptly to Buyer); (L) all Legal Requirements, Permits and Governmental Approvals; and (M) all Environmental Requirements (collectively, the "Performance Standards"); provided, however, that meeting the Performance Standards shall not relieve Seller of its other obligations under this Agreement. Any Battery Solution associated with a Facility shall be charged solely by the associated Bloom System, and under no circumstances shall any electricity from any source other than the associated Bloom System be stored in the Facility.

Section 3.10 Market-Based Rate Authority.

(1) Seller shall assist Buyer in seeking and applying for a grant of market-based rate authority from FERC sufficient to operate each Facility ("205 Authority"). In connection with such assistance, Buyer shall reimburse Seller for any out-of-pocket expenses (including reasonable attorney's fees, but not including Seller overhead cost) in connection with such assistance with the preparation of such applications.

(2) Buyer shall diligently seek to file an application for 205 Authority and shall acquire 205 Authority as quickly as is reasonably practicable. For the period from the Agreement Date until such time as Buyer receives 205 Authority, Seller will (unless and until requested not to do so by Buyer) (A) at each Facility that will be Placed in Service during such period (i) install a bidirectional meter or similar monitoring device for the measurement of kWh delivered, kWh received and net kWh, (ii) monitor daily net kWh from such Facility, and (iii) promptly make such daily data available to Buyer, and (B) notwithstanding the Warranty Specifications, but in accordance with the applicable ESA, (i) [***], and (ii) with respect to other Sites Placed in Service during such period, [***] (this clause (B), a "205 [***]"). In connection with the seeking of the [***], 205 Authority or any 205 [***], Seller shall use its commercially reasonable efforts, at Buyer's cost and expense and upon Buyer's request, to (x) facilitate the applicable ESA Customer's gaining an understanding of the circumstances giving rise to such seeking of a [***] or 205 Authority, or such 205 [***], and any anticipated effects under the applicable ESA, (y) (subject to Section 3.10(3)) reschedule applicable Facilities' Placed in Service Dates, and (z) mitigate any adverse economic consequences to Buyer hereunder or such ESA Customer under such ESA. Upon Buyer's receipt of 205 Authority or the [***] (whichever occurs later), Seller's obligations pursuant to this Section 3.10 shall terminate and Seller will resume full operation of such Facilities in accordance with the Warranty Specifications (to the extent Seller's obligations in respect of such Warranty Specifications were ever limited).

(3) Notwithstanding anything herein to the contrary, until the earlier of (I) expiration pursuant to Section 2.10(5) of Seller's obligations under Section 2.10 without a Tax Equity Investment being consummated, and (II) Buyer's receipt of the [***], Seller shall under no circumstances cause a Facility to be interconnected to the transmission or distribution system of the applicable Transmitting Utility, or, if the Facility has been interconnected to the transmission or distribution system of the applicable Transmitting Utility, cause the interconnection to be energized and synchronized, or generate any energy, including test energy. This restriction does not apply to the Facilities listed on Schedule 3.10.

ARTICLE IV
FACILITY SERVICES AND OTHER WORK

Section 4.1 In General.

(1) During the Warranty Period, in consideration of the Service Fees, Seller shall service each Facility constituting a portion of the Portfolio so that the Portfolio performs in accordance with the Warranty Specifications and so that the BOF and Ancillary Equipment will not cause the Portfolio to fail to perform in accordance with the Warranty Specifications, as more fully set forth in ARTICLE V, and in all cases subject to the Performance Standards. Without limiting the foregoing, Seller agrees to perform on behalf of Buyer all operations and maintenance obligations in respect of each Facility under the applicable ESA and Site License in a manner fully consistent with the terms and conditions of such documents. The services set forth in this Section 4.1, as more fully described in this ARTICLE IV, are collectively referred to herein as the "Facility Services." For clarity, Seller shall have no authority or responsibility under this Agreement with respect to the payment or receipt of monies to or from ESA Customers or with respect to serving or receiving formal notices to or from ESA Customers; provided, however, subject to the notice requirements set forth in Section 6.2, that Seller may informally communicate with ESA Customers regarding routine, day-to-day Facility Services matters. For so long as Seller is performing Facility Services in respect of a Facility, the Parties intend that Seller shall be responsible for all operational activities in respect of such Facility, including the performance of all obligations to ESA Customers that are required to be performed physically at any Site under the applicable Facility Contracts. If a Party has any uncertainty regarding which Party is responsible for particular obligations to ESA Customers, the Party's Manager shall discuss such matter with the other Party's Manager to implement the allocation of responsibility intended by this Agreement and the Parties thereafter shall, if necessary, amend this Agreement to clarify the Parties' agreement regarding such allocation of responsibility.

(2) Until the expiration of the Extended Warranty Term, upon the expiration of the Warranty Period with respect to any Facility Buyer may, at its option, elect to renew the Warranty Period with respect to such Facility for a period of one (1) additional year. The Warranty Period for each Facility shall be automatically renewed for a period of one (1) additional year at the termination of the existing Warranty Period if Buyer has not informed Seller in writing of its election to terminate the Warranty Period at the end of such existing Warranty Period at least thirty (30) days prior to the final date of such existing Warranty Period. Notwithstanding anything to the contrary set forth in

the foregoing, in the event that the "Term" of the Equinix ESA with respect to any Facility(ies) is extended pursuant to Section 4.7(c) thereof, then, upon the expiration of the then-applicable term of such Equinix ESA absent such extension, Buyer may elect to extend the Warranty Period for such Facility(ies) for a period equal to such extended "Term" instead of electing a one-year renewal.

(3) Notwithstanding anything to the contrary set forth in the foregoing, in the event that the "Term" of an ESA with respect to any Facility is extended pursuant to any provision in such ESA (or any related agreement between Buyer and the applicable ESA Customer) providing for a day-for-day extension thereof during a period in which the Facility is not generating electricity, then, (i) Buyer's obligation to pay Services Fees with respect to the applicable Facility shall be automatically suspended during the pendency of the Facility outage, (ii) the year of the Warranty Period in which the "Initial Term" (as extended) of the applicable ESA would otherwise have expired shall be automatically extended on a day-for-day basis equal to the extension of the applicable ESA so that the Warranty Period is coterminous with the "Initial Term" of applicable ESA, as extended, and (iii) during such idle period Seller will be obligated to perform only such maintenance services for the Facility as are designed to facilitate a safe and reliable restart of the Facility following such idle period.

(4) If requested by Buyer, Seller shall use its commercially reasonable efforts to assist with and facilitate (i) the exercise by any ESA Customer of its rights to renew, or (ii) other renewal, in each case of the initial term or any renewal term of such ESA Customer's ESA. Such assistance and facilitation shall include the execution and delivery of reasonable documents and other instruments requested by Buyer.

Section 4.2 Operation and Maintenance Services. Without limiting, and in furtherance of, Section 4.1, Seller is hereby granted the right and authority (and, to the extent necessary to carry out its functions hereunder, a limited power of attorney) and agrees, for the benefit of Buyer, to operate safely and reliably each Facility and to maintain during the Warranty Period in accordance with the terms of this Agreement each such Facility in good condition and repair in accordance with the Warranty Specifications and the Performance Standards. During the Warranty Period, the specific responsibilities of Seller under this Agreement shall include the following:

(1) Facility Operations. Seller shall ensure that all Facility components are operated and maintained safely and in a manner designed to meet the Warranty Specifications and Performance Standards and as otherwise required under this Agreement.

(2) Facility Maintenance. Seller shall perform, or cause to be performed, all scheduled and unscheduled maintenance required on the Facilities in order to perform in accordance with the Warranty Specifications and Performance Standards. In that regard, Seller's responsibilities hereunder shall include promptly correcting any malfunctions in compliance with the terms of this Agreement. Seller agrees to respond in a timely manner to any Facility outage or other casualty that materially reduces power output or efficiency, or materially impairs the capability of any Facility to comply with the terms and provisions of the applicable ESA or the Performance Standards, by (A) promptly diagnosing the source of such issue and, (B) if on-Site Facility Services are required,

using its best efforts to (1) dispatch field service personnel to the Site within one Business Day after Seller obtains Knowledge that such on-Site Facility Services are required, and (2) cause its field service personnel to arrive at the applicable Site in order to commence repair services at the applicable Facility no later than the next Business Day. Without in any way limiting the foregoing, Seller shall in any event comply with any and all response time(s) and/or corrective activity(ies) required by the applicable ESA(s).

(3) Repair and Replacement of Power Modules; ITC Recapture Covenant. Buyer agrees that Seller may replace the Power Modules included in each Facility with Power Modules of a different model, provided that Seller certifies to Buyer that such replacement model has been subjected to inspections and tests performed by Seller which indicate that such replacement Power Modules model is reasonably expected to perform at least as well as the model it replaces. Seller hereby covenants to Buyer that (i) any repair or replacement of Power Modules made within five (5) years of the date the applicable Bloom System was Placed in Service will have an aggregate cost of replaced parts (taking into account the cost of any other replaced parts pursuant to this Agreement or otherwise) that is less than eighty percent (80%) of the Bloom System's total value (the cost of the new parts plus the value of the remaining Bloom System originally Placed in Service), and (ii) Seller shall keep appropriate records and other documentation until the twelve-year anniversary of the date upon which the applicable Bloom System was Placed in Service that (A) specifically identify the Power Module relocated or removed, (B) evidence that such item is different than that used upon Placed in Service, (C) are sufficient to provide evidence to Buyer and other Persons, as necessary, of the cost of such replaced parts and (D) are sufficient to provide evidence to Buyer and other Persons, as necessary, whether any removed or relocated Power Modules or refurbished parts contain any equipment other than the specifically identified components relocated or removed; provided, Seller shall have no obligation to disclose such records or documentation unless required under Section 6.1(1)(ii) or Section 10.3(5) in connection with a Tax Proceedings.

(4) Personnel. Seller shall ensure that all operations and maintenance functions contemplated by this Section 4.2 are performed by technically competent and qualified personnel (the "Service Technicians"). Seller shall ensure that all Service Technicians: (i) participate in a maintenance training program and receive confirmation of having achieved the requisite level of proficiency for the tasks they are assigned to perform, and (ii) attend periodic "refresher" training programs to the extent Seller deems necessary, in its reasonable judgment.

(5) Spare Parts. Seller shall establish and maintain an adequate inventory of spare parts in one or more locations to facilitate scheduled and unscheduled maintenance required on the Facilities.

(6) Programs and Procedures. Prior to the date of the Commencement of Operations of the first Facility, Seller and Buyer shall have adopted and implemented programs and procedures, consistent with the Performance Standards, intended to ensure safe and reliable operation of the Facilities. Seller may update such programs and procedures from time-to-time during the Term that it believes to be appropriate, in its reasonable judgment and in accordance with the Performance Standards, such updates subject to Buyer's approval. Buyer may, not more than once per calendar

year and at Buyer's sole cost and expense, review such programs and procedures from time to time to confirm compliance with the Performance Standards. Buyer may from time to time provide comments on any such Seller programs and procedures and Seller agrees to consider any such comments in good faith; provided, that Buyer's review and comment on any such program or procedure will not relieve Seller of any of its obligations under this Agreement.

(7) Operations and Maintenance Procedures. Without in any way limiting Seller's obligations pursuant to this Section 4.2, Seller shall perform all operations and maintenance work in accordance with the provisions of Schedule 4.2.

(8) Maximum Export Covenants and Net Metering. Seller shall cause each Facility to be operated such that the export off Site of any amount of output from any Facility does not cause the breach or violation of any obligation or duty in the applicable ESA in respect of net metering quantities or other output export limitations.

(9) Kaiser Self Performance. Notwithstanding anything to the contrary herein, Buyer shall have no liability hereunder or under any Transaction Document arising from any performance by Kaiser pursuant to a Kaiser ESA.

Section 4.3 Service Fees.

(1) Buyer shall compensate Seller for the Facility Services, on a calendar month basis, by paying Seller the "Service Fees" equal, for each Facility, to (i) (A) the rate (in $/kW) specified in Schedule 4.3(1) hereto for such Facility for the applicable calendar month since the applicable Facility achieved Commencement of Operations, multiplied by (B) the aggregate System Capacity (in kW) of the Bloom Systems comprising the applicable Facility, for the applicable calendar month, plus (ii) any additional Services Fees for such Facility set forth on Schedule 4.3(1) hereto based on the presence of Ancillary Equipment. If Facility Services are provided by Seller for a particular Facility for only a portion of any calendar month, the Service Fees due with respect to such partial calendar month shall be pro-rated based on the number of days such Facility Services were provided in respect of such Facility during the calendar month.

(2) Commencing on the date each Facility achieves Commencement of Operations, with respect to each calendar month of such Facility's Warranty Period, the Service Fees shall be invoiced not more often than once per calendar month on a separate invoice (and not pursuant to a Payment Notice) not later than five (5) Business Days prior to the first day of such calendar month, and, subject to Section 3.4(1)(xii)(B) and Section 5.4, shall be payable no later than the thirty (30) calendar days following such proper delivery of such invoice; provided, that the pro rata Services Fees for the calendar month in which a Facility achieves Commencement of Operations shall be invoiced and paid with the Services Fees for the subsequent calendar month. Interest shall accrue, unless being contested in good faith, daily on the Service Fees not paid when due, at the lesser of the monthly rate of (i) one and five-tenths percent (1.5%) and (ii) the highest rate permissible by law on such unpaid balance. Seller shall be under no obligation to provide or perform services hereunder for any Facility whose Service Fee, other than a Service Fee disputed in good faith, has not been paid in full (or offset pursuant to Section 3.4(1)(xii)(B), Section 4.3(6), Section 5.7 or

Section 5.8) within thirty (30) days of invoice until such date upon which the Service Fee has been paid.

(3) If Buyer disputes any amount shown in an invoice issued by Seller in accordance with Section 4.3(2): (i) Buyer must pay the undisputed portion of the invoice amount within the time prescribed by Section 4.3(2), and (ii) liability for the disputed portion of that invoice will be determined in accordance with the dispute resolution procedure set out in Section 14.5.

(4) Any disputed portion of an invoiced amount which was not paid under Section 4.3(3) and is determined as being due to Seller in accordance with the dispute resolution procedure set out in Section 14.5 must be paid by Buyer within ten (10) days of the determination of the dispute in accordance with the procedure set out in Section 14.5 plus, if it is determined in accordance with the dispute resolution procedures that the disputed portion was not disputed in good faith, interest calculated in accordance with Section 4.3(2).

(5) Buyer shall, promptly following receipt of an invoice and reasonable supporting documentation thereof, reimburse to Seller the amount of any cash deposit Credit Support provided by Seller and described on Schedule 1.

(6) Each Party shall have the sole and absolute right to set off any undisputed amounts to which it is entitled under this Agreement (each, a "Set-Off Amount"). If a right to set off so arises, Buyer or Seller, as the case may be, may invoice the other Party for such Set-Off Amount. If such Set-Off Amount is not paid within 30 days of receipt of such invoice, then the Party due such Set-Off Amount shall have the sole and absolute right to set off any undisputed amounts to which it is entitled under this Agreement against any amounts owed by such Party under this Agreement; *provided, however*, the Party setting off such amounts must deliver written notice to the other Party no later than three (3) Business Days from date the Set-Off Amount is actually set off, which notice identifies (i) the amount so invoiced pursuant to this Section 4.3(6),(ii) the Set-Off Amount, and (iii) the provision to which the Set-Off Amount relates. The deduction of any Set-Off Amount shall operate for all purposes as a complete discharge (to the extent of such deduction) of the obligation of the applicable Party to pay the amount from which such deduction was withheld and made. Neither the exercise of, nor the failure to exercise, such right of setoff will constitute an election of remedies or limit the applicable Party in any manner in the enforcement of any other remedies that may be available to it.

(7) If Seller is prevented from performing the Facility Services for a given Facility, or if Buyer is prevented from performing its obligations hereunder, due to a Force Majeure Event under Section 12.6(1) or a Change in Law under Section 12.9, in either case for a period in excess of thirty days in the aggregate (whether or not continuous) over a six month period, then, on and after the thirty-first day of such Force Majeure Event or Change in Law, as the case may be, Buyer shall not be required to pay the Service Fees for such Facility until the date Seller may resume performing the Facility Services for such Facility.

(8) Unless expressly stated otherwise, the Service Fee shall serve as the full consideration for all of Seller's obligations in this Article IV and otherwise after each Facility's Commencement

of Operations Date pursuant to this Agreement, and Buyer shall have no obligation to make further payment with respect to such performance hereunder. Seller shall bear any cost overruns in connection with any services provided by a Service Provider.

Section 4.4 Remote Monitoring; BloomConnect.

(1) For purposes of monitoring the operational performance and determining when repair services are necessary, Seller shall monitor and evaluate the information gathered through remote monitoring of each Facility and Site as well as the maintenance and inspection Site visits. For so long as Seller is responsible for the Facility Services in respect of any Facility, Seller shall provide Buyer with access to (i) BloomConnect or any successor software and (ii) Raw Data, in each case with respect to such Facility.

(2) To the extent an ESA Customer has a right to access BloomConnect or any successor software related to the management of its purchase of energy under an applicable ESA, Seller shall provide access to such ESA Customer for the same.

Section 4.5 Permits.

(1) Seller shall be responsible, at its sole cost and expense, for obtaining, maintaining and complying with all Permits and PTO required to perform the Facility Services under this Agreement, including related performance assurance or other credit support requirements in connection therewith, and shall promptly notify Buyer of any material challenges to the status of a Permit and PTO for a Facility, or any other material issues or anticipated material issues relating to obtaining or maintaining a Permit and PTO for a Facility. Without in any way limiting the foregoing, Buyer shall cooperate with and assist Seller in obtaining all such Permits and PTO.

(2) Seller agrees, at its sole cost and expense, to consult, advise and otherwise assist with the Buyer's preparation and submission of all filings and notices of any nature which are required to be made by Buyer under the terms of any Permit held by Buyer or any Legal Requirements applicable to the Facilities or to Buyer on account of the Facilities.

Section 4.6 Coordination of Relationship.

(1) Seller's Operations Manager. Seller shall at all times retain an operations manager (the "Operations Manager") who shall be dedicated to the overall supervision and management of performance of Seller's Facility Services obligations under this Agreement. Seller's initial Operations Manager is set forth on Schedule 4.6. Seller may, from time to time, designate another individual as a proposed replacement for the Operations Manager by notice to Buyer. Seller's suggested replacement Operations Manager shall be subject to Buyer's approval, which may not be unreasonably withheld or delayed in all instances. Where feasible, Buyer shall have the opportunity to meet the replacement Operations Manager in person or telephonically prior to assignment. Such meeting will take place telephonically except as otherwise agreed upon by the Parties. Nothing in this paragraph shall prevent Seller from assigning interim replacements on a temporary basis to enable it to continue to timely perform its obligations while assignment of a

permanent replacement is pending. During the Warranty Term, Seller shall not assign the Operations Manager duties that are inconsistent or that conflict with the obligations of the Operations Manager in respect of his or her Facility Services duties.

(2) Buyer Manager. Buyer will appoint an individual to serve as its primary contact person with regard to this Agreement (the "Buyer Manager"). Buyer's initial Buyer Manager is set forth on Schedule 4.6. Buyer may, from time to time, designate another individual as a proposed replacement for the Buyer Manager by notice to Seller.

(3) Manager Meetings. The Buyer Manager and the Operations Manager will serve as each Party's main contact to, and for, the other Party with regard to day-to-day matters affecting the Parties' relationship in relation to Installation Services and Facility Services. The Buyer Manager and the Operations Manager (or their designees) will meet, by phone or in person, as often as they feel necessary to monitor and manage such day-to-day activities. Such managers shall operate by consensus to the extent practicable but shall have no authority to amend or waive compliance with the terms and conditions of this Agreement, or to approve actions of the Parties that are inconsistent with this Agreement. Any such waivers or amendments shall be implemented only as described in Section 14.1 or Section 14.2, as the case may be.

(4) QBR. Unless waived in writing by Parties, senior representatives of Buyer (or its Affiliate) and Seller will meet for a QBR at least once each fiscal quarter, which meeting may be by phone or in person. The parties will mutually agree, reasonably in advance, upon an agenda for each QBR, which may include ESA Customer renewals and additional expansion activities. Each QBR shall provide the parties reasonable time to discuss the agenda and ask and respond to relevant questions.

Section 4.7 Relocation or Removals of Facilities or Power Modules Within Portfolio Pursuant to ESAs. In the event that an ESA permits the applicable ESA Customer to request or require the relocation or removal of a Facility or any Power Modules therein after such Facility achieves any of the events described in clauses (2) through (4) of the definition of "Placed in Service", Buyer may, upon request made by such ESA Customer pursuant to the provisions therein, require Seller to relocate or remove such Facility or Power Modules pursuant to this Section 4.7.

(1) In the event that a Facility or one or more Power Modules are to be relocated and remain subject to the same ESA pursuant to this Section 4.7, Seller shall promptly perform all actions necessary for the removal of such Facility or Power Modules from the original Site(s) and the transportation to, and reinstallation and resumption of operations of, such Facility or Power Modules at the relocation Site(s) determined in accordance with the applicable ESA. Buyer shall bear all costs associated with such relocation, provided, that Seller shall bear all such costs to the extent such relocation is due to a breach by Seller of the ESA Warranty or the Efficiency Warranty or a Seller Default, in each case as between Buyer and Seller.

(2) In the event that a Facility or one or more Power Modules are to be removed pursuant to this Section 4.7, Seller will promptly remove such Facility or Power Modules from the applicable Facility or Facilities, and the Parties will cooperate in good faith to identify one or more Sites or

Facilities in the Scheduled Portfolio at which to redeploy such Facility or Power Modules, either (in the event one or more Power Modules but not an entire Facility is being removed or relocated) as additional Power Modules installed in then-empty Power Modules cabinets or to replace operating Power Modules nearing the end of their useful life. In identifying such Sites or Facilities, the Parties will consider (among other things) (i) the availability of empty Power Module cabinets, (ii) wiring or other equipment limitations, and (iii) any restrictions or limitations imposed by Legal Requirements, the ESAs, and the applicable Interconnection Agreement. Upon Buyer's direction, Seller will promptly (x) perform all actions necessary for the handling, removal, shipping, transportation, storage, and reinstallation of such Facility or Power Modules from the original Site and the transportation to, and reinstallation and resumption of operations of, such Facility or Power Modules at the relocation Site in each case in accordance with the applicable ESA and (y) exercise its commercially reasonable efforts to assist Buyer in obtaining for Buyer's benefit a release in writing of all of Buyer's obligations and liabilities with respect to such Facility or Power Modules that are applicable at the initial Site, whether under the applicable ESA or any other agreements that are no longer applicable.

(3) Any relocation or removal of Power Modules pursuant to this Section 4.7 shall be performed in accordance with Sections 4.2(3); provided, that without Buyer's prior written consent, Seller shall not perform such relocation or removal other than using specifically identified Components removed or relocated from the original Site.

Section 4.8 Remarketing and Redeployment.

(1) In certain circumstances an ESA may contain terms or conditions requiring Buyer to attempt to remarket and redeploy one or more Facilities, but not to remove or relocate such Facilities, which actions are instead addressed in Section 4.7 hereof. If Buyer becomes obligated to attempt such remarketing and redeployment as described in the foregoing sentence, Seller agrees to assist Buyer in its applicable remarketing, resale or redeployment obligations (collectively, the "ESA Remarketing Activities"), using at least that degree of effort as is required of Buyer under the applicable ESA. Without in any way limiting the foregoing, Seller assistance shall include taking the following actions for Buyer's benefit upon request: (a) if necessary, remove such Facility in accordance with Section 4.10(2), (b) on a nondiscriminatory basis with respect to other similar equipment of Seller, distributing to its sales organization information on the availability, location and price of such Facility, and agreeing to provide to a prospective purchaser of such unit or the output thereof, as applicable, at no cost to such purchaser, a certificate of maintainability with respect to such unit, (c) subject to Buyer's approval of reinstallation and procurement plans, cause such Facility to be reinstalled at the applicable purchaser's site at Seller's then prevailing installation rates, including procuring and installing any necessary BOF equipment related thereto, (d) cause such Facility to be refurbished or reconfigured as necessary or appropriate to facilitate such resale or redeployment, and (e) enter into an Energy Tolling Agreement and site license agreement for all necessary operations and maintenance services necessary to operate such Facility following such resale or redeployment at Seller's then prevailing maintenance rates for similar equipment at a similar Site and including a scope of work, performance guaranties, and indemnification provisions similar in all material respects (except that Tolling Rates shall be subject to Buyer's approval in its

sole discretion) to the ESA pursuant to which the applicable Facility was most recently installed. The purchaser described above shall be deemed a New Customer hereunder, and its site a New Customer Site, in each case approved in accordance with Section 2.9 (in Buyer's sole discretion). Any ESA Remarketing Activities shall be performed in accordance with Section 4.2(3); provided, that without Buyer's prior written consent, Seller shall not perform such ESA Remarketing Activities other than using specifically identified Components removed or relocated from the original Site. In the event the requirements and obligations under the ESA conflict with the requirements and obligations in this Section 4.8(1), the provisions of the ESA shall prevail.

(2) If Buyer elects that Seller relocate a Facility or Bloom Systems to a substitute Site or a New Customer Site pursuant to Section 3.4(1)(xii)(B) or Seller becomes obligated to do so as a result of removing a Facility under Section 2.4(7) (if applicable), then unless and until Buyer subsequently elects that Seller refund any amounts in respect of the Aggregate Purchase Price paid as of such date in and remove such Facility or Bloom Systems pursuant to Section 2.4(7) or Section 3.4(1)(xii)(B), as applicable, to the extent a substitute Site is not already available and approved pursuant to this Agreement, Seller shall attempt to remarket or redeploy such Facility or Bloom Systems, including upon Buyer's request, on a nondiscriminatory basis with respect to other similar equipment of Seller, distributing to its sales organization information on the availability, location and price of such Facility, and agreeing to provide to a prospective purchaser of such unit or the output thereof, as applicable, at no cost to such purchaser, a certificate of maintainability with respect to such unit (collectively, the "Pre-PIS Remarketing Activities"). Seller will (a) if applicable, ensure any proposed New Customer and/or New Customer Site is approved by Buyer in accordance with Section 2.9, (b) subject to Buyer's approval of reinstallation and procurement plans, (c) cause such Facility to be reinstalled at the applicable New Customer Site at Seller's then prevailing installation rates, including procuring and installing any necessary BOF equipment related thereto cause such Facility to be refurbished or reconfigured as necessary or appropriate to facilitate such redeployment, (d) either (x) in its own name, enter into the applicable ESA and site license agreement for all necessary operations and maintenance services necessary to operate such Facility following such redeployment at Seller's then prevailing maintenance rates for similar equipment at a similar Site and including a scope of work, performance guaranties, and indemnification provisions similar in all material respects (except that Tolling Rates shall be subject to Buyer's approval in its sole discretion) to the ESA pursuant to which the applicable Facility was most recently installed and, upon approval in writing from Buyer, assign each of the foregoing to Buyer or (y) negotiate the final forms of the foregoing and present them to Buyer for approval and execution.

(3) All of Seller's reasonable and documented costs and expenses (including a reasonable allocation of personnel hours) incurred in connection with any ESA Remarketing Activities shall be reimbursed by Buyer, and Seller will reasonably cooperate with Buyer to provide Buyer with any documentation that is required pursuant to the applicable ESA to support such costs and expenses. All costs and expenses in respect of any Pre-PIS Remarketing Activities and other services and equipment provided pursuant to Section 4.8(2) are for the account of Seller, it being understood that any portions of the Aggregate Purchase Price paid to date in respect of the related Facility shall fully compensate Seller for performing such obligations.

Section 4.9 Calculation of Indexed ESA Tolling Rates. In the event that an ESA (including as applicable to any one or more Facilities) provides for the calculation of the Tolling Rate for any Facility as of any time based on external factors such as the prevailing price of electricity, electricity transmission and delivery, natural gas prices, or other factors (each, an "Indexed ESA"), Seller shall perform all required calculations of the Tolling Rate(s) on behalf of Buyer in accordance with the requirements of the applicable Indexed ESA, and Buyer hereby authorizes Seller, subject to Section 4.1, to perform such calculations, informally interact with the applicable ESA Customer(s) and generate proposed calculations of Tolling Rate(s) from time to time in accordance with the provisions of the applicable Indexed ESA. Seller shall keep Buyer informed, with reasonable documentation, throughout the performance of actions contemplated in this Section 4.9. In the event of any dispute between Seller and the applicable ESA Customer(s) regarding the calculations of the Tolling Rate(s), Seller shall provide prompt notice to Buyer of such dispute and thereafter Buyer shall have right to participate in and control all negotiations and to resolve such dispute with the applicable ESA Customer(s) regarding the calculations of such Tolling Rate(s). Seller shall deliver to Buyer the results of Seller's calculations of the Tolling Rate(s) under each applicable Indexed ESA at least five (5) Business Days prior to the date such calculations are to be delivered to the applicable ESA Customer so that Buyer may confirm Seller's calculations, and Seller shall not provide any such calculation to the applicable ESA Customer until Buyer has confirmed Seller's calculations. In the event that Buyer believes Seller has made any calculation errors, the Parties shall cooperate in good faith to resolve any discrepancies between Seller's calculations and Buyer's calculations prior to the date on which such calculations must be delivered to the applicable ESA Customer pursuant to the terms of the applicable Indexed ESA, and as between Buyer and Seller any discrepancies that remain unresolved after a period of three (3) Business Days of discussions shall be resolved in favor of Buyer.

Section 4.10 Repurchase and Remove.

(1) If Seller repurchases a Facility pursuant to any of Sections 5.7(4), 5.8(1), 12.3, or 12.7(2), or if a Facility is returned to Seller pursuant to Sections 2.4(7), 3.4(1)(xii)(B), or Section 13.1, then:

(i) Seller shall (x) pay to Buyer the Repurchase Value, if Seller is required to repurchase a Facility pursuant to any of Sections 5.7(4), 5.8(1), 12.3, 12.7(2), (y) if Seller is required to refund or repurchase a Facility pursuant to Sections 2.4(7) or 3.4(1)(xii)(B), (A) refund to Buyer all payments of the Aggregate Purchase Price paid in respect of such Facility or any Components thereof as of such date and (B) pay to any ESA Customers and any other Persons any amounts that are due or become due to be paid by Buyer pursuant to any ESA, Site License or other Facility Contract or Permit in respect of such Facility, or (z) pay to Buyer the amount specified in Section 13.1, if a Facility is returned to Seller pursuant thereto;

(ii) title to such Facility shall automatically transfer back to Seller on an AS IS basis upon Buyer's receipt of such payment and Buyer shall deliver a Bill of Sale to Seller evidencing such transfer of title;

(iii) upon Buyer's request, Seller shall use commercially reasonable efforts to assist Buyer in securing a release in writing of (and if such release cannot be secured within thirty (30) days, Seller shall assume in writing) all of Buyer's obligations and liabilities with respect to such Facility from the related ESA Customer under the applicable ESA and from any other Person party to a Facility Contract in respect of such Facility under such Facility Contract;

(iv) Seller shall, at its sole cost and expense, remove such Facility from the applicable Site in accordance with Section 4.10(2) below;

(v) such Facility shall no longer be deemed a part of the Portfolio or the Scheduled Portfolio; and

(vi) Seller and Buyer's rights and obligations with respect to such Facility under this Agreement shall terminate in full, except for those provisions that expressly survive by their terms.

(vii) THE REMEDY DESCRIBED IN THIS SECTION 4.10(1) IS BUYER'S SOLE AND EXCLUSIVE REMEDY, AND SELLER'S SOLE AND EXCLUSIVE LIABILITY, ARISING OUT OF ANY FAILURE SET FORTH IN SECTIONS 3.4(1)(xii)(B), 5.7(4), 5.8(1), 12.3 OR 12.7(2), EXCEPT AS EXPRESSLY SET FORTH IN SUCH SECTIONS; *PROVIDED*, SELLER SHALL BE RESPONSIBLE FOR ANY PAYMENTS DUE AND PAYABLE UNDER THIS AGREEMENT UP TO AND UNTIL THE DATE OF SUCH REPURCHASE.

(2) Subject to Section 4.10(1), if Seller is required to remove a Facility from its Site pursuant to the terms hereunder, then:

(i) Seller shall remove such Facility and all Ancillary Equipment and BOF (including the concrete pad to the extent required under the applicable ESA or Site License) from such Site;

(ii) Seller shall restore such Site to the condition before the installation and as required under the applicable ESA and Site License, closing all utility connections and properly sealing all Site penetrations in the manner required by Legal Requirements, the applicable ESA and Site License, if any; and

(iii) to the extent not already provided under Section 4.10(1)(iii), Seller shall, upon Buyer's request, use commercially reasonable efforts to assist Buyer in securing a release in writing of all of Buyer's obligations and liabilities with respect to such Facility, as applicable to the Site from which it was removed, from the related ESA Customer under the applicable ESA and from any other Person party to a Contract in respect of such Facility under such Contract (in each case if terminated or otherwise inapplicable to such Facility after such removal).

(3) If Buyer becomes the owner of a Facility, or a Component thereof, that is no longer subject to, or, in Buyer's discretion, but subject to the terms and conditions of any applicable ESA, adequately monetized under, an ESA, Buyer may elect that Seller provide "Remarketing Services" under and as defined in the Administrative Services Agreement, for the fees set forth therein. Nothing in this Section 4.10(3) shall limit the rights of Buyer in connection with ESA Remarketing Activities or Pre-PIS Remarketing Activities, as set forth in Sections 4.8(1) and 4.8(2), respectively, or in connection with Section 2.9. Any such "Remarketing Services" shall be performed in accordance with Section 4.2(3); provided, that without Buyer's prior written consent, Seller shall not perform such "Remarketing Services" other than for specifically identified Components removed or relocated from the original Site. This Section 4.10(3) shall be subject to Section 12.7(2) in all respects. Any new off taker of a Facility remarketed by operation of this Section 4.10(3) shall be deemed a New Customer hereunder, and its site a New Customer Site, in each case, approved in accordance with Section 2.9.

ARTICLE V
WARRANTIES

Section 5.1 Facility Services Warranty. Without limiting Seller's obligations under ARTICLE IV, Seller shall perform, or cause to be performed, all such Facility Services in respect of the Bloom Systems, Ancillary Equipment and the BOF necessary for the Portfolio to perform in accordance with the Warranty Specifications (the "Facility Services Warranty").

Section 5.2 Performance Guaranty.

(1) During the Warranty Period, Seller shall determine within ten (10) Business Days after the end of each calendar year, whether the Portfolio has delivered to the applicable Interconnection Points the Minimum kWh for purposes of the Performance Guaranty during such calendar year ("Performance Guaranty").

(2) If such calculation indicates that the Actual kWh delivered by the Portfolio was greater than the Minimum kWh during such calendar year, then the difference (in kWh) between Actual kWh less Minimum kWh shall be recorded as a positive balance in the Performance Guaranty Bank.

(3) If such calculation indicates that the Actual kWh delivered by the Portfolio was less than the Minimum kWh during such calendar year, then the difference (in kWh) between Minimum kWh less Actual kWh shall be recorded as a negative balance in the Performance Guaranty Bank.

(4) Seller shall report the balance of the Performance Guaranty Bank to Buyer within thirty (30) days of the end of each calendar year. If Seller fails to perform any Performance Guaranty calculation within the periods required by this Section 5.2, Buyer may perform its own calculations and notify Seller of the results of such calculation and, if applicable, make a claim pursuant to Section 5.7. In the event that Buyer believes Seller has made any calculation errors, the Parties shall cooperate in good faith to resolve any discrepancies between Seller's calculations and Buyer's calculations.

(5) The Minimum Power Product for purposes of the Performance Guaranty shall be updated by amendment to this Agreement (which amendment shall be agreed upon and executed by both Buyer and Seller) promptly following the Commencement of Operations Date Deadline to reflect the final assumptions set forth in the Project Model used to calculate the Aggregate Purchase Price of the Facilities installed in the immediately prior Calendar Quarter (if such Project Model reflects a Minimum Power Product other than [***] percent ([***]%).

Section 5.3 Efficiency Warranty. During the Warranty Period, Seller shall perform any required repairs, modifications (including algorithm or other adjustments) or replacements that Buyer is required to perform pursuant to the ESAs, whether based on the efficiency of any Facility or Facilities or other objective metrics used by Seller consistent with past practices, including availability, output, minimum production, peak demand reduction, demand charge reduction, backup power provision, islanding, net metering or otherwise (the "Efficiency Warranty"). If Buyer is obligated to perform any repair, modification or replacement of any Facility(ies), or any component thereof, pursuant to an ESA, Buyer may make a claim under Section 5.7(3).

Section 5.4 Performance Warranty.

(1) During the Warranty Period, Seller shall determine within ten (10) Business Days after the end of each Calendar Quarter, whether the Portfolio has delivered to the applicable Interconnection Points the Minimum kWh for purposes of the Performance Warranty (as set forth in the definition of "Minimum kWh") during such Calendar Quarter ("Performance Warranty").

(2) If such calculation indicates that the Actual kWh delivered by the Portfolio was greater than the Minimum kWh during such Calendar Quarter, then the difference (in kWh) between Actual kWh less Minimum kWh shall be recorded as a positive balance in the Performance Warranty Bank.

(3) If such calculation indicates that the Actual kWh delivered by the Portfolio was less than the Minimum kWh during such Calendar Quarter, then the difference (in kWh) between Minimum kWh less Actual kWh shall be recorded as a negative balance in the Performance Warranty Bank.

(4) Seller shall report the balance of the Performance Warranty Bank to Buyer with its delivery of the Quarterly Report. At any time the Performance Warranty Bank has a negative balance, Buyer may make a claim under Section 5.7. If Seller fails to perform any Performance Warranty calculation within the periods required by this Section 5.4, Buyer may perform its own calculations and notify Seller of the results of such calculation and, if applicable, make a claim pursuant to Section 5.7. In the event that Buyer believes Seller has made any calculation errors, the Parties shall cooperate in good faith to resolve any discrepancies between Seller's calculations and Buyer's calculations.

Section 5.5 Portfolio Warranty.

(1) Subject to Section 5.6 and Section 13.7, Seller warrants to Buyer that (i)(x) each Bloom System and each Battery Solution shall, upon Commencement of Operations, conform to the Specifications for Bloom Systems and Battery Solutions, respectively, set forth on Schedule 3.3(1) and (y) each Facility and its Components shall be free from defects in design, materials and workmanship until the second anniversary of the Commencement of Operations for such Facility (the warranties in the foregoing clauses (i)(x) and (i)(y) are collectively the "General Product Warranty"), and (ii) the Portfolio and each Facility will comply with the Warranty Specifications applicable to the Portfolio or such Facility, as the case may be, during the Warranty Period (collectively, the "Portfolio Warranty"). To the extent any claim under either the General Product Warranty or the Portfolio Warranty must be verified by Seller, Seller shall notify Buyer of its determination as promptly as is practicable.

(2) Upon its receipt of a claim from Buyer relating to the General Product Warranty, or upon its obtaining Knowledge of a breach of the General Product Warranty Seller shall promptly correct the applicable defect or failure to conform at Seller's sole expense, which proves to be or have been in breach of the General Product Warranty on or before the second anniversary of the Commencement of Operations for such Facility. Seller shall promptly notify Buyer of the date of completion of such correction, repair or replacement. Notwithstanding anything to the contrary in this Agreement, any action by Buyer for a breach of the General Product Warranty with respect to a Facility must be brought no later than ninety (90) days after the second anniversary of the Commencement of Operations for such Facility WITHOUT IN ANY WAY LIMITING SELLER'S OBLIGATION TO INDEMNIFY BUYER PURSUANT TO SECTION 5.8, AND/OR WITH RESPECT TO CLAIMS PURSUANT TO SECTION 13.3 BUYER'S SOLE REMEDY FOR A BREACH OF THE GENERAL PRODUCT WARRANTY SHALL BE THE CORRECTION OF DEFECTIVE OR NON-CONFORMING FACILITY AS STATED ABOVE.

(3) The Portfolio Warranty is not transferable to any third person unless assigned pursuant to Section 14.4.

(4) Any period of time in which the Warranty Specifications are not met shall not extend the Warranty Period.

Section 5.6 Exclusions. The Pre-COO Equipment Warranty, the Portfolio Warranty and the ESA Warranty shall not cover any obligations on the part of Seller to the extent caused by or arising from (a) a Facility being affected by vandalism or other third-party's actions or omissions occurring after Commencement of Operations (other than to the extent caused by actions or omissions of Seller, a Seller Affiliate, or a Service Provider, in any such case to the extent such action or omission constitutes a failure to perform or breach under a Transaction Document); (b) any failure by an ESA Customer to supply natural gas or interconnection services, as required under the applicable ESA (except to the extent from or through an Approved LDC); (c) Buyer's (as opposed to Seller, Seller Affiliate or a Service Provider) or an ESA Customer's (to the extent comprising a breach or failure to perform under an ESA) removal of any safety devices comprising a part of the

Facility, (d) any conditions caused by unforeseeable movement of terrain in the environment in which a Facility is installed (provided that normal soil settlement, shifting, subsidence or cracking will not constitute 'unforeseeable movement'), (e) accidents, abuse, improper third party testing (unless caused by Seller, Seller Affiliate or a Service Provider), (f) to the extent and for the duration that Seller's performance is excused hereunder, Force Majeure Events, (g) installation, operation, repair or modification of a Facility by anyone other than Seller, Seller Affiliates or a Service Provider, in each case to the extent comprising a breach of an ESA Customer under the applicable ESA or a Buyer Default (other than any remedial action taken by Buyer following a Seller Default, solely to the extent allowed hereunder), (h) subject to Section 12.9, and to the extent and for the duration that Seller's performance is excused thereunder, any Legal Requirement arising after Commencement of Operations Date for the applicable Facility (which for this purpose shall include any tariff change or other code or operating regulation change imposed by the Transmitting Utility, in any such case solely to the extent such change requires a change in operations or methods of a Facility) and (i) a 205 [***]. SELLER SHALL HAVE NO OBLIGATION UNDER THE PRE-COO EQUIPMENT WARRANTY OR PORTFOLIO WARRANTY AND MAKES NO REPRESENTATION AS TO ANY FACILITY WHICH HAS BEEN OPENED OR MODIFIED BY ANYONE OTHER THAN SELLER, SELLER'S AFFILIATE, A SERVICE PROVIDER OR SUBCONTRACTOR, OR ANY OF SUCH PERSON'S REPRESENTATIVES, IN EACH CASE TO THE EXTENT IN INTENTIONAL BREACH OF SECTION 10.2(3).

Section 5.7 Efficiency Warranty, Performance Warranty and Portfolio Warranty Claims.

(1) Subject to the provisions of Section 13.7, if Buyer desires to make a Portfolio Warranty claim during the Warranty Period, Buyer must notify Seller of the defect or other basis for the claim in writing.

(2) If, after the annual adjustment to the Performance Guaranty Bank, such Performance Guaranty Bank has a negative balance, then Buyer may make a claim under the Performance Guaranty by submitting written notice to Seller. Upon verification of such claim Seller shall make a payment to Buyer within ten (10) days of receipt of such claim equal to (x) the absolute value of the balance of the Performance Guaranty Bank, multiplied by (y) the Performance Guaranty Payment Rate. Upon payment of such amount, the Performance Guaranty Bank shall be reset to zero. Notwithstanding anything to the contrary set forth in this Agreement, Seller's cumulative aggregate liability for all claims related to the Performance Guaranty shall not exceed the Performance Guaranty Payment Cap.

(3) In the case of a claim relating to the Efficiency Warranty, upon receipt of such claim and verification by Seller that such Efficiency Warranty is applicable, Seller or its designated subcontractor will promptly, and in all cases within the period afforded to Buyer pursuant to the applicable ESA, repair, modify or replace, at Seller's sole option and discretion, the applicable Facility or components thereof whose repair, modification or replacement is required in order for the applicable Facility to perform consistent with the Efficiency Warranty, and Seller shall notify Buyer of the Warranty Correction Date. In the event that the Warranty Correction Date has not occurred within the period afforded to Buyer pursuant to the applicable ESA (including if, pursuant

to the applicable ESA, it is determined or agreed that a Component is to be removed from a Site and that the Buyer and ESA Customer are to negotiate revised Tolling Rates), Seller shall indemnify Buyer for any Indemnifiable Losses arising out of such failure in accordance with the terms of Section 5.8.

(4) In the event of a claim relating to the Performance Warranty, upon receipt of such notice and verification by Seller that such Performance Warranty is applicable, Seller or its designated subcontractor will promptly, and in all cases within ninety (90) days of receiving such claim, repair or replace, at Seller's sole option and discretion, any Underperforming Facility and will notify Buyer of the Warranty Correction Date. Thereafter, the Portfolio shall generate at least the Minimum kWh for purposes of the Performance Warranty in the ninety (90) day period immediately following the Warranty Correction Date. In the event that (i) the Warranty Correction Date has not occurred within ninety (90) days of Seller's verification of the Efficiency Warranty claim, or (ii) the Portfolio fails to generate at least the Minimum kWh for purposes of the Performance Warranty in the ninety (90) day period immediately following the Warranty Correction Date, then Buyer has the right to require Seller (in which case Seller agrees) to repurchase such Underperforming Facilities (calculated as of the date of such repayment) as will cause the remaining Portfolio to comply with the Performance Warranty calculated through the final day of the applicable Calendar Quarter, and Seller shall pay to Buyer the Repurchase Value of such Underperforming Facilities, in which case Seller shall be deemed to have taken title to such Underperforming Facilities upon payment of the Repurchase Value, and such Facilities shall be deemed to no longer constitute a portion of the Portfolio and shall be removed as described in the previous sentences and in accordance with Section 4.10. In the event that Seller is obligated to repurchase any Underperforming Facilities pursuant to this Section 5.7(4) in connection with a Performance Warranty claim, the first Underperforming Facility repurchased shall be the Facility with the lowest output as a factor of its System Capacity in the prior Calendar Quarter, followed by the next lowest, and so on until Seller's repurchase obligations are satisfied. If it is determined that a Facility will be removed pursuant to Section 5.7(4) Seller shall at its sole cost and expense remove the Facility and restore the Site pursuant to Section 4.10.

(5) Buyer is hereby notified that refurbished parts may be used in repair or replacement activities, provided that (i) any such refurbished parts will have passed the same inspections and tests performed by Seller on its new parts of the same type before such refurbished parts are used in any repair or replacement, (ii) any such repair or replacement activities using refurbished parts shall be performed in accordance with Section 4.2(3), (iii) Seller shall within thirty (30) days of a written request therefor by Buyer, provide a report for any or all Facilities purchased hereunder that lists all components that have been replaced in any individual Facility.

(6) EXCEPT AS EXPLICITLY SET FORTH IN SECTION 5.8, THE REMEDIES SET FORTH IN THIS SECTION 5.7 ARE BUYER'S SOLE AND EXCLUSIVE REMEDY, AND SELLER'S SOLE AND EXCLUSIVE LIABILITY, ARISING OUT OF A FAILURE OF ANY FACILITY OR THE PORTFOLIO, AS APPLICABLE, TO PERFORM IN ACCORDANCE WITH THE WARRANTY SPECIFICATIONS; PROVIDED, THE REMEDIES SET FORTH IN THIS SECTION 5.7 ARE (WITH RESPECT TO ONE ANOTHER) CUMULATIVE AND NOT

EXCLUSIVE OF ONE ANOTHER; AND PROVIDED, FURTHER, THAT NOTHING IN THIS SECTION 5.7 SHALL LIMIT ANY RIGHTS OR REMEDIES OF BUYER IN RESPECT OF A SELLER DEFAULT.

Section 5.8 Indemnification Regarding Performance Under ESAs.

(1) Subject to Section 5.6, without in any way limiting and in addition to Buyer's other remedies in this Article V, if Buyer incurs any Indemnifiable Loss to an ESA Customer (including, for the avoidance of doubt, any reduction in Tolling Rates under an ESA) with respect to (x) any ESA Warranty, (y) (pursuant to Section 5.7(3)) any Efficiency Warranty or (z) any audit or adjustment as a result of meter readings that were determined to be inaccurate, Seller shall indemnify and hold Buyer harmless for any such Indemnifiable Loss ("ESA Warranty Reimbursement Payment"), pursuant to the indemnification claims procedure set forth in Section 13.5. Without in any way limiting and in addition to the foregoing, in the event that the failure of any Facility(ies) to comply with any ESA Warranty causes the termination of an ESA (in whole or in part), then (i) Seller shall (at Buyer's option) repurchase the applicable Facility for the Repurchase Value in accordance with Section 4.10(1), and (ii) Seller shall indemnify and hold Buyer harmless for any amount Buyer is liable to an ESA Customer in connection with such termination. If it is determined that a Facility(ies) will be removed pursuant to this Section 5.8(1), Seller shall at its sole cost and expense remove the Facility(ies) in accordance with Section 4.10(2). For the avoidance of doubt, claims, credits, reimbursements and any other payments made under this Section 5.8(1) are not subject to the cap set forth in Section 5.7(2) with respect to claims relating to the Performance Guaranty and shall not count against such cap.

(2) ESA Warranty Reimbursement Payments owed pursuant to Section 5.8(1) shall be calculated by Seller on the first Business Day following the end of each Calendar Quarter and paid no later than the fifth Business Day of the Calendar Quarter immediately following the Calendar Quarter with respect to which such ESA Warranty Reimbursement Payment arose.

(3) Buyer shall not modify, supplement, amend, amend and restate or otherwise change the terms of any ESA related to the ESA Warranty in a manner that increases Buyer's liability or obligations thereunder unless Seller has provided prior written consent (not to be unreasonably withheld, conditioned or delayed) to such modification, supplement, amendment, amendment and restatement, or change of such ESA; provided, that if such consent is not obtained, Seller shall continue to perform its obligations under this Section 5.8 to the extent they would have been required absent such modification, supplement, amendment, amendment and restatement, or change.

(4) Notwithstanding anything to the contrary set forth herein, Seller shall have no liability to Buyer under this Section 5.8 with respect to an ESA Warranty to the extent (i) that Buyer's monetary liability or repair or replacement obligations thereunder are increased in any modification, supplement, amendment, amendment and restatement, or change of an ESA without Seller's consent, to the extent that such consent is required pursuant to Section 5.8(3) or (ii) excluded under Section 5.6.

Section 5.9 Disclaimers. EXCEPT FOR THE REPRESENTATIONS AND WARRANTIES SET FORTH IN SECTION 2.6(5), ARTICLE VIII, THIS ARTICLE V, SECTION 11.6 AND ELSEWHERE IN THIS AGREEMENT AND THE OTHER TRANSACTION DOCUMENTS, THE FACILITIES ARE TRANSFERRED "AS IS, WHERE IS", AND SELLER EXPRESSLY DISCLAIMS ANY REPRESENTATIONS OR WARRANTIES OF ANY KIND OR NATURE, EXPRESS OR IMPLIED, AS TO LIABILITIES, OPERATIONS OF THE FACILITIES, VALUE OR QUALITY OF THE FACILITIES OR THE PROSPECTS (FINANCIAL AND OTHERWISE), RISKS AND OTHER INCIDENTS OF THE FACILITIES. EXCEPT FOR THE REPRESENTATIONS AND WARRANTIES SET FORTH IN SECTION 2.6(5), ARTICLE VIII, THIS ARTICLE V, SECTION 11.6 AND ELSEWHERE IN THIS AGREEMENT AND THE OTHER TRANSACTION DOCUMENTS, SELLER SPECIFICALLY DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY, USAGE, SUITABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE WITH RESPECT TO THE FACILITIES, OR ANY PART THEREOF. NO PERSON IS AUTHORIZED TO MAKE ANY OTHER WARRANTY OR REPRESENTATION CONCERNING THE PERFORMANCE OF THE FACILITIES.

Section 5.10 Title. Title to all replacement items, replacement parts, replacement materials and replacement equipment supplied under or pursuant to this Agreement to Buyer shall transfer to Buyer upon installation or inclusion in a Facility. Upon replacement of an item or part as part of the Facility Services provided hereunder, Seller shall remove such item or part and shall have the right to dispose of such replaced property in any manner that it chooses in its sole discretion (subject to Section 4.2(3)).

ARTICLE VI
RECORDS AND AUDITS

Section 6.1 Record-Keeping Documentation; Audit Rights.

(1) Seller shall ensure that records concerning Seller's Installation Services and Facility Services activities hereunder are properly created and maintained at all times in accordance with all Legal Requirements. Such records shall be in electronic format and shall include the following:

(i) records and documentation in respect of each Facility's satisfaction of each Milestone, including records and documentation regarding the Delivery of Facility(ies), the completion of BOF and Ancillary Equipment, to the extent applicable, the achievement of Commencement of Operations, the fact and date(s) such Facility has achieved each of the four separate criteria set forth in the definition of "Placed in Service" and in support of and evidencing the start of construction for ITC eligibility purposes before January 1, 2020;

(ii) Tax Records and any other records, reports, or other documentation reasonably requested by Buyer, including to support the ITC eligibility until the twelve-year anniversary of the date upon which the applicable Facility was Placed in Service. Seller agrees to use commercially reasonable efforts to promptly provide such documentation to Buyer upon Buyer's request (provided, proprietary information may be redacted in Seller's

reasonable discretion), and shall provide an explanation for any inability to provide such documentation;

(iii) records and documentation shall be maintained by Seller in respect of each Facility or the Portfolio or Scheduled Portfolio, as applicable, regarding the compliance of such Facility or the Portfolio or Scheduled Portfolio, as applicable, with the Warranty Specifications and any applicable ESA Warranties during the Warranty Period; and

(iv) any other records, reports, or other documentation related to the production and sale of energy from the Facilities or that Buyer is required to maintain in respect of any Facility under any applicable ESA;

(2) All such records required to be created and maintained pursuant to Section 6.1(1) shall be (i) kept available at Seller's office in electronic format and made available for Buyer's inspection by transmission to Buyer (including, at Seller's option, by uploading to the Data Room), in electronic format upon request at all reasonable times (provided, proprietary information may be redacted in Seller's reasonable discretion) and (ii) retained by Seller for as long as is required under applicable Legal Requirements, or any longer period required under any ESA. Any documentation delivered by Seller during the Warranty Term to Buyer pursuant to this Agreement shall be for Buyer's benefit and immediately become Buyer's property. Any such documentation shall be stored by Seller on behalf of Buyer until its final delivery to Buyer. Seller may retain a copy of all such documentation related to each Facility for future analysis.

(3) Inspection/Audit. Buyer shall have the right no more than once during any calendar year and going back no more than two (2) calendar years preceding the calendar year in which an audit takes place, upon reasonable prior written notice, including using an independent public accounting firm reasonably acceptable to Seller, to examine such records during regular business hours in the location(s) where such records are maintained by Seller for the purposes of verifying Seller's compliance with its obligations hereunder, including the accuracy of Quarterly Reports and Seller's calculations in respect of Warranty Specifications and applicable ESA Warranties; provided, however, that (A) such records may be audited only once during any calendar year under this Section 6.1(3) unless the first such audit reveals any inaccuracies or irregularities and (B) any such auditor shall be contractually or ethically subject to restrictions no less restrictive than those set forth in Article X (Confidentiality). Buyer shall pay the cost of the audit unless the results of the audit reveal that the Minimum kWh or Actual kWh reported by Seller in respect of the Portfolio or any Facility during any calendar year that is audited exceeds by five percent (5%) or more the true Minimum kWh or Actual kWh, as the case may be, in which case Seller shall pay the audit costs.

Section 6.2 Reports; Other Information.

(1) Without in any way limiting Seller's other reporting, notification, and other similar obligations under this Agreement, before and during the Warranty Period, Seller shall furnish to Buyer the following reports, notices, and other information regarding the Facilities (which may be effected by e-mail communication to the Buyer Manager or other appropriate Buyer representative):

(i) within thirty (30) days after the end of each Calendar Quarter, the Quarterly Report;

(ii) Promptly upon Seller's Knowledge of any event or circumstance which materially delayed or prevented, or is reasonably likely to materially delay or prevent, its performance of any of Buyer's obligations under any ESA or any other Facility Contract (including as performed by Seller or any other Service Provider), or any ESA Customer's or Seller's obligations under an Interconnection Agreement, notice of such event or circumstance in reasonable detail, including, for the avoidance of doubt, any Seller Default;

(iii) Promptly upon (but in no event more than five (5) Business Days after) Seller's acquiring Knowledge of any material manufacturing or design defect in any Facility, including any material Component thereof, notice of such defect;

(iv) Promptly upon Seller's Knowledge of the occurrence of any material damage to any Facility or Site, notice of such damage in reasonable detail;

(v) Quarterly with delivery of the Quarterly Report, notice that a Facility was subject to an exclusion set forth in Section 5.6;

(vi) Within three (3) Business Days following Seller's final determination of the applicability thereof, notice that (x) the operation of a Facility has experienced any of the circumstances described in clauses (i) through (iii) of the definition of "Minimum kWh" herein or (y) an ESA Customer plans an outage or curtailment;

(vii) Promptly upon Seller's Knowledge, notice that any Facility was or is not in compliance with any ESA Warranty;

(viii) Any information Buyer may reasonably request in connection with any claim filed by Buyer under any insurance maintained with respect to the Facilities, and any information such insurance providers may reasonably request in connection with such claim;

(ix) Promptly upon (A) receipt, copies of all material documents furnished to Seller by any Governmental Authority (or to any Governmental Authority by Seller) in respect of Buyer or any Facility in the Scheduled Portfolio or (B) obtaining Knowledge thereof, any disputes with Governmental Authority in respect of Buyer or any Facility in the Scheduled Portfolio; and

(x) Immediately upon Seller's knowledge or reasonable belief that a Compliance Law Violation (as defined in the Equinix ESA) or a breach of any of the representations, warranties or covenants in Section 7.1(h)(i) of the Equinix ESA has occurred or will occur in connection with any act or omission by Seller, Seller Affiliate, the Service Provider or a Seller or Seller Affiliate agent, representative or subcontractor at any tier, written notice and a reasonably detailed explanation thereof.

(2) Construction Update. From the Agreement Date until the Commencement of Operations Date Deadline, once each month, Seller will host a telephone call, scheduled with reasonable advance notice (but no less than five (5) Business Days' notice) to Buyer and which Buyer and its Representatives may attend, during which Seller shall discuss the status of each Facility reasonably expected to be included in the Scheduled Portfolio, including a summary narrative regarding the progress towards and any delays in the achievement of any of the Milestones (the "Construction Update"). During each Construction Update, Seller shall provide commercially reasonable answers to Buyer's commercially reasonable questions, and if Seller is unable to do so during such Construction Update, then Seller shall conduct such follow-up communications with Buyer in writing and by telephone as are necessary to provide such commercially reasonable answers as promptly as is practicable.

(3) Financial Statements. In the event that Seller is no longer listed on a public stock exchange, Seller shall provide to Buyer (i) as soon as is reasonably practicable and in no event later than 120 days after the end of each year ending December 31 thereafter, an audited consolidated balance sheet of Seller and the related consolidated statements of income and cash flows for the year then ended and (ii) within 45 days after the end of each other Calendar Quarter thereafter, the unaudited balance sheet and the related unaudited statements of income and cash flows for such Calendar Quarter then ended.

(4) [*Reserved*.]

(5) ESA Customer Notice. To the extent Seller receives any notice under an ESA from an ESA Customer, it shall promptly provide and forward such notice to Buyer.

(6) Physical Security. Promptly upon its obtaining Knowledge thereof, Seller shall notify Buyer of any actual or attempted breach of a Facility's (or Component thereof) physical, electronic, cyber or other on-site or remote security mechanisms, including any locks or other means of preventing internal access, and Seller shall also promptly notify Buyer when any alarm is activated at any Facility.

ARTICLE VII
DATA ACCESS

Section 7.1 Access to Data and Meters. After the Purchase Date and throughout the Warranty Period for each Facility, to the extent relevant to calculations necessary for periods prior to the end of such Warranty Period and subject to any confidentiality obligation owed to any third party, any limitations under Legal Requirements as determined by Buyer in its reasonable discretion, and/or any restrictions on the disclosure of information which may be subject to Intellectual Property rights restricting disclosure, at the sole cost of Seller:

(1) Buyer shall grant Seller access to all data relating to the electricity production of each such Facility, it being understood that it is Seller's responsibility to determine the performance of the Facility, and any other calculations as required under this Agreement, and that it is Buyer's

responsibility to handle all accounting and invoicing activities (except to the extent otherwise specified herein or pursuant to the Administrative Services Agreement);

(2) Buyer shall allow Seller access to all data from all Facility Meters;

(3) Buyer shall allow Seller access to Facility performance data delivered to ESA Customers for Facilities pursuant to obligations set forth in such ESAs for such Facility; and

(4) Seller shall be entitled to use the foregoing data for its internal business purposes and make such data available to third parties for analysis, in all cases unless and to the extent such uses of or disclosures by Seller are restricted under the applicable ESA or Legal Requirements, including those related to privacy.

ARTICLE VIII
REPRESENTATIONS AND WARRANTIES OF SELLER

Section 8.1 Representations and Warranties of Seller. Seller represents and warrants to Buyer as of the Agreement Date and each Milestone Date and Purchase Date (provided that any representation as to a Facility shall be made solely with respect to such Facility on its applicable Milestone Dates and Purchase Date) (in each case, except where otherwise noted) as follows:

(1) Incorporation; Qualification. Seller is a corporation duly incorporated, validly existing and in good standing under the laws of the State of Delaware and has all requisite corporate power and authority to own, lease, and operate its business as currently conducted. Seller is duly qualified to do business as a foreign corporation and is in good standing under the laws of each jurisdiction that its business, as currently being conducted, shall require it to be so qualified, except where the failure to be so qualified would not have a Material Adverse Effect on the Facilities being sold under this Agreement.

(2) Authority. Seller has full corporate power and authority to execute and deliver the Transaction Documents to which it is a party and to consummate the transactions contemplated hereby and thereby. The execution and delivery by Seller of the Transaction Documents to which it is a party and the consummation by Seller of the transactions contemplated hereby and thereby have been duly and validly authorized by all necessary corporate action required on the part of Seller and the Transaction Documents to which Seller is a party have been duly and validly executed and delivered by Seller. Each of the Transaction Documents to which Seller is a party constitutes the legal, valid and binding agreement of Seller, enforceable against Seller in accordance with its terms, except as enforcement may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting creditors' rights generally and by general principles of equity (regardless of whether considered in a proceeding in equity or at law).

(3) Consents and Approvals; No Violation. Neither the execution, delivery and performance of the Transaction Documents to which Seller is a party nor the consummation by Seller of the transactions contemplated hereby and thereby will (i) conflict with or result in any breach of any provision of the certificate of incorporation or bylaws of Seller, (ii) with or without

the giving of notice or lapse of time or both, result in the creation of any Lien (other than Permitted Liens) on Seller's assets or materially conflict with, result in any material violation or material breach of, constitute a default under, result in any right to accelerate, or create any right of termination under the conditions or provisions of any note, bond, mortgage, indenture, material agreement or other instrument or obligation to which Seller is a party or by which a material part of its assets in respect of the Scheduled Portfolio is bound, or (iii) constitute material violations of any Facility Contract or Permit law, regulation, order, judgment or decree applicable to Seller or the transactions contemplated hereby.

(4) Third Party Consents. Seller has received all material Third Party Consents that are required as of such date for the consummation and performance of the transactions contemplated hereunder.

(5) Legal Proceedings.

(i) There are no pending or, to Seller's Knowledge, threatened claims, disputes, governmental investigations, suits, actions, arbitrations, legal, administrative or other proceedings, domestic or foreign, criminal or civil, at law or in equity, by or against Seller that challenge the enforceability of the Transaction Documents or Facility Contracts, to which Seller or any Seller Affiliate is a party or the ability of Seller to consummate the transactions contemplated hereby or thereby, in each case, that could reasonably be expected to result in a Material Adverse Effect on Seller or the ability of Seller to perform its obligations hereunder.

(ii) Solely as of the Agreement Date, before the transaction contemplated by the MIPA is effected, there are no pending or, to Seller's Knowledge, threatened claims, disputes, governmental investigations, suits, actions, arbitrations, legal, administrative or other proceedings, domestic or foreign, criminal or civil, at law or in equity, by or against Buyer that challenge the enforceability of the Transaction Documents or any Facility Contract to which Buyer is a party (or, to Seller's Knowledge, any other Facility Contract) or the ability of Buyer to consummate the transactions contemplated hereby or thereby, in each case, that could reasonably be expected to result in a Material Adverse Effect on Seller or the ability of Seller to perform its obligations hereunder, or on Buyer or the ability of Buyer to perform its obligations under any Facility Contract.

(6) U.S. Person. Seller is not a "foreign person" within the meaning of Section 1445(b)(2) of the Code and has provided a Certificate of Non-Foreign Status in the form and substance required by Section 1445 of the Code and the regulations thereunder.

(7) Title; Liens.

(i) As of the Deposit Date, the Delivery Date and the Purchase Date of the Facility (and, if applicable, any Delayed Ancillary Equipment), before and until the purchase thereof under Section 2.4 is effected, Seller has and will convey good and marketable title to such assets to be sold to Buyer on such date and all such assets are free and clear of all

Liens other than Permitted Liens. Neither Seller nor any of its subcontractors have placed any Liens on the Sites or the Facilities other than Permitted Liens.

(ii) As of the Purchase Date and Commencement of Operations Date of the Facility (and, if applicable, any Delayed Ancillary Equipment), to the extent that Seller has Knowledge that any of its subcontractors has placed any Lien on a Facility or Site, Seller has caused such Liens to be discharged, or has provided a bond in an amount and from a surety acceptable to Buyer to protect against such Lien.

(8) Intellectual Property.

(i) To Seller's Knowledge, neither the Facility nor any part thereof, nor any other product or service marketed, manufactured, or sold (or proposed to be marketed, manufactured or sold) by or on behalf of Seller hereunder violates or will violate any license or infringes, misappropriates or otherwise violates, or will infringe, misappropriate or otherwise violate, any Intellectual Property rights of any other Person. Seller has received no written communication alleging that Seller has infringed, misappropriated, or otherwise violated, or by conducting its business, would infringe, misappropriate, or otherwise violate, or offering a license under, any of the patents, trademarks, service marks, tradenames, copyrights, trade secrets, mask works or other Intellectual Property rights or proprietary rights or processes of any other Person, and as of such date, no action has been instituted, or, to the Knowledge of Seller, threatened, that alleges any such infringement, misappropriation, or violation of any third party Intellectual Property, or offering a license under any third party Intellectual Property.

(ii) No claim or action by any Person contesting the validity, enforceability, or ownership of any of the Seller's Intellectual Property has been asserted against Seller, nor, to the Knowledge of Seller, is threatened.

(iii) Seller exclusively owns all right, title and interest in and to the Seller's Intellectual Property. None of the former or present employees, officers, directors or independent contractors of Seller holds any right, title or interest in or to any Seller's Intellectual Property, or has asserted any claim with regard to any Seller's Intellectual Property.

(iv) Seller is a party to a valid, binding and enforceable written contract with each of Seller's present and former officers, directors, employees and independent contractors employed or engaged by it at any time for the creation or development of Seller's Intellectual Property, which written contract assigns to, and vests in, Seller all right, title and interest in and to such Intellectual Property.

(v) The Seller's Intellectual Property constitutes all the Intellectual Property necessary for constructing, using, operating and maintaining the Facility.

(vi) Seller is in compliance with all software licenses for the Software used in connection with the construction, use, operation and maintenance of the Facility, including any software that is subject to an "open source, "copyleft," or other similar type of license.

(9) Real Property. The real property referred to in the applicable ESA and Site License is all the real property that is necessary for the construction, installation, operation and maintenance of the Facility in accordance with all Governmental Approvals and the Facility Documents including providing adequate ingress and egress in connection with the construction, operation and maintenance of the Facilities for the term of the ESA, other than those real property interests that can be reasonably expected to be available as and to the extent required. The Site has been licensed to Buyer pursuant to the terms of the applicable Site License. The Site has not been leased to Buyer.

(10) Tax Representations.

(i) The Facility is a fuel cell power plant that has a maximum electrical output determined at the normal operating conditions of at least 0.5 kilowatts of electricity using an electrochemical process and has an electricity-only generation efficiency greater than 30 percent. The Facility will function independently of each other Facility in the Portfolio to generate (and, if the Facility includes a Battery Solution, store) electricity for transmission and sale to an ESA Customer and is an integrated system comprised of a fuel cell stack assembly (and, if the Facility includes a Battery Solution, such Battery Solution) and associated balance of plant components that has all the necessary components to convert a fuel into electricity using electrochemical means.

(ii) As of Purchase Date for the Facility, (x) no federal, state, or local Tax credit (including the ITC), or depreciation or amount of allowance or deduction, has been claimed with respect to any property that is part of such Facility and (y) no grants, rebates, or other incentives have been applied for or received in respect of such Facility (or any property that is part of such Facility) that are other than taxable income to the recipient.

(iii) No application has been submitted for a grant provided under Section 1603 of the American Recovery and Reinvestment Tax Act of 2009, as amended by the Tax Relief, Unemployment Insurance Reauthorization and Job Creation Act of 2010, with respect to any property that is part of any Facility.

(iv) No private letter ruling has been requested or obtained for the Facility or the transactions contemplated hereunder from the IRS.

(v) As of the Purchase Date, the Facility was not originally Placed in Service and, specifically, none of the events described in clauses (2) through (4) of the definition of "Placed in Service" have been met with respect to such Facility.

(vi) The Facility is not comprised of any property that (A) is "used predominately outside of the United States" within the meaning of Code Section 168(g), (B) is imported property of the kind described in Code Section 168(g)(6), (C) is "tax-exempt use property"

within the meaning of Code Section 168(h), or (D) solely as of the Agreement Date, Deposit Date, and Delivery Date (i) is property described in Code Section 50(b) or (ii) "tax exempt bond financed property" within the meaning of Code Section 168(g)(5).

(vii) Other than de minimis property, material or parts, and in no event more than [***]% of the cost or value of the Facility (or any Delayed Ancillary Equipment included in such Facility) consists of property, materials or parts used by any Person prior to having been first placed in a state of readiness and availability for their specifically assigned function as part of the Facility.

(viii) No portion of the basis of the Facility is attributable to "qualified rehabilitation expenditures" within the meaning of Section 47(c)(2)(A) of the Code.

(ix) The "original use" as defined in Section 48 of the Code of any equipment included in the Facility will not have commenced prior to such equipment's Purchase Date.

(x) Seller is not related to the ESA Customer within the meaning of Code Section 267 or Code Section 707.

(xi) Unless expressly noted otherwise in Schedule 1, construction of the Facility (including, for the avoidance of doubt, any Delayed Ancillary Equipment included in such Facility) within the meaning of Notice 2018-59 began before January 1, 2020.

(xii) If the Facility includes a Battery Solution that has been Placed in Service, such Battery Solution is charged solely by the associated Bloom System and no electricity from the grid is stored in the Facility (including, for the avoidance of doubt, such Battery Solution).

(xiii) Unless expressly noted in Schedule 1, all equipment included in a Facility is "eligible property" for purposes of Section 48 of the Code.

(xiv) The Facility (including, for the avoidance of doubt, any Delayed Ancillary Equipment included in such Facility) is intended to be operated as a single unit, including for purposes of (A) the Placed in Service Date of such Facility (subject to any Delayed Ancillary Equipment having a later Placed in Service Date than the rest of the Facility in which it is included) and (B) determining whether construction of such Facility has begun within the meaning of Notice 2018-59.

(xv) All of the factual information furnished in writing by or on behalf of Seller or any of its Affiliates to Buyer or to the Appraiser in connection with the Appraisal with respect to the Facilities to be purchased hereunder is true, correct and complete in all material respects, provided, Seller makes no representation or warranty with respect to factual information provided by unrelated third parties other than that Seller has no actual knowledge of any such information having been provided.

(11) Permits; Regulatory.

(i) As of the Agreement Date, the Deposit Date, the Delivery Date and the Commencement of Operations Date, Seller, for itself or on behalf of Buyer or the ESA Customer (as applicable), has obtained all Permits and other Governmental Approvals and Interconnection Agreements required for (i) Seller's performance of its obligations hereunder as of such date (including the sale to Buyer of Facilities and the appointment by Buyer of Seller to perform Installation Services and Facility Services), and (ii) the ESA Customer to benefit from its rights and interests, and perform its obligations, under its Facility Contracts, as of such date, and in each case in compliance with Legal Requirements, including any Environmental Law. On each of such dates, Seller, as applicable on behalf of Buyer, is in compliance in all material respects with all applicable Permits, Governmental Approvals and Interconnection Agreements, each of the foregoing is final and in full force and effect, and Seller has not received any notice from a Governmental Authority of an actual or potential violation of any such Permit or other Governmental Approval or from the counterparty to an Interconnection Agreement of an actual or potential violation thereof or of any written challenge to issuance, validity or enforceability thereof.

(ii) Permits and Government Approvals. Seller has obtained all material Permits (and, as of the Commencement of Operations Date, PTO) and Government Approvals required for the Facility as of such date for the consummation and performance of the transactions contemplated hereunder.

(12) Energy.

(i) As of the Agreement Date only, no Facility (or equipment or component thereof) described in Schedule 1 has commenced synchronization or been energized (other than factory testing performed in the ordinary course of manufacture by the manufacturer or vendor of such equipment or component), and as of each Purchase Date, the applicable Facility being purchased by Buyer hereunder has not commenced synchronization or been energized to the extent required to comply with Section 203 of the FPA; and

(ii) As of the Agreement Date only, no Facility described in Schedule 1 has been interconnected to the transmission or distribution system of the applicable Transmitting Utility, or generated any power, including test power. As of each Purchase Date, (1) the applicable Facility being purchased by Buyer hereunder has not been interconnected to the transmission or distribution system of the applicable Transmitting Utility; or (2) if such Facility has been interconnected to the transmission or distribution system of the applicable Transmitting Utility, such interconnection has not been synchronized or energized, and such Facility has not generated any energy, including any test energy.

(13) Facility Contract Disputes. As of such date, there are no pending or threatened (in writing) disputes or claims between any counterparties to a Facility Contract under such Facility Contract (provided, that to the extent neither Seller nor Buyer is party thereto, the foregoing representation and warranty is made only to Seller's Knowledge).

(14) ESAs and Other Contracts.

(i) The ESA is a legal, valid, binding and enforceable obligation of Buyer (as of the Agreement Date, if in effect on the Agreement Date) and, to Seller's Knowledge, of the ESA Customer, and the ESA is in full force and effect. To Seller's Knowledge, neither Buyer nor the applicable ESA Customer is in material breach or violation of the ESA and no event has occurred, is pending or is threatened, which, after the giving of notice, with lapse of time, or otherwise, would constitute any such breach or default by Buyer or any other party thereto.

(ii) With respect to the Facility, the applicable ESA includes a description of all labor, material and services required for the complete performance of the services and other work contemplated thereby. The Facility Services and the Installation Services are inclusive of all services and other work contemplated by, with respect to the Facility, the applicable ESA and Site License. Seller has thoroughly reviewed the terms and conditions of the ESA and Site License. Seller has visited and inspected the Site and is familiar with the Site and its conditions.

(iii) Each Facility Contract in connection with the Facility to which Seller or any of its Affiliates is a party as of such date is a legal, valid, binding and enforceable obligation of the parties thereto. On such date, Seller, as applicable on behalf of Buyer, is in compliance in all material respects with the Facility Contracts to which it or Buyer is a party, to the extent it has obligations hereunder as of such date, and has not received any notice from any Person who is party to a Facility Contract of an actual or potential violation of any such Facility Contract. Neither Buyer nor Seller nor, to Seller's Knowledge, any other Person party thereto is in material breach or violation of any Facility Contract in connection with the Facility, and no event has occurred, is pending or is threatened in writing, which, after the giving of notice, with lapse of time, or otherwise, would constitute any such breach or default by Buyer, Seller or any other party thereto.

(iv) No claim has been made under any Third Party Warranty with respect to the Facility and, to Seller's Knowledge, no event, change or circumstance has occurred that would entitle Buyer, Seller (or any Affiliate of Seller) or the ESA Customer to make any such claim under any Third Party Warranty or in respect of portions of the Facility to which such Third Party Warranty applies. No claim under any Third Party Warranty for the Facility has been rejected or dishonored by the provider thereof. Neither Seller (nor any Affiliate of Seller) nor, to Seller's Knowledge, Buyer or any other Person party to any Third Party Warranty for the Facility, is in default under any such Third Party Warranty in any material respect. Each Third Party Warranty for the Facility is in full force and effect.

(15) Insurance, Casualty and Condemnation.

(i) Seller has obtained the insurance described in Annex B, all such policies are in full force and effect and provide coverage in respect of all Facilities (and will, by their terms, automatically cover all Facilities that become part of the Scheduled Portfolio in the

future), and all insurance premiums that are due and payable have been paid in full with no premium overdue.

(ii) With respect to any Facility, (A) Seller has made no claims under any such insurance policy with respect to the Facility, (B) there is no casualty which has occurred and is occurring (or any damage or disrepair due to any prior casualty) with respect to any portion of the Site or Facility, (C) there are no pending or contemplated condemnation or eminent domain proceedings against Seller or any ESA Customer in respect of the Facility or the Site (or any part thereof), and (D) neither Seller nor (to Seller's Knowledge) any ESA Customer has received written notice of any pending or threatened condemnation or eminent domain proceedings, or otherwise, that would affect the Facility or Site (or part thereof).

(16) Deposits and Credit Support. Except as set forth on Schedule 8.1(16) or in any ESA, there is no Credit Support posted or provided by Seller or otherwise on behalf of Buyer or an ESA Customer in connection with any Government Approvals, interconnection applications, Incentive Agreements or other Facility Contracts.

(17) Subcontractors, Service Providers. To the extent that the applicable ESA Customer has or had rights or privileges pursuant to its applicable ESA to be notified of, review or consent (or withhold its consent) to the retention of any Service Provider, such Service Provider has not been contracted with or retained, and is not otherwise performing any Installation Services or Facility Services hereunder, unless in accordance with such ESA Customer's rights.

(18) Facility Performance. Seller is not aware of any circumstances which could reasonably be expected to prevent the Portfolio or, with respect to any ESA Warranty or Efficiency Warranty, any Facility therein, as of such date from complying with the Warranty Specifications and the ESA Warranties for the Warranty Period applicable thereto.

(19) Bankruptcy. No event of Bankruptcy has occurred with respect to Seller or, to the Knowledge of Seller, the ESA Customer.

(20) Compliance. With respect to the Deposit Date, the Delivery Date, the Purchase Date, and the Commencement of Operations Date, Seller has performed in all respects all obligations, and complied in all material respects with the representations, warranties, agreements and covenants, required to be performed by or complied with by Seller hereunder as of each such date; provided that, for clarity, Seller has complied in all respects with the obligations set forth in Section 7.1(h)(i) of the Equinix PPA in its capacity as "Bloom" thereunder and as if Seller were a "Party" thereto.

(21) Material Adverse Effect. As of and since the Agreement Date, no Material Adverse Effect has occurred with respect to Seller or, to the Knowledge of Seller, any applicable ESA Customer.

(22) Data Privacy. Seller has used all data that Seller has collected regarding any ESA Customer's electricity consumption at such Site consistent with and subject to Legal Requirements in the United States with respect to privacy.

(23) Disclosures. The lists of and copies of Governmental Approvals, Incentive Agreements, Permits, PTOs, Interconnection Agreements and other Facility Contracts delivered by Seller pursuant to Section 2.3(5)(iii) and Section 3.4(1)(xv) are as of such delivery a true, correct and complete list, and true, correct and complete copies, thereof. Each of such Permits, PTOs, other Governmental Approvals and Interconnection Agreements obtained is validly issued, final and in full force and effect and is not subject to any current legal proceeding or to any unsatisfied condition. Each of such Permits, PTOs and other Governmental Approvals has been issued in the name of the appropriate Party as required by applicable Legal Requirements

(24) Environmental.

(i) Seller is in compliance with all applicable Environmental Requirements with respect to the Facility. Neither Seller nor (to Seller's Knowledge) any other person has released any Hazardous Material on, under, at or near the applicable Site in a manner that could reasonably be expected to result in any cleanup, removal, remediation, response or corrective action under Environmental Requirements. Neither Seller nor (to Seller's Knowledge) any ESA Customer has received written notice of an alleged violation of or of potential liability under Environmental Law from any Governmental Authority or holder of rights or interests in real property with respect to any Facility or Site (or part thereof). All wastewater from the Facility is discharged from the Site into a public sanitary sewer system in accordance with Legal Requirements, and no Hazardous Materials are discharged in connection with the Facility, directly or indirectly, into any body of surface water or groundwater by Seller or any other party. Seller has no outstanding obligations pursuant to any orders, judgments or agreements with respect to Environmental Requirements. No claim pursuant to Environmental Law is pending or threatened in writing against Seller.

(ii) As of the Agreement Date with respect to any Facilities comprising a portion of the Scheduled Portfolio on the Agreement Date, the Site is not within an area determined to be flood-prone under the Federal Flood Protection Act of 1973. With respect to any Facilities that are added to the Scheduled Portfolio after the Agreement Date, as of the date the applicable ESA is executed and delivered and as of the Facility's Delivery Date, the Site is not within an area determined to be flood-prone under the Federal Flood Protection Act of 1973 or such Facility is elevated in accordance with the issued for construction set delivered in connection with Section 2.3(5) with Buyer's consent.

(25) Anti-Corruption Laws, Sanctions, Anti-Money Laundering Laws and Related Matters.

(i) (A) Seller and its officers, employees, directors and agents, are in compliance with any applicable Anti-Corruption Laws, Anti-Money Laundering Laws, Sanctions and applicable Sanctions and (B) the Seller (x) has not violated, been found in violation of, or been charged or convicted under, any Sanctions, Anti-Money Laundering Laws or Anti-Corruption Laws or (y) is not under any investigation, including administrative, civil or criminal investigation by any Governmental Authority for an alleged or possible violation

of, or received notice from or made a voluntary disclosure to any Governmental Authority regarding a possible violation of, any Sanctions, Anti-Money Laundering Laws or Anti-Corruption Laws;

(ii) Neither Seller nor its officers, employees, directors nor, to Seller's knowledge, agents, (A) is a Sanctioned Person or currently the subject or target of any Sanctions, (B) is controlled by or is acting on behalf of a Sanctioned Person, (C) has its assets located in a Sanctioned Country, (D) directly or indirectly derives revenues from investments in, or transactions with, Sanctioned Persons, or (E) has been notified that its name appears or may in the future appear on a State Sanctions List;

(iii) Seller has implemented and maintain in effect policies and procedures designed to ensure compliance by Seller and its directors, officers, employees and agents with all Sanctions, Anti-Money Laundering Laws and Anti-Corruption Laws;

(iv) Neither Seller nor any of its directors, officers, employees, nor, to Seller's knowledge, agents, is a Sanctioned Person;

(v) No transaction contemplated by any Transaction Document will violate any Anti-Money Laundering Laws, Anti-Corruption Law or Sanctions;

(vi) No part of the proceeds from the Purchase Price: (A) constitutes or will constitute funds obtained on behalf of any Sanctioned Person or will otherwise be used directly or indirectly, (x) in connection with any investment in, or any transactions or dealings with, any Sanctioned Person, (y) for any purpose that would cause any party hereto to be in violation of Sanctions or (z) otherwise in violation of any U.S. Sanctions; (B) will be used, directly or indirectly, in violation of, or cause any party hereto to be in violation of, any applicable Anti-Money Laundering Laws; or (C) will be used, directly or indirectly, for the purpose of making any improper payments, including bribes, to any governmental official or commercial counterparty in order to obtain, retain or direct business or obtain any improper advantage, in each case which would be in violation of, or cause any party hereto to be in violation of, any applicable Anti-Corruption Laws.

Section 8.2 Survival Period.

(1) All claims by Buyer hereunder relating to breaches of representations and warranties contained in ARTICLE VIII or in Section 11.6 with respect to a Facility shall be forever barred unless the Seller is notified in writing within eighteen (18) months following the date of achievement of Commencement of Operations for such Facility, except for representations and warranties contained in (a) Section 2.6(5), Section 8.1(1), Section 8.1(2), Section 8.1(3), and Section 8.1(7), which shall survive indefinitely, and (b) Section 4.2(3) (and any other Sections that require compliance with the requirements of Section 4.2(3)), Section 8.1(6) and Section 8.1(10), and the last sentence of Section 3.9, each of which will survive until six (6) months following the expiration of the applicable statute of limitations. All claims by Buyer under this Agreement relating to breaches of any covenant or agreement to be performed by Seller hereunder shall survive until the date that

is ninety (90) days after the date by which performance is required by this Agreement, provided, however, that any claim by Buyer relating to the breach of any covenant or agreement to be performed by Seller hereunder in Section 4.2(3) (and any other Sections that require compliance with the requirements of Section 4.2(3)), Section 6.1 and the last sentence of Section 3.9 shall survive until six (6) months following the expiration of the applicable statute of limitations. Notwithstanding the foregoing, any claim timely brought by Buyer hereunder shall survive until the date of its final resolution or final disposition. For the avoidance of doubt, the Parties hereby agree and acknowledge that, except as set forth herein, the foregoing survival periods are a contractual statute of limitations and any claims based upon any breach or inaccuracy listed above must be brought or filed prior to the expiration of such survival period.

(2) Notwithstanding anything to the contrary in the preceding Section 8.2(1), survival periods with respect to Indemnifiable Losses asserted against or suffered by any Buyer Indemnitee pursuant to Section 13.3(1)(2)(i) and arising under the MIPA shall be as set forth in the MIPA.

ARTICLE IX
REPRESENTATIONS AND WARRANTIES OF BUYER

Section 9.1 Representations and Warranties of Buyer. Buyer represents and warrants to Seller as of each Purchase Date, as follows.

(1) Organization. Buyer is a limited liability company duly formed, validly existing and in good standing under the laws of the State of Delaware and has all requisite limited liability company power and authority to own, lease, and operate its business as currently conducted.

(2) Authority. Buyer has full limited liability company power and authority to execute and deliver the Transaction Documents to which it is a party and to consummate the transactions contemplated hereby and thereby. Any execution and delivery after the Agreement Date by Buyer of the Transaction Documents to which it is a party, and the consummation after the Agreement Date by Buyer of the transactions contemplated hereby and thereby have been duly and validly authorized by all necessary limited liability company action required on the part of Buyer, and any Transaction Documents to which Buyer became a party after the Agreement Date have been duly and validly executed and delivered by Buyer. Each of the Transaction Documents to which Buyer is a party constitutes the legal, valid and binding agreement of Buyer, enforceable against Buyer in accordance with its terms, except as enforcement may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting creditors' rights generally and by general principles of equity (regardless of whether considered in a proceeding in equity or at law).

(3) Consents and Approvals; No Violation. Neither the execution, delivery and performance, in each case after the Agreement Date, of any Transaction Documents to which Buyer is a party nor the consummation, after the Agreement Date, by Buyer of the transactions contemplated hereby and thereby will (i) conflict with or result in any breach of any provision of the articles of formation of Buyer nor Buyer's limited liability company agreement, (ii) with or without the giving of notice of lapse of time or both, result in the creation of a Lien (other than immaterial Liens or Permitted Liens) on Buyer's assets or materially conflict with, result in any

material violation or material breach of, constitute a default under, result in any right to accelerate, or create any right of termination under the material conditions or provisions of any note, bond, mortgage, indenture, material agreement or other instrument or obligation to which Buyer is a party or by which it (or any material part of its assets) is bound or (iii) constitute material violations of any law, regulation, order, judgment or decree applicable to Buyer.

(4) Legal Proceedings. There are no pending or, to Buyer's Knowledge, threatened claims, disputes, governmental investigations, suits, actions, arbitrations, legal, administrative or other proceedings, domestic or foreign, criminal or civil, at law or in equity, by or against Buyer that challenge the enforceability of the Transaction Documents to which Buyer is a party or the ability of Buyer to consummate the transactions contemplated hereby or thereby, in each case, that could reasonably be expected to result in a material adverse effect on Buyer or its ability to perform its obligations hereunder, except, in any such case, as were in existence on or before the Agreement Date.

Section 9.2 Survival Period. All claims by Seller hereunder relating to breaches of representations and warranties contained in ARTICLE IX with respect to a Facility shall be forever barred unless the Buyer is notified in writing within eighteen (18) months following the date of achievement of Commencement of Operations for such Facility, except for breaches and warranties contained in Section 9.1(1), Section 9.1(2), Section 9.1(3), which shall survive indefinitely. All claims by Seller under this Agreement relating to breaches of any covenant or agreement to be performed by Buyer hereunder shall survive until the date that is ninety (90) days after the date by which performance is required by this Agreement. Notwithstanding the foregoing, any claim timely brought by Seller hereunder shall survive until the date of its final resolution or final disposition. For the avoidance of doubt, the Parties hereby agree and acknowledge that the foregoing survival periods are a contractual statute of limitations and any claims based upon a breach of representations and warranties in ARTICLE IX must be brought or filed prior to the expiration of such survival period.

ARTICLE X
CONFIDENTIALITY

Section 10.1 Confidential Information. Subject to the other terms of this ARTICLE X each Party shall, and shall cause its Affiliates and its respective stockholders, members, subsidiaries and Representatives to, hold confidential the terms of this Agreement and all information it has obtained or obtains from the other Party in connection with this Agreement concerning Seller and Buyer and their respective assets, business, operations or prospects (the "Confidential Information"), including all materials and information furnished by Seller in performance of this Agreement, regardless of form conveyed or whether financial or technical in nature, including any trade secrets and proprietary know how and proprietary Software whether such information bears a marking indicating that they are proprietary or confidential or not; provided, however, that Confidential Information shall not include information that (x) is or becomes generally available to the public other than as a result of any fault, act or omission by a Party or any of its Representatives, (y) is or becomes available to a Party or any of its Representatives on a non-confidential basis from a source

other than the other Party or its Representatives, provided that such source was not and is not bound by any contractual, legal or fiduciary obligation of confidentiality with respect to such information or (z) was or is independently developed or conceived by a Party or its Representatives without use of or reliance upon the Confidential Information of the other Party, as evidenced by sufficient written record. Notwithstanding anything to the contrary, the foregoing obligations shall not apply to the tax treatment or tax structure of any transaction contemplated by this Agreement (the "Transaction") and each Party (and any employee, representative, or agent of any Party) may disclose to any and all Persons, without limitation of any kind, the tax treatment and tax structure of the Transaction and all other materials of any kind (including opinions or other tax analyses) that are provided to any Party to the extent relating to such tax treatment and tax structure. This Section 10.1 is intended to prevent the Transaction from being treated as a "reportable transaction" as a result of it being a transaction offered to a taxpayer under conditions of confidentiality within the meaning of Sections 6011, 6111 and 6112 of the Code (or any successor provision) and the regulations thereunder (as clarified by Notice 2004-80 and Notice 2005-22) and shall be construed in a manner consistent with such purpose.

Section 10.2 Restricted Access.

(1) Buyer agrees that the Facilities, to the extent they are fabricated and manufactured by Seller and/or use Seller's Intellectual Property, themselves contain Seller's valuable trade secrets. Buyer agrees (i) to restrict the use of such information to matters relating to the Facilities, and such other purposes, if any, expressly provided herein, and (ii) to restrict access to such information as provided in this Section 10.2.

(2) Seller's Confidential Information will not be reproduced without Seller's prior written consent, except to the extent necessary for Buyer to exercise its rights as permitted under this Agreement, and following expiration or termination of this Agreement other than in connection with a Seller Default, all copies of such written information will be returned to Seller upon written request (not to be made while materials are still of use to the operation and maintenance of a Facility that remains subject to this Agreement or to the exercise of other rights of ownership by Buyer pursuant to any Transaction Document) or shall be certified by Buyer as having been destroyed, unless otherwise agreed by the Parties. Buyer's Confidential Information will not be reproduced by Seller without Buyer's prior written consent, and following termination of this Agreement all copies of such written information will be returned to Buyer upon written request or shall be certified by Seller as having been destroyed. Notwithstanding the foregoing, each Party and its Representatives may each retain archival copies of any Confidential Information to the extent required by law, regulation or professional standards or copies of Confidential Information created pursuant to the automatic backing-up of electronic files where the delivery or destruction of such files would cause undue hardship to the receiving Party, so long as any such archival or electronic file back-up copies are accessible only to legal or information technology personnel, provided that such Confidential Information will continue to be subject to the terms of this Agreement.

(3) Subject to the Long-Term Agreement and Sections 10.2(1) and (2) and Article XI, the Facilities are offered for sale and are sold by Seller subject to the condition that such sale does

not convey any license, expressly or by implication, under any Seller Intellectual Property, to manufacture, reverse engineer, duplicate or otherwise copy or reproduce any part of the Facilities, documentation or Software without Seller's express advance written permission. Subject to the Long-Term Agreement and Article XI, Buyer agrees not to intentionally remove the covering of any Bloom System, not to intentionally access the interior or to reverse engineer, or cause or knowingly allow its Affiliates, subsidiaries and Representatives, or any third party under its control (not including Seller or any Service Provider) to open, access the interior or reverse engineer any Facility or Software provided by Seller. Subject to the Long-Term Agreement and Article XI, and anything contemplated pursuant to this Agreement, only Seller or its authorized representatives may open or access the interior of a Facility. Actions taken by applicable authorities, including police and fire personnel, by Service Providers, by ESA Customers or their respective representatives (if without Buyer's Knowledge or if in breach of an applicable ESA) or by Kaiser (or a third party on its behalf) pursuant to Section 5 of Exhibit B of any Kaiser ESA shall not be deemed to be a breach of this Section 10.2(3).

(4) Third Parties.

(i) Notwithstanding the foregoing or anything else herein to the contrary, and without limitation of the rights set forth in Article XI hereof, if any Facility is no longer covered by this Agreement or another agreement between Buyer and Seller (or any Affiliate of Seller) regarding the operation and maintenance of such Facility as a result of the termination or expiration of this Agreement with respect to such Facility, regardless of the cause of such termination, Buyer shall be entitled to operate and maintain, or cause another Person to operate and maintain, such Facility, including replacing Components as needed or desired. To the extent Buyer requires any maintenance services for such Facility following such expiration or termination (except if such expiration or termination is in connection with a Seller Default), Buyer shall notify Seller of such requirements in writing.

(ii) If Seller desires to perform such maintenance services, Seller shall provide within five (5) Business Days to Buyer the material terms and conditions (including, the scope of services offered, the price(s) quoted for such services (which prices shall be no greater than the average rate billed by Seller for providing such maintenance services to its most recently deployed 10 MWs of similar fuel cell energy servers and related equipment), and the terms of any performance warranties to be provided in connection with such services, which terms shall be substantially similar to those set forth herein, pursuant to which it is willing to provide such maintenance services for such Facility, which shall be no less favorable to Buyer than Seller's standard rates, terms and warranties as of such date.

(iii) If Buyer declines to engage Seller to perform such services, or the Parties are unable to execute, within ten (10) Business Days after Seller has provided its material terms and conditions pursuant to Section 10.2(4)(ii), appropriate documentation to reflect such services, Buyer may engage the applicable third party.

Section 10.3 Permitted Disclosures.

(1) Legally Compelled Disclosure. Confidential Information may be disclosed (i) as required or requested to be disclosed by a Party or any of its Affiliates or their respective stockholders, members, subsidiaries, Representatives, lenders or tax equity investors, as a result of any applicable Legal Requirement or rule or regulation of any stock exchange, the Financial Industry Regulatory Authority, Inc. or other regulatory authority or self-regulatory authority having jurisdiction over such Party, (ii) as required or requested by the IRS, the Department of Justice or the Office of the Inspector General in connection with a Facility, cash grant, or tax credits relating thereto, including in connection with a request for any private letter ruling, any determination letter or any audit or (iii) as required under any Interconnection Agreement. If a Party becomes compelled by legal or administrative process to disclose any Confidential Information, such Party shall, to the extent permitted by Legal Requirements, provide the other Party with prompt notice so that the other Party may seek a protective order or other appropriate remedy or waive compliance with the non-disclosure provisions of this Section 10.3 with respect to the information required to be disclosed. If such protective order or other remedy is not obtained, or such other Party waives compliance with the non-disclosure provisions of this Section 10.3 with respect to the information required to be disclosed, the first Party shall furnish only that portion of such information that it is advised by counsel is legally required to be furnished and shall exercise reasonable efforts, at the expense of the Party whose Confidential Information is being disclosed, to obtain reliable assurance that confidential treatment will be accorded such information, including, in the case of disclosures to the IRS described in clause (ii) above, to obtain reliable assurance that, to the maximum extent permitted by applicable Legal Requirements, such information will not be made available for public inspection pursuant to Section 6110 of the Code.

(2) Disclosure to Representatives. Notwithstanding the foregoing, and subject always to the restrictions in Section 10.2, a Party may disclose Confidential Information received by it to its and its Affiliates' actual or potential investors or financing parties and its and their employees, consultants, legal counsel or agents who have a need to know such information; provided that such Party informs each such Person who has access to the Confidential Information of the confidential nature of such Confidential Information, the terms of this Agreement, and that such terms apply to them. The Parties shall use commercially reasonable efforts to ensure that each such Person complies with the terms of this Agreement and that any Confidential Information received by such Person is kept confidential.

(3) Securities Filings. A Party may file this Agreement as an exhibit to any relevant filing with the Securities Exchange Commission (or equivalent foreign agency) in accordance with Legal Requirements only after complying with the procedure set forth in this Section 10.3(3). In such event, the Party seeking such disclosure shall prepare a draft confidential treatment request and proposed redacted version of this Agreement to request confidential treatment for this Agreement, and the other Party agrees to promptly (and in any event, no less than fourteen (14) days after receipt of such confidential treatment request and proposed redactions) give its input in a reasonable manner in order to allow the Party seeking disclosure to file its request within the time lines prescribed by Legal Requirements. The Party seeking such disclosure shall exercise

commercially reasonable efforts to obtain confidential treatment of the Agreement from the Securities Exchange Commission (or equivalent foreign agency) as represented by the redacted version reviewed by the other Party. Each Party shall bear its own costs in connection with such efforts. If Seller is the Party seeking such disclosure, then Seller shall bear responsibility for any liability or obligation that Buyer owes to any ESA Customer pursuant to its ESA in respect of filings and related disclosures contemplated by this Section 10.3(3).

(4) Permitted Disclosures. Nothing herein shall be construed as prohibiting a Party hereunder from using such Confidential Information in connection with (i) any claim against the other Party, (ii) any exercise by a Party hereunder of any of its rights hereunder, (iii) a financing or proposed financing by Seller or Buyer or their respective Affiliates, (iv) a disposition or proposed disposition by any direct or indirect Affiliate of Buyer of all or a portion of such Person's equity interests in Buyer, (v) a disposition or proposed disposition by Buyer of any Bloom System or Facility, or (vi) any disclosure required to be made to an ESA Customer (or otherwise) under an ESA or a Site License, provided that, in the case of items (iii), (iv) and (v), the potential financing party or purchaser has entered into a confidentiality agreement with respect to Confidential Information on customary terms used in confidentiality agreements in connection with corporate financings or acquisitions before any such information may be disclosed; provided, further, that Buyer shall have no liability to Seller hereunder in respect of disclosures made to ESA Customers pursuant to the foregoing clause (vi), or for any breach by an ESA Customer of the confidentiality obligations to which it is bound in the applicable ESA, as long as Buyer uses its commercially reasonable efforts to enforce such confidentiality obligations (and Buyer shall have no liability to Seller hereunder for disclosures made by Seller to any Persons).

(5) Tax Records. If an IRS audit, investigation or similar proceeding shall be commenced by the IRS with respect to Buyer and any Tax matter in connection with this Agreement (*e.g.*, a potential change in adjusted tax basis of a purchased Facility) (a "Tax Proceeding"), Buyer shall provide Seller with written notice of the Tax Proceeding within ten days after its commencement; *provided, however*, that the failure to provide written notice of the Tax Proceeding within such 10-day period shall not relieve Buyer from its obligations with respect to the subject of the Tax Proceeding. Notwithstanding any other provisions herein and solely in connection with a Tax Proceeding, Seller will provide and disclose the Tax Records to Buyer or directly to the IRS in cases of highly confidential information, as required. Seller (or its legal and accounting advisors) may fully participate, at its sole expense, in the Tax Proceeding. Buyer shall not settle a Tax Proceeding relating to an issue for which Seller will be obligated to indemnify Buyer under Section 13.4 without the prior written consent of Seller (which consent shall not be unreasonably withheld, conditioned or delayed). Buyer shall keep Seller reasonably informed of the commencement, status and nature of the Tax Proceeding and, at the request of Buyer and without any further consideration, shall provide or cause to be provided all assistance reasonably requested by Buyer with respect to the conduct of the Tax Proceeding.

(6) Press Releases. Subject to this Section 10.3, any public announcement, press release or similar publicity, with respect to this Agreement and the transactions contemplated

hereby will be issued at the time and in the manner mutually agreed in writing by the Buyer and the Seller.

Section 10.4 Communication with ESA Customers. Neither Seller nor any of its Affiliates, employees, agents or other Representatives shall, directly or indirectly, for itself or on behalf of another, from the Agreement Date until, with respect to each Facility and its related Site in the Scheduled Portfolio, the date that is two (2) years after the expiration of the applicable Warranty Period (or earlier termination of this Agreement), induce, influence or encourage, any ESA Customer, directly or indirectly, including through the negotiation of possible terms and conditions of similar or related contracts or extensions, to:

(1) alter, terminate or breach its contractual or other business relationship with Buyer,

(2) enter into a contractual or business relationship with Seller (or an Affiliate or other related Person on Seller's behalf) in substantial replacement of the supplies and services provided with respect to such Facility under the applicable ESA or

(3) exercise any purchase option under any ESA.

ARTICLE XI
LICENSE AND OWNERSHIP; SOFTWARE

Section 11.1 IP License to Use. Subject to Section 11.2, Seller grants to Buyer a limited (as described herein), non-exclusive, royalty-free, fully paid-up, perpetual, irrevocable (except as described in Section 12.4 hereof), non-transferable (except as described herein) license to use the Intellectual Property, including Seller's proprietary Software, to the extent contained in the Documentation, the Components and the Facilities purchased hereunder (collectively, "Seller's Intellectual Property") in conjunction with the purchase, use, operation, maintenance, repair and, subject to Section 3.6(2), sale of the Facilities (the "IP License"); provided, that (a) such license may be transferred or sub-licensed upon a transfer of a Facility to any Person who acquires such Facility, subject to Buyer's compliance with Section 3.6(2), (b) such license may be (and shall automatically be) transferred or sub-licensed by Buyer to any third party Buyer is entitled to engage to maintain any Facility pursuant to Section 10.2(4), (c) such license may be (and shall automatically be) transferred by Buyer to any successor or assign of Buyer permitted pursuant to Section 14.4, and (d) in the event of a voluntary or involuntary Bankruptcy of Buyer, Seller hereby expressly consents to the assumption and assignment of the IP License by Buyer as necessary to allow Buyer's continued use of each Bloom System, any item of Ancillary Equipment and/or Facility in accordance with the terms hereof and, as applicable, each ESA, Interconnection Agreement and other applicable Facility Contracts. Seller shall retain all right, title and ownership of any and all Intellectual Property licensed by Seller hereunder. No right, title or interest in any such Intellectual Property is granted, transferred or otherwise conveyed to Buyer under this Agreement except as otherwise expressly set forth herein. Buyer shall not, in violation of the rights granted to or obligations imposed on Buyer hereunder, modify, network, rent, lease, loan, sell, distribute or create derivative works based upon Seller's Intellectual Property in whole or part, or cause or knowingly allow any third party to do so.

Section 11.2 Grant of Third Party Software License.

(1) Seller grants to Buyer a limited (as described herein), non-exclusive, royalty-free, fully paid-up, irrevocable (except as described in ARTICLE XII hereof), non-transferable (except as described herein) license to use the third party Software (the "Software License"); provided, that (i) such license may be transferred or sub-licensed upon a transfer of a Facility to any Person who acquires such Facility, (ii) such license may be (and shall automatically be) transferred or sub-licensed by Buyer to any third party Buyer is entitled to engage, and does engage, to maintain any Facility pursuant to Section 10.2(4), and (iii) such license may be (and shall automatically be) transferred by Buyer to any successor or assign of Buyer permitted pursuant to Section 14.4. No right, title or interest in any Software provided to Buyer (including all copyrights, patents, trade secrets or other intellectual or intangible property rights of any kind contained therein) is granted, transferred, or otherwise conveyed to Buyer under this Agreement except as expressly set forth herein. Buyer agrees not to reverse engineer or decompile the Software or otherwise use the Software for any purpose other than in connection with the use of the Facilities.

(2) Subject to any confidentiality restrictions contained in the ESAs, all data collected on the Facilities by Seller using the Software, and data collected on the Facilities using Seller's internal proprietary Software are the sole property of Seller to be used by Seller in accordance with Legal Requirements, and Seller hereby grants to Buyer a limited, non-exclusive, irrevocable (except as set forth in ARTICLE XII hereof), royalty-free license to use the data collected on the Facilities using such Software or Seller's internal proprietary software only for purposes of using such Facilities and administering the Transaction Documents or as required pursuant to the terms of any ESA, Site License, Interconnection Agreement or other Facility Contract to which Buyer is a party, provided the provisions of ARTICLE X on confidentiality are maintained.

Section 11.3 No Software Warranty. The Software and related documentation are provided "AS IS" and without any warranty of any kind and Seller EXPRESSLY DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Section 11.4 Effect on Licenses. All rights and licenses granted under or pursuant to this Agreement by Seller are, and shall otherwise be deemed to be, for purposes of Section 365(n) of the U.S. Bankruptcy Code and of any similar provisions of applicable laws under any other jurisdiction (collectively, the "Bankruptcy Laws"), licenses of rights to "intellectual property" as defined under the Bankruptcy Laws. If a case is commenced by or against Seller under the Bankruptcy Laws, Seller (in any capacity, including debtor-in-possession) and its successors and assigns (including a trustee under the Bankruptcy Laws) shall, as Buyer may elect in a written request, immediately upon such request:

(1) perform all of the obligations provided in this Agreement to be performed by Seller including, where applicable, providing to Buyer such Intellectual Property (including embodiments

thereof) held by Seller and such successors and assigns or otherwise available to them and to which Buyer is entitled to have access under this Agreement, including the Documentation; and

(2) not interfere with the rights of Buyer under this Agreement, or the Transaction Documents, to such Intellectual Property (including such embodiments), including any right to obtain such Intellectual Property (or such embodiments) from Seller or from another entity, to the extent provided in the Bankruptcy Laws or in this Agreement.

Section 11.5 IP Related Covenants. If Seller grants, bargains, sells, conveys, mortgages, assigns, pledges, warrants or transfers any Intellectual Property or Software that is required (a) for Seller or its Affiliates to perform their respective obligations under the Transaction Documents or (b) for the continued maintenance and operation of the Facilities without a material decrease in performance of the Facilities, such act or transaction shall be, and for the avoidance of doubt Seller shall cause such act or transaction to be, subject to (i) the grant of the IP License and Software License under this Agreement and (ii) the Long-Term Agreement.

Section 11.6 Representations and Warranties. Seller represents and warrants to Buyer as of the Agreement Date and as of each Purchase Date as follows with respect to all Intellectual Property that is required (i) for Seller or its Affiliates to perform their respective obligations under the Transaction Documents, and (ii) for the continued operation of the Facilities in accordance with the Transaction Documents, the ESAs and the Interconnection Agreements:

(1) Seller owns or has the right to use and to authorize Buyer to use all such Intellectual Property and Software; and

(2) Seller and its Affiliates are not infringing, misappropriating or otherwise violating any Intellectual Property rights of any third party with respect to the actions described in subsection (i) and (ii) of Section 11.6 and the sale, manufacture or use of the Facilities do not (and the sale, manufacture and use of the Facilities as contemplated in this Agreement will not) infringe, misappropriate or otherwise violate any Intellectual Property rights of any third party.

ARTICLE XII
EVENTS OF DEFAULT AND TERMINATION

Section 12.1 Seller Default. The occurrence at any time of any of the following events shall constitute a "Seller Default":

(1) Failure to Pay. The failure of Seller to pay any undisputed amounts owing to Buyer on or before the day following the date on which such amounts are due and payable under the terms of this Agreement and Seller's failure to cure each such failure within ten (10) Business Days after Seller receives written notice from Buyer of each such failure;

(2) Failure to Perform Other Obligations. Unless due to a Force Majeure Event, and except for a Seller Default pursuant to Section 12.1(6), the failure of Seller to perform or cause to be performed any other material obligation required to be performed by Seller under this Agreement,

the Administrative Services Agreement or the MIPA, or the failure of any representation and warranty set forth herein or therein to be true and correct as and when made; provided, however, that if such failure by its nature can be cured, then Seller shall have a period of thirty (30) days after obtaining Knowledge of such failure to cure the same and a Seller Default shall not be deemed to exist during such period; provided, further, that if Seller commences to cure such failure during such period and is diligently and in good faith attempting to effect such cure, said period shall be extended for sixty (60) additional days; provided, further, that notwithstanding the foregoing, the cure periods set forth above shall in no event exceed (and will be deemed modified as necessary to match) the cure period applicable to any particular or breach pursuant to an ESA;

(3) Failure to Remedy Injunction. The failure of Seller to remedy any injunction that prohibits Buyer's use of any Facility as contemplated by Section 13.1 within sixty (60) days of Seller's receipt of written notice of Buyer being enjoined therefrom;

(4) Bankruptcy. If Seller (i) admits in writing its inability to pay its debts generally as they become due; (ii) files a petition or answer seeking reorganization or arrangement under the federal bankruptcy laws or any other Legal Requirements of the United States of America or any State, district or territory thereof or any similar proceeding outside of the United States of America; (iii) makes an assignment for the benefit of creditors; (iv) consents to the appointment of a receiver of the whole or any substantial part of its assets; (v) has a petition in bankruptcy filed against it, and such petition is not dismissed within sixty (60) days after the filing thereof; or if (vi) a court of competent jurisdiction enters an order, judgment, or decree appointing a receiver or similar Person of the whole or any substantial part of Seller's assets, and such order, judgment or decree is not vacated or set aside or stayed within sixty (60) days from the date of entry thereof; or (vii) under the provisions of any other law for the relief or aid of debtors, any court of competent jurisdiction shall assume custody or control of the whole or any material part of Seller's assets, and such custody or control is not terminated or stayed within sixty (60) days from the date of assumption of such custody or control;

(5) Maximum Liability. Seller's aggregate incurred liability under this Agreement and the other Transaction Documents equals or exceeds the Maximum Liability;

(6) Failure to Perform Certain Obligations. Unless due to a Force Majeure Event, the failure of Seller to perform or cause to be performed its obligations pursuant to Section 2.8, Section 2.10(2) or Section 3.10(3), or pursuant to the Side Letter Agreement, in each case subject to any applicable cure and grace periods set forth in such Sections; or

(7) Other Transaction Documents. (i) Any MIPA Representation or any representation or warranty made in the Long-Term Agreement, in either case, was not true and correct as and when made or (ii) Seller fails to perform or cause to be performed any obligation required to be performed by Seller under the Long-Term Agreement.

Section 12.2 Buyer Default. The occurrence at any time of the following events with respect to Buyer shall constitute a "Buyer Default":

(1) Failure to Pay. The failure of Buyer to pay any undisputed amounts owing to Seller on or before the day following the date on which such amounts are due and payable under the terms of this Agreement and Buyer's failure to cure each such failure within ten (10) Business Days after Buyer receives written notice of each such failure;

(2) Failure to Perform Other Obligations. Unless due to a Force Majeure Event, the failure of Buyer to perform or cause to be performed any material obligation required to be performed by Buyer under this Agreement or the failure of any representation and warranty set forth herein to be true and correct as and when made; provided, however, that if such failure by its nature can be cured, then Buyer shall have a period of thirty (30) days after receipt of written notice of such failure to cure the same and a Buyer Default shall not be deemed to exist during such period; provided, further, that if Buyer commences to cure such failure during such period and is diligently and in good faith attempting to effect such cure, said period shall be extended for sixty (60) additional days; or

(3) Bankruptcy. If Buyer (i) admits in writing its inability to pay its debts generally as they become due; (ii) files a petition or answer seeking reorganization or arrangement under the federal bankruptcy laws or any other Legal Requirements of the United States of America or any State, district or territory thereof; (iii) makes an assignment for the benefit of creditors; (iv) consents to the appointment of a receiver of the whole or any substantial part of its assets; (v) has a petition in bankruptcy filed against it, and such petition is not dismissed within sixty (60) days after the filing thereof; or if (vi) a court of competent jurisdiction enters an order, judgment, or decree appointing a receiver of the whole or any substantial part of Buyer's assets, and such order, judgment or decree is not vacated or set aside or stayed within sixty (60) days from the date of entry thereof; or (vii) under the provisions of any other law for the relief or aid of debtors, any court of competent jurisdiction shall assume custody or control of the whole or any substantial part of Buyer's assets and such custody or control is not terminated or stayed within sixty (60) days from the date of assumption of such custody or control.

Section 12.3 Buyer's Remedies upon Occurrence of a Seller Default. If a Seller Default has occurred under Section 12.1(4), Section 12.1(6) or Section 12.1(7), Buyer may terminate this Agreement with respect to all Facilities by written notice, and assert all rights and remedies available to Buyer under Legal Requirements subject to the limitations of liability set forth in Section 13.6. If a Seller Default has occurred with respect to a Facility under Section 12.1(1), Section 12.1(2), Section 12.1(3), or Section 12.1(5), Buyer may terminate this Agreement only with respect to such Facility for which such Seller Default has occurred by written notice, and assert all rights and remedies available to Buyer under Legal Requirements subject to the limitations of liability set forth in Section 13.6. If a Seller Default has occurred under Section 12.1(1), Section 12.1(2), Section 12.1(3), Section 12.1(5), Section 12.1(6) or Section 12.1(7), Buyer may require Seller and, if so required, Seller shall repurchase the relevant Facility or Facilities in respect of which this Agreement is being terminated from Buyer on an AS IS basis by paying the Repurchase Value of

any such Facility, calculated as of the date of such payment, in which case Seller shall take title to such Facility upon paying the Repurchase Value, and such Facility shall no longer constitute a portion of the Portfolio or the Scheduled Portfolio (provided, that if such Seller Default has occurred under Section 12.1(5), Seller shall not be obligated to make a payment to Buyer in excess of the Maximum Liability except as otherwise set forth in Section 13.6). If a Facility will be removed pursuant to this Section 12.3, Seller shall at its sole cost and expense remove the Facility in accordance with Section 4.10(1).

Section 12.4 Seller's Remedies Upon Occurrence of a Buyer Default. If a Buyer Default has occurred Seller may terminate this Agreement only with respect to those Facilities for which a Buyer Default has occurred and remains uncured by written notice, and assert all rights and remedies available to Seller under Legal Requirements with respect to those Facilities for which a Buyer Default has occurred, subject to the limitations of liability set forth in Section 13.6, including without limitation retaining any prior payments with respect to such Facilities and, to the extent Seller has title to and possession of such Facilities, selling such Facilities to another buyer.

Section 12.5 Preservation of Rights. Termination of this Agreement shall not affect any rights or obligations as between the Parties which may have accrued prior to such termination or which expressly or by implication are intended to survive termination whether resulting from the event giving rise to termination or otherwise, including, without limitation, ARTICLE X, ARTICLE XI (including the IP License and right to retain copies of the documentation and other embodiments of Intellectual Property in Section 11.1), and ARTICLE XIII.

Section 12.6 Force Majeure.

(1) If either Party is rendered wholly or partially unable to perform any of its obligations under this Agreement by reason of a Force Majeure Event, then except as otherwise explicitly specified in this Agreement, that Party (the "Claiming Party") will be excused from whatever performance is prevented by the Force Majeure Event to the extent so prevented; provided, however, that (a) the Claiming Party, promptly upon (and in no event later than three (3) days after) the occurrence of such Force Majeure Event, gives the other Party (the "Affected Party") notice in writing describing the particulars of the occurrence, including the anticipated duration of the Force Majeure Event; (b) the suspension of performance shall be of no greater scope and of no longer duration than is reasonably required by the Force Majeure Event; (c) no liability of either Party for an event that arose before the occurrence of the Force Majeure Event shall be excused as a result of the Force Majeure Event; (d) the Claiming Party shall exercise commercially reasonable efforts to correct or cure (and at all times minimize) the event or condition excusing performance and resume performance of all its obligations; and (e) when the Claiming Party is able to resume performance of its obligations under this Agreement, the Claiming Party shall promptly give the Affected Party notice in writing to that effect and shall promptly resume performance. Except as set forth in Section 4.3(7), an event of Force Majeure shall not excuse the obligation to pay money under this Agreement. Notwithstanding anything to the contrary in this Agreement, in no event shall Seller (or any of its Service Providers) be required to risk the lives or health of any human Persons during the pendency of a Force Majeure Event, it being understood that Seller or its Service

Providers, as applicable, shall return to the affected Site as soon as reasonably safe, as is required by clauses (b), (d) and (e) of this Section 12.6.

(2) If, as a result of a Force Majeure Event, a Facility in the Portfolio, in whole or in part, is damaged or destroyed such that the repair of such Facility or part thereof is likely to exceed $[***] (a "**Casualty**"), Seller shall give prompt notice of such damage to Buyer and shall promptly provide an estimate of the costs required to either restore or remove such Facility. After receiving such notice and estimate, Buyer may either (a) instruct Seller to repair, rebuild or replace (as applicable) such Facility or part thereof to effect the restoration of such Facility as nearly as possible to the condition it was in immediately prior to such Casualty, with such alterations and upgrades as may be reasonably requested and approved by Buyer (a "**Restoration**"), or (b) upon Buyer's determination that the Facility or part thereof cannot be repaired, rebuilt or replaced to Buyer's satisfaction, terminate this Agreement with respect such Facility subject to such Casualty, after which Seller shall remove such Facility in accordance with Section 4.10(2) (a "**Casualty Removal**"). Upon a termination of this Agreement with respect to a Casualty Removal, Buyer and Seller shall be fully released of any and all obligations hereunder with respect to the Facility subject to the Casualty, except for those provisions which expressly survive a termination.

(3) Buyer shall reimburse Seller for all costs reasonably incurred by Seller of Restoration or Casualty Removal, whether or not such costs are covered by insurance. At Buyer's request, Seller shall, using commercially reasonable efforts and in good faith, participate in any discussions with, and facilitate Buyer's exchange of information with, any insurance companies with respect to any Casualty, Restoration or Casualty Removal. For the avoidance of doubt, any insurance proceeds in respect of a Casualty, Restoration or Casualty Removal shall be entirely for the benefit of Buyer, except to the extent Buyer has failed to reimburse Seller as set forth in the first sentence of this Section 12.6(3), and other than to such extent, any such insurance proceeds received by Seller shall be held in trust for the benefit of Buyer and promptly remitted to Buyer. Any Restoration shall be conducted in compliance with Sections 4.2(3) and 4.10(2).

Section 12.7 Termination of ESAs Following Placed in Service Date; ESA Customer Purchase Options.

(1) In the event that an ESA is terminated (or if an ESA Customer exercises its purchase option pursuant to its ESA) with respect to a Facility on or following the date such Facility achieves any of the events described in clauses (2) through (4) of the definition of "Placed in Service", then, notwithstanding anything to the contrary set forth in Section 4.1(2), Buyer may terminate this Agreement with respect to that Facility by written notice, such termination to be effective as of the final day of the calendar month in which such notice is delivered. Following the effectiveness of such termination, Buyer shall owe Seller no further Services Fees in respect of such Facility. For clarity, nothing in this Section 12.7(1) shall limit in any manner any other rights or remedies that may be available to Buyer or Seller under this Agreement. If an ESA Customer exercises its purchase option pursuant to its ESA, Seller shall use commercially reasonable efforts to facilitate the consummation of such purchase and related matters, including by executing and delivering reasonable documentation in a timely manner at Buyer's request. If Buyer owns a Facility or any

Component thereof following termination of the applicable ESA (or, if prior to termination of an ESA, it is reasonably likely that the applicable ESA Customer will not agree to renew, or otherwise cause to be renewed, the initial term or any renewal term of such ESA), Seller shall, at Buyer's request, use its commercially reasonable efforts to remarket the applicable Facility or Component thereof pursuant to Section 4.10(3).

(2) In the event that the termination of an ESA with respect to any Facility pursuant to Section 12.7(1) results from a Seller Default as described in Section 12.1(1), Section 12.1(2), Section 12.1(3), Section 12.1(5), Section 12.1(6) or Section 12.1(7), Seller shall, at Buyer's option, repurchase and remove the relevant Facilities in accordance with Section 4.10(1) and (2). Notwithstanding the foregoing or anything else in this Agreement, any payment by the ESA Customer under the [***] ESA of any termination value or reimbursement of costs under such ESA, under any circumstances, shall be subject in all respects to the last sentence of Section 11.2(b)(i) of the [***] ESA.

(3) In the event of a Compliance Law Violation (as defined in the Equinix ESA), the Parties will cooperate in good faith to cure such Compliance Law Violation in accordance with the terms of Section 7.1(h)(i) of the Equinix ESA including by ensuring that any individual(s), Seller Affiliate, Service Provider and/or Seller or Seller Affiliate agent, representative or subcontractor at any tier directly involved in the Compliance Law Violation are no longer in any way performing under the Equinix ESA. In the event that, notwithstanding such efforts, such Compliance Law Violation either (i) can only be cured by the termination of Seller's performance in connection with the Equinix ESA, or (ii) results in the termination of the Equinix ESA, then, in either case, Buyer may terminate this Agreement with respect to any Facilities installed pursuant to the Equinix ESA and affected by such termination of the Equinix ESA, and Buyer shall owe Seller no further Service Fees in respect of such Facility(ies) for any period from and after the date of termination. For clarity, nothing in this Section 12.7(3) shall limit in any manner any other remedies that may be available to Buyer under this Agreement.

Section 12.8 Termination of ESAs Prior to Placed in Service Date. If an ESA is terminated with respect to one or more Facilities prior to the date such Facility achieves any of the events described in clauses (2) through (4) of the definition of "Placed in Service", then Seller shall, at Buyer's sole discretion and as part of the Installation Service (without in any way limiting Buyer's rights and remedies under, and subject to, Section 2.4(7), Section 2.9 and Section 3.4(1)(xii)(B)), (i) remove such Facility in accordance with Section 4.10(2) and (ii) relocate and install such Bloom System and applicable Ancillary Equipment and BOF at a substitute Site. The costs of such removal and relocation shall be at Seller's sole cost and expense; *provided, however* to the extent the applicable ESA Customer reimburses Buyer for (or otherwise pays Buyer in respect of) such costs pursuant to the terms of the applicable ESA, then Buyer shall remit such payments to Seller to the extent of Seller's bearing costs under this sentence.

Section 12.9 Change in Law. If, due to any change in Legal Requirements subsequent to the date of this Agreement (a "Change in Law"), performance of any provision of this Agreement or any transaction contemplated hereby shall become impracticable, impossible or unduly

burdensome, the Parties hereto shall use commercially reasonable efforts to find and employ an alternative means, including renegotiation of economics of the Agreement, to achieve the same or substantially the same result as that was contemplated by this Agreement; provided, however, that (a) the Party claiming impairment of performance under this Section 12.9 (the "Claiming Party") shall, promptly upon (and in no event later than three (3) Business Days after) the occurrence of such Change in Law, give the other Party (the "Affected Party") notice in writing describing the particulars of the occurrence, including the anticipated duration of the Change in Law; (b) the suspension of performance shall be of no greater scope and of no longer duration than is reasonably required by the Change in Law; (c) no liability of either Party for an event that arose before the occurrence of the Change in Law shall be excused as a result of the Change in Law; (d) the Claiming Party shall exercise commercially reasonable efforts to correct or cure (and at all times minimize) the effect of Change in Law and resume performance of all its obligations; and (e) when the Claiming Party is able to resume performance of its obligations under this Agreement, the Claiming Party shall promptly give the Affected Party notice in writing to that effect and shall promptly resume performance. Except as set forth in Section 4.3(7), a Change in Law shall not excuse the obligation to pay money under this Agreement. If an event or circumstance gives rise to a Change in Law as defined herein under this Agreement, but such event or circumstance does not also constitute a 'Change in Law' (or similar term) as defined under the applicable ESA or Site License (depending on which Facilities are affected), then for the purposes of any rights and obligations of the parties under this Agreement that relate to corresponding rights or obligations under such ESA or Site License such event or circumstance will not constitute a Change in Law under this Agreement.

ARTICLE XIII
INDEMNIFICATION

Section 13.1 IP Indemnity.

(1) Except as expressly limited below, Seller agrees to indemnify, defend and hold Buyer, its direct and indirect members, and their Affiliates and their respective managers, officers, directors, employees and agents harmless from and against any and all Third Party Claims and Indemnifiable Losses (including in connection with obtaining any Intellectual Property necessary for continuation of completion, operation and maintenance of Facilities purchased by Buyer from Seller), arising from or in connection with any alleged infringement, misappropriation, conflict, violation or misuse of any patents, copyrights, trade secrets or other third party Intellectual Property rights by Facilities or Components thereof purchased by Buyer pursuant to this Agreement (or the sale, use, operation or maintenance thereof, provided that such sale, use, operation or maintenance is as contemplated by this Agreement or the Long-Term Agreement) or the exercise of the IP License or the Software License granted pursuant to Section 11.1 and Section 11.2 hereunder, or the license granted under the Long-Term Agreement, or the exercise by Kaiser of any of its rights and interests with respect to Kaiser Purchaser Equipment, or any exercise by an ESA Customer of any of its rights and interests with respect to a Non-Scheduled Facility. Buyer shall give Seller prompt notice of any such claims (provided, that the failure to so notify shall not relieve Seller's obligations under this Section 13.1 except to the extent Seller is materially prejudiced thereby). Seller shall be entitled to participate in, and, unless in the opinion of counsel for Seller a conflict of interest between the Parties may

exist with respect to such claim, assume control of the defense of such claim with counsel reasonably acceptable to Buyer. Seller shall ensure that the terms and conditions set forth in Section 23.2 of the Kaiser ESA, as applicable to any Facilities thereunder, are satisfied and that there does not arise at any time an "Event of Default" (as defined in the Kaiser ESA) pursuant to Section 16.1(f) of the Kaiser ESA (and, for the avoidance of doubt, Seller shall promptly and at its own expense procure, provide and maintain any performance assurance, credit support and other assurance requested by the counterparty to such Kaiser ESA), and Seller shall comply in all respects with any similar obligations in any transaction confirmations under the Kaiser ESA entered into after the Agreement Date. Buyer authorizes Seller to settle or defend such claims in its sole discretion on Buyer's behalf, without imposing any monetary or other obligation, restriction, admission or liability on Buyer and subject to Buyer's participation rights set forth in this Section 13.1. Buyer shall assist Seller upon reasonable request by Seller and, at Seller's reasonable expense, in defending any such claim. If Seller does not assume the defense of such claim, or if a conflict precludes Seller from assuming the defense, then Seller shall reimburse Buyer on a monthly basis for Buyer's reasonable and documented defense expenses of such claim through separate counsel of Buyer's choice reasonably acceptable to Seller. If Seller assumes the defense of such claim, Seller shall keep Buyer reasonably informed as to the status of such defense (including prompt updates with respect to any material developments). Should Buyer be enjoined from selling or using any Facility or Component thereof as a result of such claim, Seller will, at its sole option and discretion (and at its own expense), either (i) procure or otherwise obtain for Buyer the right to use or sell the Facility or Component thereof; (ii) modify the Facility or Component thereof so that it becomes non-infringing but still substantially meets the original functional specifications of the Facility or Component thereof (in which event, for the avoidance of doubt, all warranties hereunder shall continue to apply unmodified); (iii) upon return of the Facility or Component thereof to Seller, as directed by Seller, provide to Buyer a non-infringing Facility or Component thereof meeting the functional specifications of Facility or Component thereof, or (iv) when and if none of the first three options is reasonably available to Seller, authorize the return of the Facility to Seller and, upon receipt thereof, return to Buyer all monies paid by Buyer to Seller for the Repurchase Value, net of any monies paid by Seller to Buyer for any performance guaranties or other warranty claims; provided that Seller shall not elect the options in the preceding clauses (i), (ii) or (iii) without Buyer's written consent (such consent not to be unreasonably withheld) if such election could reasonably be expected to materially decrease Buyer's revenues or materially increase Buyer's operating expenses.

(2) THIS INDEMNITY SHALL NOT COVER ANY CLAIM:

(i) for Intellectual Property infringement, conflict, violation, misappropriation, or misuse resulting from any combination made by Buyer of any Bloom System with any other product or products (except any other Component of the Facility) or modifications made by or on behalf of Buyer to any part of the Bloom System, unless (A) such combination or modification is in accordance with Seller's specifications for the Bloom System, (B) such combination or modification is made by or on behalf of or at the written request of Seller where Seller has requested the combination or modification giving rise to the claim by Buyer, (C) such combination is reasonably necessary for the use of the Facility as permitted in this

Agreement or (D) such other product or products would not infringe the Intellectual Property rights of a third party but for the combination with any part of the Bloom System; or

(ii) for infringement of any Intellectual Property rights where such infringement results from a modification to the Bloom System which was requested in writing by Buyer on a custom basis; provided, that before performing or agreeing to perform any such modification, Seller shall notify Buyer in writing, with specific reference to this Section 13.1(2)(ii), that such modification if performed will result in claims being excluded from indemnification pursuant to this Section 13.1(2) and the extent of such exclusions; and provided, further, that none of the following shall constitute a modification to the Bloom System which was or is requested by Buyer on a custom basis: (a) the integration of the Battery Solution or other Ancillary Equipment or BOF into any Facility, (b) specifications, plans, designs or drawings comprising a part of, or delivered pursuant to, any ESA or Site License, (c) performance of an ESA or Site License by the parties thereto pursuant to the terms and conditions thereof or (d) any change or amendment to any of the agreements, documents or information set forth in the foregoing clauses (b) or (c) to the extent approved in writing by Seller.

Section 13.2 General Indemnification of Seller by Buyer. Buyer shall indemnify, defend and hold harmless Seller, its officers, directors, employees, shareholders, Affiliates and agents (each, a "Seller Indemnitee") from and against any and all Indemnifiable Losses (other than Indemnifiable Losses addressed in Section 13.1) asserted against or suffered by any Seller Indemnitee arising out of a Third Party Claim (other than a claim for such Seller Indemnitee's breach of any contract to which such Seller Indemnitee is a party) to the extent arising out of or in connection with (a) the negligent or intentional acts or omissions of Buyer or its subcontractors, agents or employees or others under Buyer's control (excluding Seller and any Seller Affiliate) after the Agreement Date, or (b) except in accordance with this Agreement or the Transaction Documents, operation of a Facility or any part thereof by any party other than Seller or an Affiliate or subcontractor of Seller after such Facility has been purchased by Buyer pursuant to this Agreement (but subject to Seller's warranties, covenants and indemnities under this Agreement and any other Transaction Document to which Seller is a party); provided that Buyer shall have no obligation to indemnify Seller to the extent caused by or arising out of (i) any gross negligence, fraud or willful misconduct of any Seller Indemnitee or the breach by Seller or any Seller Indemnitee of its covenants, representations and warranties under this Agreement or in any Payment Certificate or (ii) any operation of any Facility (or any part thereof) by a Person outside of Buyer's control or direction or by a Person taking such action despite Buyer's reasonable efforts to prevent the same.

Section 13.3 General Indemnification of Buyer by Seller.

(1) Seller shall indemnify, defend and hold harmless Buyer, its direct and indirect members, managers, officers, directors, employees, Affiliates and agents (each, a "Buyer Indemnitee") from and against any and all Indemnifiable Losses (other than, but without limiting, Indemnifiable Losses addressed in Section 3.4(4), Section 3.7, Section 5.7, Section 5.8, Section 13.1, or Section 13.4) asserted against or suffered by any Buyer Indemnitee arising out of (1) any

Third Party Claim to the extent arising out of or in connection with the negligent or intentional acts or omissions of Seller, its Service Providers, its agents, its employees or others under Seller's control arising out of or in connection with a breach, violation or default of the obligations of the foregoing Persons under the Transaction Documents (other than matters addressed separately in Section 3.4(4), Section 3.7, Section 5.3, Section 5.7, Section 5.8, Section 13.1, this Section 13.3 or Section 13.4, which shall be governed by the terms thereof), (2) the breach of an obligation or inaccuracy of a representation or warranty when made, in each case, (i) by Seller under any Transaction Document (it being the intention of Buyer and Seller that Seller's obligations in this Section 13.3 shall include any Indemnifiable Losses asserted against or suffered by Buyer Parent under the MIPA, and Buyer may make claims hereunder on behalf of Buyer Parent) or (ii) by Buyer or any Affiliate of Seller prior to the Agreement Date under a Site License or ESA, (3) any injury, death, or damage to property caused by a defect in a Facility, (4) any breach under a Kaiser ESA arising in connection with the Kaiser Purchaser Equipment or any Non Scheduled Facility (until such Non Scheduled Facility is approved by Buyer to be part of the Scheduled Portfolio in accordance with Section 2.9) or (5) Seller Attributes; provided that, Seller shall have no obligation to indemnify Buyer to the extent caused by or arising out of any gross negligence, fraud or willful misconduct of a Buyer Indemnitee, the breach by Buyer or any Buyer Indemnitee of its covenants, representations and warranties under this Agreement or the inability of Buyer to ultimately utilize any tax benefits.

(2) Except as otherwise set forth in this Agreement, in the event that Buyer incurs any liability, cost, loss or expense to an ESA Customer or licensor under a Site License (including relating to a breach of an ESA or Site License) arising out of Seller's breach of its obligations herein, Seller shall indemnify and hold Buyer harmless for any such liability, cost, loss or expense incurred by Buyer.

Section 13.4 Tax Indemnification of Buyer by Seller.

(1) Seller agrees to indemnify, defend and hold harmless each Buyer Indemnitee from and against any Tax Loss arising out of (i) the inaccuracy of any representation made by Seller in Section 8.1(6) or Section 8.1(10) as of the date such representation was made, (ii) the breach of or failure to perform any obligation, covenant or obligation of Seller under this Agreement, including the last sentence of Section 3.9, Section 4.2(3) (and any other Sections that require compliance with the requirements of Section 4.2(3)) and Section 6.1, or (iii) the gross negligence, willful misconduct or fraud of Seller in performing its obligations under this Agreement; *provided*, Seller shall have no obligation to indemnify Buyer to the extent such inaccuracy or breach was caused solely by Buyer or Buyer's inability to ultimately utilize any such tax benefits. The parties agree to treat any indemnity under this Section 13.4(1) as a return of the purchase price. If, pursuant to a final determination, it is determined that payment of an indemnity under this Section 13.4(1) is taxable, Seller shall promptly pay to Buyer the After Tax Basis gross-up amount. To the extent any such payment is includable as income of a Buyer Indemnitee as determined by agreement of the Parties or, if there is no agreement, by an opinion of a nationally-recognized Tax counsel selected by the Buyer Indemnitee and reasonably acceptable to Seller that such amount "should" be included as income of the Buyer Indemnitee, the amount of the payment shall be increased by the After Tax Basis gross-up amount upon the receipt or accrual of the payment.

Section 13.5 Indemnity Claims Procedure.

(1) Except as otherwise provided in Section 13.1, if any indemnifiable Third Party Claim is brought against a Party (the "Indemnified Party") under Section 13.2 or Section 13.3, then the other Party (the "Indemnifying Party") shall be entitled to participate in, and, unless in the reasonable opinion of counsel for the Indemnifying Party a conflict of interest between the Parties may exist with respect to such claim, assume the sole and exclusive control over the defense of such claim, with counsel reasonably acceptable to the Indemnifying Party. If the Indemnifying Party does not assume the defense of the Indemnified Party, or if a conflict precludes the Indemnifying Party from assuming the defense, then the Indemnifying Party shall reimburse the Indemnified Party on a monthly basis for the Indemnified Party's reasonable and documented defense expenses through separate counsel of the Indemnified Party's choice. If the Indemnifying Party assumes the defense of the Indemnified Party with acceptable counsel, the Indemnified Party, at its sole option, subject to the Indemnifying Party's exclusive control of the defense, may participate in the defense, at its own expense, with counsel of its own choice without relieving the Indemnifying Party of any of its obligations hereunder. The Indemnifying Party may settle the defense without the consent of the Indemnified Party, so long as such defense only includes the payment of money and such settlement does not admit to any fault or actions of the Indemnified Party or infringe on the rights of the Indemnified Party hereunder.

(2) Notwithstanding anything to the contrary in this ARTICLE XIII, it is express intention of the Parties that the indemnifications provided for in this ARTICLE XIII shall apply to direct demands, claims, actions, investigations, arbitrations or other proceedings (whether at law or in equity) between the Parties for a breach of this Agreement or any other Transaction Document, regardless of whether a Third Party Claim is involved.

(3) For Tax reporting purposes, to the maximum extent permitted by the Code, each party will agree to treat all amounts paid pursuant to this Section 13.5 as a non-taxable reimbursement of purchase price. If, pursuant to a final determination, it is determined that payment of an indemnity under this Section 13.5 is taxable, Seller shall promptly pay to Buyer the After-Tax Basis gross-up amount. To the extent any such payment is includable as income of Buyer as determined by the agreement of the Parties or, if there is no agreement, by an opinion of a nationally-recognized Tax counsel selected by Buyer and reasonably acceptable to Seller that such amount "should" be included in income of Buyer, the amount of such payment shall be increased by the After-Tax Basis gross-up amount upon the receipt or accrual of the payment. Notwithstanding anything to the contrary in this ARTICLE XIII, if a Third Party Claim is brought against Buyer by an ESA Customer and the indemnification procedure set forth or required in the applicable ESA mandates any specific dates by which defenses must be assumed or other actions taken, or reserves consent or other rights to such ESA Customer, then Seller as the Indemnifying Party shall perform its obligations under this ARTICLE XIII in accordance with, at a minimum, such indemnification procedures in such ESA.

(4) In determining the amount of any liability incurred by a Party under this Article XIII, if any of the Indemnifiable Losses are deemed to be federally taxable income, any calculation of Indemnifiable Losses shall be grossed up on an After-Tax Basis.

Section 13.6 Limitation of Liability.

(1) Notwithstanding anything to the contrary in this Agreement, in no event shall a Party be liable to the other Party for an amount in excess of the Maximum Liability; provided, that the foregoing limitation shall not apply to liability arising out of (A) the fraud, willful misconduct, or gross negligence of a Party or that Party's employees, agents, subcontractors (except that for the purposes of this provision, Seller and its employees, agents and subcontractors will not be deemed to be employees, agents or subcontractors of Buyer), (B) a Third Party Claim, (C) any Indemnifiable Loss for which an Indemnified Party received insurance proceeds under Section 13.9, (D) Kaiser Purchaser Equipment, (E) the Side Letter Agreement, (F) Seller Attributes, (G) liability for any ESA Warranty Reimbursement Payments that Seller has incurred pursuant to Section 5.8 or (H) any Tax Loss; and in any of the foregoing clauses (A) through (H), any amounts so received will not be included when calculating Seller's Maximum Liability.

(2) Except for liquidated damages specifically provided for in this Agreement, and amounts due in respect of any Third Party Claim, damages hereunder are limited to direct damages, and in no event shall a Party be liable to the other Party, and the Parties hereby waive claims for indirect, punitive, special or consequential damages or loss of profits; *provided, however*, the following shall not be characterized as indirect, punitive, special or consequential damages or loss of profits : (i) Tax Loss, (ii) lost profits that were the reasonably foreseeable consequence of an indemnifiable breach or inaccuracy at the time of such breach or inaccuracy, (iii) payments of the Repurchase Value or any Aggregate Purchase Price refunds or other payments required under any of Section 2.4(7), Section 2.6(4) or Section 3.4(1)(xii)(B), (iv) Performance Guaranty payments, (v) Indemnifiable Losses in respect of Seller Attributes, (vi) Indemnifiable Losses in respect of Kaiser Purchaser Equipment, (vii) Indemnifiable Losses in respect of the Side Letter Agreement or (viii) liability for any ESA Warranty Reimbursement Payments that Seller has incurred pursuant to Section 5.8.

(3) Subject to Section 3.2(3), each Party hereby waives any claim under this ARTICLE XIII irrespective of the legal theory under which it is brought to the extent such claim is covered by the insurance of the claiming Party.

Section 13.7 Liquidated Damages; Estoppel. The Parties acknowledge and agree that it would be impracticable or impossible to determine with precision the amount of damages that would or may be incurred by Buyer as a result of (x) the Portfolio's failure to satisfy any Capacity Warranty or (y) the existence of any of the circumstances described in this Agreement that gives rise to an obligation of Seller to pay to Buyer the Repurchase Value. It is therefore understood and agreed by the Parties that: (a) Buyer may be damaged by Seller's failure to satisfy either Capacity Warranty or to avoid such circumstances from occurring; (b) it would be impractical or impossible to fix the actual damages to Buyer resulting therefrom; and (c) any cash payments in respect of a claim under the Performance Guaranty payable to Buyer under Section 5.7 or any Repurchase Value for failure to meet such obligations are in the nature of liquidated damages, and not a penalty, and are fair and reasonable estimate of compensation for the losses that Buyer may reasonably be anticipated to incur by any such failure. Seller hereby (i) waives any argument that its failure to comply with such

obligations would not cause Buyer irreparable harm, (ii) agrees that it shall be estopped from arguing the invalidity, or otherwise questioning the reasonableness, of the liquidated damages provided for herein, and (iii) agrees that it will consent to the entry of judgment ordering payment of such liquidated damages in any court of competent jurisdiction. Seller and Buyer each agree that Buyer shall be under no obligation to submit any dispute regarding the payment of any Repurchase Value when due to the dispute resolution mechanism set forth in Section 14.5, but may rather immediately pursue whatever rights it has available under this Agreement, at law or in equity in accordance with Section 14.6 herein.

Section 13.8 Duplication of Recovery. Any Indemnifiable Loss for which any Indemnified Party hereto is entitled to indemnification under this Article XIII shall be determined without duplication of recovery by reason of the state of facts giving rise to such Indemnifiable Loss constituting a breach of more than one representation, warranty, covenant or agreement; provided, however, that the right to indemnification shall not be limited to the extent that the amount of Indemnifiable Losses for such state of facts has not previously been recovered.

Section 13.9 Indemnification Obligations Net of Insurance Proceeds. The Parties intend that any liability subject to indemnification pursuant to this Article XIII will be net of insurance proceeds actually received, realized or recovered by an Indemnified Party. Accordingly, the Indemnifiable Loss which an Indemnifying Party is required to pay to an Indemnified Party will be reduced or offset by any insurance proceeds actually received, realized or recovered by or on behalf of the Indemnified Party in reduction of the related liability.

Section 13.10 Survival. The Parties' respective rights and obligations under this ARTICLE XIII shall survive any total or partial termination of this Agreement.

ARTICLE XIV
MISCELLANEOUS PROVISIONS

Section 14.1 Amendment and Modification. This Agreement may be amended, modified or supplemented only by written agreement of Buyer and Seller.

Section 14.2 Waiver of Compliance; Consents. Except as otherwise provided in this Agreement, any failure of any of the Parties to comply with any obligation, covenant, agreement or condition herein may be waived by the Party entitled to the benefits thereof only by a written instrument signed by the Party granting such waiver, but any such waiver of such obligation, covenant, agreement or condition shall not operate as a waiver of, or estoppel with respect to, any subsequent failure to comply therewith.

Section 14.3 Notices. All notices, provisions of documentation, reports, certifications, or other documentation, and other communications hereunder shall be in writing and shall be deemed given when (A) uploaded to the Data Room (provided, that Buyer is the only Party hereunder that may receive notice by upload to the Data Room, and such notice shall not be deemed given until Buyer has been notified thereof by an email update or telephone conversation), (B) received, if delivered personally, by facsimile transmission with completed transmission acknowledgment or

by electronic mail, or (C) delivered, if mailed by overnight delivery via a nationally recognized courier or registered or certified first class mail (return receipt requested), postage prepaid, to the recipient Party at its below address; provided, however, that the Parties may notify one another in writing of changes to the addresses and other recipient information below this paragraph in this Section 14.3, and such notices of changes of address and other recipient information shall be effective only upon receipt thereof:

To Seller:

Bloom Energy Corporation
4353 North 1st Street, 4th Floor
San Jose, CA 95134
Attention: [***]
email: [***]

and to:

Bloom Energy Corporation
4353 N. First Street
San Jose, CA 95134
Attention: General Counsel
email: [***]

To Buyer:

c/o Duke Energy One
Attention: [***]
Deputy General Counsel
550 S. Tryon Street
Mail code: DEC45A
Charlotte, NC 28202
Tel: [***]
email: [***]

and to:

c/o Duke Energy One
Attention: [***]
Strategic Development Initiatives
400 S. Tryon Street
Mailcode: ST2690
Charlotte, NC 28202
Tel: [***]
email: [***]

and to:

[***]
Hunton Andrews Kurth LLP
200 Park Avenue
52nd Floor
New York, NY 10166
Tel: [***]
email: [***]

Section 14.4 Assignment.

(1) This Agreement and all of the provisions hereof shall be binding upon and inure to the benefit of the Parties and their respective successors and permitted assigns (including by operation of law), but neither this Agreement nor any of the rights, interests or obligations hereunder, nor the equity interests that own the Buyer, directly and indirectly, shall be assigned, transferred or conveyed by any Party, without the prior written consent of the other Party (to be granted in the other Party's sole discretion); *provided, however* that:

(i) So long as Buyer does not make any assignment pursuant to this clause (i) to a Competitor of Seller, Buyer may make such an assignment without Seller's consent to a successor to substantially all of Buyer's business, whether in a merger, sale of stock or other equity interests or rights, sale of assets or other transaction, or in any sale of stock or other equity interests or rights in Buyer representing less than all or substantially all of Buyer's business, including a direct or indirect (x) acquisition or disposition of tax equity investment interests or (y) collateral assignment for the benefit of a secured lender; provided, Buyer may make a collateral assignment for the benefit of a secured lender without consent to a Competitor of Seller, so long as such Person is not listed on Schedule 14.4(a); provided, further, if there is publicly announced a change in control, merger or sale of all or substantially all of the assets of Duke Energy Corporation to a Competitor of Seller, Seller shall have the right for thirty (30) calendar days after such announcement (after which date, Seller's right shall automatically expire) to elect, immediately upon written notice, to purchase the Portfolio in full by performing the following actions: (A) promptly refund any payments of the Aggregate Purchase Price for Facilities for which none of the events in clauses (2) through (4) of the definition of Placed in Service have occurred, (B) pay to Buyer (or its successor or beneficiary) the sum of the aggregate Repurchase Value (using the method of determining the Repurchase Value specified in clause (a) or (b) of the definition thereof that can be determined more quickly, with a post-purchase true-up to follow promptly to ensure that the actual amount described in this clause (B) is paid) for all Facilities or the net present value of expected remaining project cash flows at a discount rate equivalent to the investor return in the Base Case Model and including ESA renewals (reflected in the Base Case Model, adjusted to reflect a ten (10) year renewal term for each ESA in the Portfolio), whichever is greater, *plus* all amounts necessary for any holder of tax equity interests to achieve the rate of return contemplated in the tax equity financing documentation as of the

consummation of such acquisition by Seller; (C) procure written releases of Buyer from any and all liabilities, obligations and duties in respect of this Agreement, the other Transaction Documents, the Facility Contracts, the Governmental Approvals and the Portfolio; (D) assume all of Buyer's liabilities under any Facility Contracts and Governmental Approvals; and (E) execute and deliver to Buyer a Bill of Sale and other assignment agreements and other documentation as may be necessary to effect such purchase and related transfer of title to all Facilities;

(ii) Buyer may make such an assignment without Seller's consent to an ESA Customer in connection with its exercise of a purchase option pursuant to an ESA;

(iii) Seller shall be entitled to subcontract any of its obligations under this Agreement without consent (provided, that Seller shall not subcontract to any Person other than a Service Provider pursuant to Section 14.14) or to assign its obligations under this Agreement to an Affiliate under common ownership with Seller, provided, further, that (X) such assignment or subcontracting shall not excuse Seller from the obligation to competently perform any subcontracted or assigned obligations or any of its other obligations under the Agreement and (Y) Seller shall not assign any of Seller's obligations hereunder to an Affiliate unless Seller shall have executed and delivered to Buyer, on or prior to the effectiveness of such Assignment, a guarantee by Seller of all payment and performance obligations so assigned, to Buyer's reasonable satisfaction;

(iv) nothing in this Agreement shall be deemed to require the consent of any Party with respect to any change in control, merger or sale of all or substantially all of the assets of Seller; and

(v) nothing in this Agreement shall be deemed to require the consent of any Party with respect to any acquisition or disposition of any direct or indirect tax equity interests in Buyer.

Any purported assignment or delegation in violation of this Section 14.4(1) shall be null and void. The Parties acknowledge and agree that any and all provisions applicable to a Facility Transfer are set forth in Section 3.6.

(2) Upon the occurrence of any assignment or other disposition by Buyer permitted under Section 14.4(1), Buyer shall automatically be deemed to have obtained as of the date of such assignment or other disposition, without further action, any other consents that may be required from Seller pursuant to this Agreement or the other Transaction Documents, including those set forth in Sections 3.3(3) and Section 5.5(3) such that the assignee receives the benefit of all rights, benefits and interests of Buyer pursuant to this Agreement, including the Pre-COO Equipment Warranty (as applicable) and the Portfolio Warranty, and the Seller shall use commercially reasonable efforts to enter into an agreement with such assignee or transferee that is substantially similar to the Long-Term Agreement.

(3) In the event of an assignment or transaction prohibited by Section 14.4(1), the assigning Party shall notify the other Party of the identity of the proposed assignee or successor in writing. Such other Party shall have the right to consent to such assignment or transaction. Such other Party shall notify such assigning Party of its determination within ten (10) Business Days of receipt of notice from such assigning Party hereunder (and if such other Party does not so timely notify, then such other Party's consent to such assignment or transaction shall be deemed provided). If such other Party notifies such assigning Party that such other Party is electing to withhold consent, then such assigning Party shall be prohibited from consummating the proposed transaction.

(4) In connection with any assignment allowed under this Section 14.4, the Parties shall use their commercially reasonable efforts to execute and deliver such additional documents and instruments and to perform such additional acts as may be necessary or appropriate to effectuate, carry out and perform such assignment or transaction so as to maintain the economic and other benefits of the parties thereto, including the assignment of contracts and Governmental Approvals (or application in respect of Governmental Approvals) in respect of any applicable Facility.

(5) From time to time, either Party may, in its reasonable judgement, request an amendment to Schedule 14.4(a) or Schedule 14.4(b) to reflect that any Person thereon has become a "Competitor of Seller" or has ceased to be a "Competitor of Seller". If the other Party, in its reasonable discretion and upon receipt of sufficient evidence thereof, consents, the Parties will effect such amendment promptly.

Section 14.5 Dispute Resolution; Service of Process.

(1) Except as provided in Section 13.5 and Section 13.7, in the event a dispute, controversy or claim arises hereunder, including any claim whether in contract, tort (including negligence), strict product liability or otherwise, the aggrieved Party will promptly provide written notification of the dispute to the other Party within ten (10) days after such dispute arises. Thereafter, a meeting shall be held promptly between the Parties, attended by representatives of the Parties with decision-making authority regarding the dispute, to attempt in good faith to negotiate a resolution of the dispute. If the Parties are not successful in resolving a dispute within twenty-one (21) days of such meeting, then, subject to the limitations on remedies set forth in Section 4.10(2), Section 5.6, Section 5.7(6), Section 12.3 and Section 12.4 and ARTICLE XIII, either Party may pursue whatever rights it has available under this Agreement, at law or in equity in accordance with Section 14.6 herein.

(2) In the event of any dispute arising out of or relating to this Agreement, each Party hereby consents to service of process made to the addressees set forth in Section 14.3 herein either by overnight delivery by a nationally recognized courier or by certified first class mail, return receipt requested, and hereby acknowledges that service by such means shall constitute valid and lawful service of process against the Party being served.

Section 14.6 Governing Law, Jurisdiction, Venue. THIS AGREEMENT SHALL BE GOVERNED BY AND INTERPRETED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK, WITHOUT GIVING EFFECT TO ANY CONFLICTS OF LAW OR OTHER

PRINCIPLES THEREOF THAT WOULD RESULT IN THE APPLICATION OF THE LAWS OF ANOTHER JURISDICTION (OTHER THAN SECTION 5-1401 OF THE NEW YORK GENERAL OBLIGATIONS LAW). THE PARTIES HEREBY IRREVOCABLY SUBMIT TO THE NON-EXCLUSIVE JURISDICTION OF THE COURTS OF THE STATE OF NEW YORK AND OF THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF NEW YORK WITH RESPECT TO ANY DISPUTE ARISING OUT OF OR RELATING TO THIS AGREEMENT. EACH PARTY IRREVOCABLY AND UNCONDITIONALLY WAIVES TRIAL BY JURY IN ANY ACTION, SUIT OR PROCEEDING RELATING TO ANY SUCH DISPUTE AND FOR ANY COUNTERCLAIM WITH RESPECT THERETO.

Section 14.7 Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Signatures delivered by facsimile, portable document format or other electronic means (including, without limitation, services such as DocuSign) will be considered original signatures.

Section 14.8 Interpretation. The article, section and schedule headings contained in this Agreement are solely for the purpose of reference, are not part of the agreement of the Parties and shall not in any way affect the meaning or interpretation of this Agreement.

Section 14.9 Entire Agreement. The Transaction Documents and the exhibits, schedules, documents, certificates and instruments referred to therein, embody the entire agreement and understanding of the Parties in respect of the transactions contemplated by this Agreement. Each Party acknowledges that, in agreeing to enter into this Agreement, it has not relied on any representation, warranty, collateral contract or other assurance (except those in this Agreement, any Transaction Document or any other agreement entered into on the date of this Agreement between the Parties) made by or on behalf of any other Party at any time before the signature of this Agreement. Each Party waives all rights and remedies which, but for the preceding sentence, might otherwise be available to it in respect of any such representation, warranty, collateral contract or other assurance.

Section 14.10 Construction of Agreement. The terms and provisions of this Agreement represent the results of negotiations between Buyer and Seller, each of which has been represented by counsel of its own choosing, and neither of which has acted under duress or compulsion, whether legal, economic or otherwise. Accordingly, the terms and provisions of this Agreement shall be interpreted and construed in accordance with their usual and customary meanings, and Buyer and Seller hereby waive the application in connection with the interpretation and construction of this Agreement of any rule of law to the effect that ambiguous or conflicting terms or provisions contained in this Agreement shall be interpreted or construed against the Party whose attorney prepared the executed draft or any earlier draft of this Agreement.

Section 14.11 Severability. If any term or other provision of this Agreement is invalid, illegal or incapable of being enforced by any rule of law or public policy, all other conditions and provisions of this Agreement shall nevertheless remain in full force and effect so long as the economic

or legal substance of the transactions contemplated hereby is not affected in any manner materially adverse to any Party.

Section 14.12 Further Assurances. Each Party agrees to execute and deliver such additional documents and instruments and to perform such additional acts as may be necessary or appropriate to effectuate, carry out and perform all of the terms, provisions, and conditions of this Agreement and the transactions contemplated by this Agreement.

Section 14.13 Independent Contractor; Subcontracting. Seller shall perform the Installation Services and the Facility Services and act at all times as an independent contractor, and Seller shall be solely responsible for the means, methods, techniques, sequences, and procedures employed for execution and completion of the Installation Services and the Facility Services. Nothing in this Agreement shall be interpreted or applied so as to make the relationship of any of the Parties that of partners, joint ventures or anything other than the relationship of customer and independent contractor. Notwithstanding anything to the contrary herein, including Seller's obligation to perform on behalf of Buyer certain of Buyer's obligations under ESAs and Site Licenses, neither Seller nor any of its employees, agents, subcontractors or representatives shall be considered an employee, agent, subcontractor or representative of, nor under the control of, Buyer under this Agreement. Seller shall at all times maintain supervision, direction and control over its employees, agents, subcontractors and representatives as is consistent with and necessary to preserve its independent contractor status, and Seller shall be responsible to Buyer for the acts and omissions of each such employee, agent, subcontractor and representative.

Section 14.14 Service Providers.

(1) Subject to the other requirements in this Agreement concerning Seller's subcontractors, agents and other representatives, Seller may contract with one or more unrelated third parties, who are reputable, appropriately qualified (including having an established record of successful performance in their trades), licensed, and financially responsible, to perform Installation Services and/or Facility Services throughout the Term (each, a "Service Provider"); provided, that (i) Seller shall be responsible for each Service Provider's performance of any Installation Service and/or Facility Service as if it had been performed by Seller, (ii) contracting with a Service Provider shall not relieve Seller of any liability, obligation, or responsibility pursuant to this Agreement, and (iii) to the extent that any ESA Customer has rights or privileges pursuant to its applicable ESA to be notified of, review or consent (or withhold its consent) to the retention of any Service Provider, such Service Provider shall not be contracted with, retained or otherwise perform any Installation Services or Facility Services hereunder unless in accordance with such ESA Customer's rights, to Buyer's reasonable satisfaction.

(2) All Service Providers shall obtain and maintain such insurance coverages (i) having such terms as set forth in Annex B as are applicable to part of the Installation Services or Facility Services, as the case may be, that such Service Providers are performing, (ii) in accordance with Prudent Electrical Practices and (iii) in accordance with any requirements in any applicable ESA or Site License.

(3) No Service Provider is intended to be or will be deemed a third-party beneficiary of this Agreement. Nothing contained herein shall create any contractual relationship between any Service Provider and Buyer or obligate Buyer to pay or cause the payment of any amounts to any Service Provider, including any payment due to any third party. None of Seller's employees, Service Providers or any such Service Provider's employees will be or will be considered to be employees of Buyer. Seller shall be fully responsible to Buyer for the acts and omissions of each such employee or Service Provider. To the extent that any ESA Customer has the right to request removal of any Seller or Service Provider personnel under an ESA or Site License, Seller shall cooperate with Buyer in complying with the terms and conditions of such ESA or Site License including by, upon written notification by Buyer that the performance, conduct or behavior of any Person employed by Seller or one of its Service Providers is unacceptable to the applicable ESA Customer, promptly stopping such Person from performing any obligations hereunder and/or removing such Person from the applicable Site. Additionally, Buyer may bring to Seller's attention any concerns regarding the performance, conduct or behavior of any Person employed by Seller or one of its Service Providers, which concerns Seller shall consider in good faith and thereafter take such action as Seller deems appropriate under the circumstances. Seller shall be fully responsible for the payment of all wages, salaries, benefits and other compensation to its employees and for payment of any Taxes due because of the Installation Services or Facility Services.

(4) Seller shall not be permitted to subcontract or otherwise delegate its duties or obligations hereunder except to Service Providers pursuant to this Section 14.14.

Section 14.15 Rights to Deliverables. Buyer agrees that Seller shall, except as expressly set forth herein, retain all rights, title and interest, including Intellectual Property rights, in any Training Materials provided to Buyer in connection with the services performed hereunder; provided, for the avoidance of doubt, that the Intellectual Property licenses granted to Buyer under this Agreement shall include corresponding license rights in the Intellectual Property rights contained within such Training Materials. "Training Materials" means any and all materials, documentation, notebooks, forms, diagrams, manuals and other written materials and tangible objects, describing how to operate and maintain the Facilities, including any corrections, improvements and enhancements which are delivered by Seller to Buyer, but excluding any Documentation or other data and reports delivered to Buyer in respect of any Facilities. Subject to Article X, Buyer shall have the right to make copies of all Training Materials.

Section 14.16 Limitation on Export. Buyer agrees that it will not export, re-export, resell, ship or divert directly or indirectly any Facility or any part thereof in any form or technical data or Software furnished hereunder to any country prohibited by the United States Government or any other Governmental Authority, or for which an export license or other Governmental Approval is required, without first obtaining such license or approval.

Section 14.17 Time of Essence. Time is of the essence with respect to all matters contained in this Agreement.

Section 14.18 No Rights in Third Parties. Except as otherwise specified herein, (a) nothing in this Agreement nor any action taken hereunder shall be construed to create any duty, liability or standard of care to any Person that is not a Party, (b) no Person that is not a Party shall have any rights or interest, direct or indirect, in this Agreement or the services to be provided hereunder and (c) this Agreement is intended solely for the benefit of the Parties, and the Parties expressly disclaim any intent to create any rights in any third party as a third-party beneficiary to this Agreement or the services to be provided hereunder (except that Buyer Indemnitees and Seller Indemnitees are made express third party beneficiaries with respect to applicable indemnities hereunder).

Section 14.19 Non-Recourse. No Representative or Affiliate of either of the Parties, nor any of their officers, directors, employees, agents, consultants, owners, shareholders, members or partners, shall have any personal liability to any Party under this Agreement or the other Transaction Documents as a result of the terms of this Agreement or the other Transaction Documents; provided, that this Section 14.19 shall not limit any claims by Seller against Buyer Parent pursuant to the MIPA, by Buyer (on behalf of Buyer Parent) against Seller pursuant to the MIPA or by Buyer against any ESA Customer pursuant to the ESAs or Site Licenses; provided, further, that Seller and Buyer shall not be considered to be or have been Affiliates of one another for purposes of this Section 14.19. Seller shall not initiate or pursue any claims, including in the nature of indemnity, against any ESA Customer pursuant to the terms of any ESA.

[Remainder of page intentionally left blank]

IN WITNESS WHEREOF, Buyer and Seller have caused this Purchase, Use and Maintenance Agreement to be signed by their respective duly authorized officers as of the Agreement Date.

BUYER:
2018 ESA PROJECT COMPANY, LLC
a Delaware limited liability company

By: _____
Name:
Title:

SELLER:
BLOOM ENERGY CORPORATION
a Delaware corporation

By: _____
Name:
Title:

Execution Version

REDACTED EXHIBIT: This Exhibit contains certain identified information that has been excluded because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed. Redacted information is identified by [***].

ANNEXE

Annex A
Minimum Power Product and Minimum kWh Example Calculations

Performance Warranty Example Calculations

Assumptions

- Aggregate System Capacity of Facilities in Portfolio: 15,000 kW
- Hours in applicable Calendar Quarter: (90 days) * (24 hours/day) = 2,160 hours
- Hours subject to Exclusion under Section 5.6: 100

Calculations

- *Minimum Power Product* = (15,000kW) * ([***]%) = [***]kW
- *Minimum kWh* = ([***]kW) * (2,160 - 100) = [***] kWh

Annex B
Insurance

Insurance. At all times during the Term, without cost to Buyer, Seller shall maintain in force and effect the following insurance, which insurance shall not be subject to cancellation, termination or other material adverse changes unless the insurer delivers to Buyer written notice of the cancellation, termination or change at least thirty (30) days in advance of the effective date of the cancellation, termination or material adverse change or if notice from the insurer to Buyer of material adverse change is not available on commercially reasonable terms then Seller shall provide Buyer with such notice as soon as reasonably possible after becoming aware of such change; *provided,* that following the Commencement of Operations Date with respect to a Facility, the insurance required hereunder shall only pertain to Seller's Facility Services (including, for clarity, any removal, restoration or reinstallation services provided by Seller); and *provided*, *further*, that the insurance required hereunder shall pertain to the Installation Services for any Delayed Ancillary Equipment until the Commencement of Operations Date of such Delayed Ancillary Equipment:

(a) Worker's Compensation Insurance as required by the laws of the state in which Seller's employees are performing EPC Services or Facility Services;

(b) Employer's liability insurance with limits at policy inception not less than One Million Dollars ($1,000,000.00) per occurrence;

(c) Commercial General Liability Insurance, including bodily injury and property damage liability (arising from premises, operations, contractual liability endorsements, products liability, or completed operations) with limits not less than One Million Dollars ($1,000,000.00) per occurrence and Two Million Dollars ($2,000,000.00) annual aggregate limit at policy inception;

(d) If there is exposure, automobile liability insurance in accordance with prudent industry practice with a limit of not less than One Million Dollars ($1,000,000.00), combined single limit per occurrence;

(e) Umbrella liability insurance acting in excess of underlying employer's liability, commercial general liability and automobile liability policies with limits not less than Fifteen Million Dollars ($15,000,000.00) per occurrence, except that any subcontractors shall be required to maintain such insurance with limits of not less than Three Million Dollars ($3,000,000.00);

(f) Professional errors and omission insurance with a limit of not less than One Million Dollars ($1,000,000.00) per occurrence;

(g) Environmental/pollution liability insurance with a limit of not less than One Million Dollars ($1,000,000.00) per claim;

(h) Builder's Risk/Installation Coverage for each Facility, with replacement costs and a delay in startup component (for avoidance of doubt, this requirement is only applicable, with respect to each Facility, until such Facility's Commencement of Operations Date (and until, if applicable, the Commencement of Operations Date for any Delayed Ancillary Equipment)); and

(i) Marine Cargo - Transit coverage (including air, land and ocean cargo, as applicable) on an "all-risk" basis and a "warehouse to warehouse" basis with a per occurrence limit equal to not less than 110% of the value including transit and insurance of such shipment involving the Facility at all times for which the Seller bears or has accepted risk of loss or has responsibility for providing insurance. Coverage shall include loading, unloading and temporary storage (as applicable). Coverage shall be maintained in accordance with prudent industry practice in all regards with per occurrence deductibles of not more than $50,000 for physical damage and other terms and conditions acceptable to the Buyer. For avoidance of doubt, (i) this requirement is only applicable during installation and is not required to be maintained with respect to any Facility after such Facility's Commencement of Operations Date (except, with respect to any Delayed Ancillary Equipment, until the Commencement of Operations Date for such Delayed Ancillary Equipment), and (ii) this requirement shall not apply to any subcontractor except those engaged to transport materials owned by Seller during such transit.

Seller shall cause Buyer, the Investor and any of its other investors and/or financing partners to be included as additional insured to all insurance policies required in accordance with the provisions of this Agreement except for worker's compensation. The required insurance must be written as a primary policy not contributing to or in excess of any policies carried by Buyer, and each must contain a waiver of subrogation, in form and substance reasonably satisfactory to Buyer, in favor of Buyer, the Investor and any of its other investors and/or financing partners.

The insurances contemplated in this clause are primary. The Parties acknowledge that, if a claim is made under any of the insurances contemplated in this Agreement, it is their intention that the insurer cannot require the Party first to exhaust indemnities referred to in this Agreement before the insurer's obligation to perform is mature, subject to the insurer's later pursuing subrogation, in which event any recovery will be credited by such insurer *pro tanto* in favor of the policyholder. The general liability and umbrella liability insurances required by this Agreement shall provide blanket contractual coverage to the full policy limit. Where applicable, each of these insurances will:

(a) be effected with an insurer reasonably acceptable to Buyer;

(b) contain a waiver of subrogation in favor of Buyer[, the Investor and any of its other investors and/or financing partners];

(c) contain deductibles in accordance with prudent industry practice and approved by Buyer acting reasonably; and

(d) include a provision that such insurance is primary insurance with respect to the interests of Buyer and Seller and that any other insurance maintained by Buyer, the Investor or any of its other investors and/or financing partners is excess and not contributory insurance with the insurances required under this Agreement.

Seller shall provide Buyer with evidence of compliance with these insurance requirements when requested by Buyer from time to time on a reasonable basis.

EXHIBITS

Exhibit A
Form of Purchase Order
[***]

Exhibit B
Form of Tranche Notice

To: **2018 ESA PROJECT COMPANY, LLC (Buyer)**

This Tranche Notice, dated _____, 201_, is given pursuant to Section 2.2 of the Purchase, Use and Maintenance Agreement, by and between Bloom Energy Corporation, a Delaware corporation (the "**Seller"**) and 2018 ESA Project Company, LLC, a Delaware limited liability company (the "**Buyer**"), dated as of [_____] (as amended, amended and restated, supplemented or otherwise modified from time to time, the "**PUMA")**. Terms defined in the PUMA have the same meaning where used in this Tranche Notice.

Seller hereby notifies Buyer that Seller reasonably expects that Facilities with aggregate System Capacity of __kW will be included in a Tranche that Seller reasonably expects will satisfy the applicable Deposit Milestones in such the [1st / 2nd / 3rd / 4th] Calendar Quarter of 201_.

Seller hereby certifies that, as of the date of this Tranche Notice, no Seller Default has occurred and is continuing under the PUMA.

Attached to this Tranche Notice is a draft Purchase Order.

This Tranche Notice may be relied upon by Buyer.

Signed for and on behalf of BLOOM ENERGY CORPORATION

By: _____

Name: _____

Title: _____

Exhibit C
Form of Project Information Spreadsheet

Funding Date			
[DD/MM/YYY]	Deposit $/kW	$ [***]	
	Delivery $/kW	$ [***]	Plus Purchase Price Adders
	COO $/kW	$[___]	Remainder of the Aggregate Purchase Price + Taxes
	Purchase Price Adder	$[__]	

*

Milestone	Site ID	Address	City	State	Facility Size kW	Adder	Deposit	Shipment	COO (w/ Tax)	% Sales Tax		Deposit Payment	Delivery Payment	Forecast/Actual Delivery Date	Forecast/Actual PiS	Deposit Pay Date	Delivery Pay Date	COO Pay Date	
Deposit					[__] kW	-	$ -							[DD/MM/YYYY]	[DD/MM/YYYY]	[DD/MM/YYYY]			
Delivery					[__] kW	-		$ -				$ -		[DD/MM/YYYY]	[DD/MM/YYYY]	[DD/MM/YYYY]			
COO					[__] kW	-			$ -	[_] %	$ -	$ -	$ -	[DD/MM/YYYY]	[DD/MM/YYYY]	[DD/MM/YYYY]	[DD/MM/YYYY]	[DD/MM/YYYY]	

$ -	**$ -**	**$ -**

Total Payment due Invoice Due Date	**$ -**

Exhibit D
Form of Certificate of Deposit Milestone Completion

To: **2018 ESA PROJECT COMPANY, LLC (Buyer)**

This Certificate of Deposit Milestone Completion, dated _____, 201_, (this "**Certificate**") is given pursuant to Section 2.4(1)(i) of the Purchase, Use and Maintenance Agreement, by and between Bloom Energy Corporation, a Delaware corporation (the "**Seller"**) and 2018 ESA Project Company, LLC, a Delaware limited liability company (the "**Buyer**"), dated as of [_____] (as amended, amended and restated, supplemented or otherwise modified from time to time, the "**PUMA")**. Terms defined in the PUMA have the same meaning where used in this Certificate.

This Certificate is provided in respect of a Tranche with aggregate System capacity of _____ kW (the "**Subject Tranche**").

Seller hereby certifies that in respect of the Subject Tranche:

(a) Seller has received (on behalf of Buyer or itself, as applicable) approval of Site plans and single-line drawings from one or more ESA Customers for Facilities with aggregate System Capacity equal to or greater than the aggregate System Capacity of Facilities included in such Tranche (and all other Tranches for which Seller previously delivered a Certificate of Deposit Milestone Completion to Buyer); provided, that if any Third Party Consents (including the issuance of notices to proceed, if applicable) are required from an ESA Customer or a Site License grantor (or either of their Affiliates), or if the satisfaction of any other conditions precedent is required (including the construction of separate buildings and other facilities), as a condition to Buyer or its subcontractors (including Seller) commencing installation pursuant to the applicable ESA or Site License, then such Third Party Consents have been received or achieved, and such other conditions precedent have been satisfied, as applicable;

(b) Seller has received all materials required for the commencement of fabrication of Bloom Systems with aggregate System Capacity equal to or greater than the aggregate System Capacity of Facilities included in such Tranche, and all materials required as of such time to allow for completion of such fabrication in order to achieve Commencement of Operations of such Facilities (and all Facilities included in all other Tranches for which Seller previously delivered a Certificate of Deposit Milestone Completion to Buyer) within ninety (90) days; and;

(c) Seller has performed and successfully completed all obligations required to be completed on or before such date under the Transaction Documents and the applicable Facility Contracts (including, for the avoidance of doubt, obtaining all Permits if required as a condition to the Deposit Milestone under any Facility Contract); and

(d) Each of the representations and warranties of Seller in Section 8.1 of the PUMA (excluding Sections 8.1(5)(ii), (7)(ii), (10)(ii), (12), 10(v), 10(xii), (12), (14) (except for 14(i)) and (23)(ii)) is true and correct in all respects as of the date of this Seller's Deposit Milestone Certificate.

Signed for and on behalf of BLOOM ENERGY CORPORATION

……

By: ……

Name:……..

Title:…….

Exhibit E
Form of Certificate of Delivery Milestone Completion

To: **2018 ESA PROJECT COMPANY, LLC (Buyer)**

This Certificate of Delivery Milestone Completion, dated _____, 201_, (the "**Certificate**") is given pursuant to Section 2.4(1)(ii) of the Purchase, Use and Maintenance Agreement, by and between Bloom Energy Corporation, a Delaware corporation (the "**Seller"**) and 2018 ESA Project Company, LLC, a Delaware limited liability company (the "**Buyer**"), dated as of [_____] (as amended, amended and restated, supplemented or otherwise modified from time to time, the "**PUMA")**. Terms defined in the PUMA have the same meaning where used in this Certificate.

This Certificate is provided in respect of the Facility or Facilities, as the case may be, set forth on Attachment A to this Certificate, with aggregate System Capacity of _____ kW (each, a "**Subject Facility**"). Seller hereby certifies that in respect of each Subject Facility:

(1) the Bloom Systems and all Ancillary Equipment (if any) comprising such Facility have been Delivered;

(2) BOF for such Bloom Systems necessary to place such Bloom Systems on the concrete pad for such Bloom Systems has been Delivered and installed;

(3) Such Bloom Systems have been placed upon such concrete pad and are available for installation, startup, and commissioning;

(4) Seller has obtained, on behalf of itself, Buyer or the applicable ESA Customer (as applicable), in respect of such specific Facility, any approvals, drawings and notices described in clause (a) of the definition of "Deposit Milestone" that (i) are required to be obtained before Delivery pursuant to such ESA or such Site License and (ii) were not obtained in connection with the Deposit Milestone for such Facility's Tranche;

(5) Seller has performed and successfully completed (i) all obligations required to be completed on or before such date under this Agreement and the applicable Facility Contracts, Permits and Legal Requirements and (ii) at its sole cost and expense all upgrades required to be performed in respect of the applicable Facility pursuant to an Interconnection Agreement (whether or not executed) or as otherwise required by a Transmitting Utility;

(6) No portion of such Facility has been Placed in Service;

(7) Seller has received each of the Delivery Milestone Deliverables set forth on Schedule 2.5 of the PUMA; and

(8) Each of the representations and warranties of Seller in Section 8.1 (excluding Sections 8.1(5)(ii) and 7(ii)) of the PUMA is true and correct in all respects as of the date of this Certificate of Delivery Milestone Completion.

Signed for and on behalf of BLOOM ENERGY CORPORATION

……

By: ……

Name:……..

Title:…….

ATTACHMENT A TO CERTIFICATE OF DELIVERY MILESTONE COMPLETION

ESA Customer	Location of Facility	Aggregate System Capacity (kW-AC)

Exhibit F
Form of Certificate of COO

To: **2018 ESA PROJECT COMPANY, LLC (Buyer)**

This Certificate of COO, dated as of [_____] (this "**Certificate**") is given pursuant to Section 2.4(1)(iii) of the Purchase, Use and Maintenance Agreement, by and between Bloom Energy Corporation, a Delaware corporation (the "**Seller"**) and 2018 ESA Project Company, LLC, a Delaware limited liability company (the "**Buyer**"), dated as of [_____] (as amended, amended and restated, supplemented or otherwise modified from time to time, the "**PUMA")**. Terms defined in the PUMA have the same meaning where used in this Certificate.

This Certificate is provided in respect of the Facility or Facilities, as the case may be, set forth on Attachment A to this Certificate. Seller hereby certifies that in respect of each Facility [(except with respect to any Delayed Ancillary Equipment)]:

(a) all Bloom Systems, Ancillary Equipment and related BOF comprising such Facility has been Delivered;

(b) such Facility has been installed at the location specified in the applicable Site License and Placed in Service;

(c) (i) such Facility (A) has been attached to the load at the applicable Site, (B) is producing power at one hundred percent (100%) of the aggregate System Capacity of all Bloom Systems included in such Facility, and (C) is operating at or above the Minimum Efficiency Level, and (ii) Seller has provided Buyer with evidence reasonably satisfactory to Buyer of each of the foregoing;

(d) All Pre-COO Equipment Warranty Claims raised by Buyer in respect of such Facility have been addressed by Seller in accordance with Section 3.3(2) of the PUMA;

(e) Seller has (i) performed and successfully completed all necessary acts under the applicable Interconnection Agreement (including performance testing) and (ii) obtained PTO from the applicable Person;

(f) Seller has performed and successfully completed all obligations required to be completed on or before such date under the Transaction Documents and the applicable ESA, Site License, Incentive Agreements and any other applicable contract or agreement by which Buyer is bound or to which such Facility or the components thereof are subject (including, for the avoidance of doubt, obtaining all Permits, PTO and valid, binding and enforceable Interconnection Agreements and successfully completing all items that would, if not so completed, materially impact the operational capability, durability or reliability of the Facility);

(g) Seller has received each of the COO Milestone Deliverables set forth on Schedule 2.5 of the PUMA; and

(h) Excluding Sections 8.1(5)(ii), (7)(i), (10)(v) and (ix) and (12)(i), each of the representations and warranties of Seller in Section 8.1 of PUMA is true and correct in all respects as of the date of this Certificate of COO.

Signed for and on behalf of BLOOM ENERGY CORPORATION

……

By: ……

Name:……..

Title:…….

ATTACHMENT A TO CERTIFICATE OF COO

ESA Customer	Location of Facility	Aggregate System Capacity (kW-AC)

Exhibit G
Form of Bill of Sale

BILL OF SALE

This BILL OF SALE, dated as of _____ __, 201_ is made by BLOOM ENERGY CORPORATION, a Delaware corporation ("Seller"), to 2018 ESA PROJECT COMPANY, LLC, a Delaware limited liability company ("Buyer"), and is delivered pursuant to the Purchase, Use and Maintenance Agreement, by and between Buyer and Seller, dated as of [_____] (as amended, amended and restated, supplemented or otherwise modified from time to time, the "**PUMA")**, in connection with the transfer of the assets described on Exhibit A attached hereto (collectively, the "Purchased Facility").

Seller hereby assigns, conveys, sells, delivers, sets over and transfers to Buyer, for the consideration, and on the terms and conditions, set forth in the PUMA, all of Seller's rights, title and interest in, under and to the Purchased Facility, and Buyer hereby accepts such assignment.

This Bill of Sale shall inure to the benefit of and be binding upon the parties hereto and their respective successors and assigns.

This Bill of Sale shall be governed by, and construed in accordance with, the laws of the State of New York (without giving effect to any conflicts of law or other principles thereof that would result in the application of the laws of another jurisdiction, other than Section 5-1401 of the New York General Obligations Law).

[Signature Page Follows]

[**Note to Draft: To be revised as appropriate when used in connection with return of assets to Bloom]**

IN WITNESS WHEREOF, the parties hereto have caused this Bill of Sale to be signed by their respective duly authorized officers as of the date first written above.

SELLER:

BLOOM ENERGY CORPORATION

By: _____
Name:
Title:

BUYER:

2018 ESA PROJECT COMPANY, LLC

By: _____
Name:
Title:

Exhibit A to the Bill of Sale

Customer	Site	System Size

Exhibit H
Form of Payment Notice

To: **2018 ESA PROJECT COMPANY, LLC (Buyer)**

This Payment Notice, dated _____, 201_, is given pursuant to Section 2.4(3) of the Purchase, Use and Maintenance Agreement, by and between Bloom Energy Corporation, a Delaware corporation (the "**Seller"**) and 2018 ESA Project Company, LLC, a Delaware limited liability company (the "**Buyer**"), dated as of [_____] (as amended, amended and restated, supplemented or otherwise modified from time to time, the "**PUMA")**. Terms defined in the PUMA have the same meaning where used in this Payment Notice.

Seller hereby notifies Buyer that, in connection with the Invoice Due Date or Additional Invoice Due Date occurring on _____, 20__, Buyer shall be obligated to make Purchase Price payments to Seller in the aggregate amount of $_____.

The portions of the Aggregate Purchase Price to be paid by Buyer on the above-mentioned Invoice Due Date is comprised of the following amounts:

1) [$_____ of Purchase Price payments in connection with achievement of the Deposit Milestone for a Tranche composed of Facilities with aggregate System Capacity __kW, which amount equals $[***]/kW of the aggregate Purchase Price for the Facilities included in such Tranche.]

2) $_____ of Purchase Price payments in connection with achievement of the Delivery Milestone for Facilities including Bloom Systems with aggregate System Capacity of __kW, which amount represents $[***]/kW of the Purchase Price for those Facilities that have achieved such Milestone and were included in a Tranche for which Buyer has previously made a Purchase Price payment, plus [***] percent [***]% of the Purchase Price Adder(s) applicable to such Facilities (excluding the Purchase Price Adder for any Delayed Ancillary Equipment), if any.

3) $_____ of Purchase Price payments in connection with the achievement of the Delivery Milestone for Facilities including Bloom Systems with aggregate System Capacity of __kW, which amount represents $[***]/kW of the Purchase Price for those Facilities that have achieved such Milestone and were not included in a Tranche for which Buyer has previously made a Purchase Price payment, plus [***] percent [***]% of the Purchase Price Adder(s) applicable to such Facilities (excluding the Purchase Price Adder for any Delayed Ancillary Equipment), if any.

4) $_____ of Aggregate Purchase Price payments in connection with the Commencement of Operations of Facilities including Bloom Systems with aggregate System Capacity of ___kW, which amount represents the remainder of the Purchase Price for such Facilities not previously paid by Buyer, plus one hundred percent (100%) of the Taxes to be paid by Buyer pursuant to Section 2.3(7) for such Facilities (except for Taxes with respect to any Delayed Ancillary Equipment).

Included with this Payment Notice are the applicable Payment Certificates evidencing the achievement of all applicable Milestones achieved by the Tranche and/or Facilities referenced above, together with all invoices and accompanying materials and lien waivers in respect of such Tranche and/or Facilities, in each case pursuant to Section 2.3(5) or Section 2.3(6), as applicable.

Seller hereby certifies that each of the representations and warranties of Seller in the PUMA is true and correct in all respects as of the date of this Payment Notice.

This Payment Notice may be relied upon by Buyer.

Signed for and on behalf of BLOOM ENERGY CORPORATION

By: _____

Name: _____

Title: _____

Exhibit I
Form of Event Log

Reporting Criteria and Event Description	
Reporting Criteria:	
(i) Site with Capacity Factor < [***]% for [***] (ii) Site with Capacity Factor drops > [***]% within a calendar month (iii) Any site with Capacity Factor < [***]% in a [***] (iv) Significant part replacement	
Event Type	**Description**
Part Replacements	Servicing and replacement of components within the system. This includes blowers, power electronics (inverters, DC-DC converters), valves, etc. Part replacements usually affect one fuel cell module while the remainder of the site maintains power output. Usually the component can be repaired in the field, although a few failure modes exist that require the fuel cell module to be repaired at our factory.
Remote Maintenance	Major remote adjustments made by RMCC to troubleshoot issues and improve overall performance: - Ramp the systems down until part replacement - Adjust control parameters to optimize output and extend fuel cell life
Gas Quality (Fuel/Water Related Issues)	Unexpected gas composition detected from the system and requires early filter replacements. Typically there is no impact to power output or efficiency, but systems will occasionally be ramped down to protect the fuel cell modules until the filters are replaced.
Grid Quality/ Power Outage	Voltage or frequency is detected outside of the IEEE spec and requires BE to disconnect the grid parallel connection. UPM critical loads are unaffected. This can be an intermittent “flicker” which our systems detect and automatically reconnect, or an extended outage that requires the utility provider to restore power to the customer.
Customer Maintenance	Customer test (e.g., backup generator testing), customer planned or unplanned work, utility driven customer-owned decision or customer requested power reduction.
Site Electrical Issue	Breaker trips and signal oscillations.
Other	Unique situations such as site access delays, communication issues, cleaning system doors.

*

System(s)	Date	Event(s)	Comments:
Site A	4/11/2019	Remote Maintenance	
Site B	4/28/2019	Grid Quality/ Power Outage	
Site A	5/13/2019	Customer Maintenance	
Site C	5/31/2019	Part Replacements	
Site A	6/1/2019	Gas Quality (Fuel/Water Related Issues)	
Site D	6/18/2019	Site Electrical Issue	
Site E	6/30/2019	Other	

Exhibit J
Form of an IE Certificate

[Letterhead of Independent Engineer, Leidos]
[Date]
To: [Clients – TE Investor & Lenders]
Re: [Name of Portfolio] ("2018 ESA Project Company LLC")

Ladies and Gentlemen:

This Independent Engineer's Certificate ("Certificate") is delivered to you by [Leidos] (the "Independent Engineer") pursuant to the Master Purchase Use and Maintenance Agreement ("PUMA"). All capitalized terms used herein shall have the respective meanings specified in the PUMA dated (TBD), as applicable, unless otherwise defined herein or unless the context requires otherwise.

The Independent Engineer's review and observations were performed in accordance with generally accepted technical consulting practice and included such general investigations, observations and review as the Independent Engineer, in its professional opinion, deemed necessary under the circumstances within the scope of its services as Independent Engineer pursuant to and in accordance with the standard of care in that certain [Professional Services Agreement], dated as of [TBD] by and between [Seller] and Independent Engineer (["PSA"]). The Independent Engineer makes no representations or warranties to [Bloom Energy] regarding compliance with any other standard except as expressly set forth in the [PSA] or herein.

The statements contained herein are made on the understanding and assumption that the information provided to the Independent Engineer as to the matters covered by this Certificate is true, correct, and complete, provided, however, that the Independent Engineer is not aware of any inaccuracies, misstatements or errors in the information provided. We have visited the Facilities as indicated in the Exhibit A to verify achievement of Commencement of Operations Milestone (COO Milestone). Where the Facility was not visited, we have relied upon photographic and other evidence, including testing documentation and discussions with [**Bloom Energy],** provided by others, to confirm status of those Facilities.

Based upon the foregoing review and review of the information provided to us, as of the date of this Certificate, the undersigned additionally hereby certifies, to the best of our knowledge, the Facilities indicated in the Exhibit A attached have reached Commencement of Operations ("COO"), as follows:

1. Each Facility has achieved the Commencement of Operations Milestones per the PUMA.
2. As of the COO date shown in Exhibit A, each Facility has achieved initial synchronization to the grid, daily operation has begun, is producing power at one hundred percent (100%) of the aggregate System Capacity of all Bloom Systems included in such

Facility, is operating at or above the Minimum Efficiency Level, and the Facilities have been constructed in accordance with the Applicable ESA and the Site License, if applicable, and in accordance with prudent industry practices.

3. Each Facility has obtained the required permits and approvals issued by the relevant Governmental Authority as defined by the list provided by Bloom Energy for each Facility and attached hereto as Exhibit B, and Bloom Energy confirms to the best of their knowledge, the required permits and approvals are in full force and effect (other than permits which, by their nature, need not to be obtained until a future date but which are reasonably expected to be obtained in a timely manner).
4. For each Facility, Permission to Operate (PTO) has been received from the applicable Transmitting Utility, interconnection and parallel operation with the applicable Transmitting Utility distribution system has occurred.
5. The Facility Meter has recorded electric energy received by the ESA Customer from each Facility, and daily operation of each Facility has begun.
6. To the best of our knowledge, no unrepaired defect exists with respect to any Facility material to the construction, operation, or expected performance (inclusive of the generation of electricity by any Facility), including physical damage as a result of transportation, installation errors or accidents, vandalism or other causes.

This Certificate is solely for the information of, and assistance to, the **[signatories to the PSA and/or Use of Work Products Agreement]** in conducting and documenting its investigation of the matters in connection with the Facility and is not to be used, circulated, quoted, or otherwise referred to for any other purpose. The Independent Engineer disclaims any obligation to update this Certificate. This Certificate is not intended to, and may not, be relied upon by any party other than the **[signatories to the PSA and/or Use of Work Products Agreement]**.

IN WITNESS WHEREOF, the undersigned, a duly qualified representative of the Independent Engineer, has caused this Independent Engineer's Certificate to be duly executed as of the date first above written.

By:_____

Name:_____

Title:_____

Exhibit A to the IE Certification
List of Facilities

Facility ID	Customer	Address	Commencement of Operations Date	IE Site Visit Date (if applicable)	Date of Addition of Facility to this Certificate

Exhibit B to the IE Certificate
List of Permits

Exhibit J - 5

Exhibit K

[Reserved]

SCHEDULES

Schedule 1

Master Project Schedule

											Ancillary Equipment								Syste
Serial #	**ESA Customer**	**Site #**	**Electric Utility**	**Address**	**City**	**State**	**ESA**		**Included In Model**	**Total AC Power (kW)**	**Initial Battery Power Rating (kW)**	**Initial Battery Energy Capacity (kWh)**	**Delayed Battery Power Rating (kW)**	**Delayed Battery Energy Capacity (kWh)**	**# of MI5s**	**#SL5s**	**# of DC5s**	**Gas Boosters (1:Yes, 0:No)**	**To Fi (admi by Se**
[***]	Caltech	[***]	[***]	[***]	[***]	[***]	ESA, dated as of May 30, 2019, by and between Company and California Institute of Technology		[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	ESA, by and between the 2018 Project Company and [***], dated as of June 28, 2018; First Amendment to ESA, dated as of May 24, 2018, by and between Company and [***]		[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
	Kaiser Hospitals & Kaiser Health	[***]	[***]	[***]	[***]	[***]	Master Fuel Cell ESA ([***]), by and between Company, Kaiser Hospitals, and Kaiser Health, dated as of June [__], 2018		[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	Kaiser Hospitals & Kaiser Health	[***]	[***]	[***]	[***]	[***]	Master Fuel Cell ESA, by and between Company, Kaiser Hospitals, and Kaiser		[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]

							Health, dated as of June [__], 2019											
[***]	Kaiser Hospitals	[***]	[***]	[***]	[***]	[***]	TC, dated June 18, 2019, by and between the Company and Kaiser Hospitals	Site License, dated June __, 2019, by and between Company and Kaiser Hospitals	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	Kaiser Hospitals	[***]	[***]	[***]	[***]	[***]	TC, dated June 18, 2019, by and between the Company and Kaiser Hospitals [***]	Site License, dated June __, 2019, by and between Company and Kaiser Hospitals	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	Kaiser Hospitals	[***]	[***]	[***]	[***]	[***]	TC, dated June 18, 2019, by and between the Company and Kaiser Hospitals ([***]	Site License, dated June __, 2019, by and between Company and Kaiser Hospitals	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	Kaiser Hospitals	[***]	[***]	[***]	[***]	[***]	TC, dated June 18, 2019, by and between the Company and Kaiser Hospitals [***]	Site License, dated June __, 2019, by and between Company and Kaiser Hospitals	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	Kaiser Hospitals	[***]	[***]	[***]	[***]	[***]	TC, dated June 18, 2019, by and between the Company and Kaiser Hospitals [***]	Site License, dated June __, 2019, by and between Company and Kaiser Hospitals	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]

[***]	Kaiser Hospitals	[***]	[***]	[***]	[***]	[***]		Site License, dated June __, 2019, by and between Company and Kaiser Hospitals	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	Kaiser Hospitals	[***]	[***]	[***]	[***]	[***]	TC, dated June 18, 2019, by and between the Company and Kaiser Hospitals [***]	Site License, dated June __, 2019, by and between Company and Kaiser Hospitals	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	Kaiser Hospitals	[***]	[***]	[***]	[***]	[***]	TC, dated June 18, 2019, by and between the Company and Kaiser Hospitals [***]	Site License, dated June __, 2019, by and between Company and Kaiser Hospitals	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	Kaiser Hospitals	[***]	[***]	[***]	[***]	[***]	TC, dated June 18, 2019, by and between the Company and Kaiser Hospitals [***]	Site License, dated June __, 2019, by and between Company and Kaiser Hospitals	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	Kaiser Hospitals	[***]	[***]	[***]	[***]	[***]	TC, dated June 18, 2019, by and between the Company and Kaiser Hospitals [***]	Site License, dated June __, 2019, by and between Company and Kaiser Hospitals	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	Kaiser Hospitals	[***]	[***]	[***]	[***]	[***]	TC, dated June 18, 2019, by and between the Company and Kaiser	Site License, dated June __, 2019, by and between	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]

							Hospitals [***]	Company and Kaiser Hospitals											
[***]	Kaiser Hospitals	[***]	[***]	[***]	[***]	[***]	TC, dated June 18, 2019, by and between the Company and Kaiser Hospitals [***]	Site License, dated June __, 2019, by and between Company and Kaiser Hospitals	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]

Schedule 1

Master Project Schedule

[***]	Kaiser Hospitals	[***]	[***]	[***]	[***]	[***]	TC, dated June 18, 2019, by and between the Company and Kaiser Hospitals [***]	Site License, dated June __, 2019, by and between Company and Kaiser Hospitals	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	Kaiser	[***]	[***]	[***]	[***]	[***]	TC, dated June __, 2019, by and between the Company and Kaiser Hospitals [***]	Site License, dated June __, 2019, by and between Company and Kaiser Hospitals	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	Kaiser	[***]	[***]	[***]	[***]	[***]	TC, dated June __, 2019, by and between the Company and Kaiser Hospitals [***]	Site License, dated June __, 2019, by and between Company and Kaiser Hospitals	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	Kaiser	[***]	[***]	[***]	[***]	[***]	TC, dated June __, 2019, by and between the Company and Kaiser Hospitals [***]	Site License, dated June __, 2019, by and between Company and Kaiser Hospitals	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	Kaiser	[***]	[***]	[***]	[***]	[***]	TC, dated June __, 2019, by and between the Company and Kaiser Hospitals [***]	Site License, dated June __, 2019, by and between Company and Kaiser Hospitals	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]

[***]	Kaiser	[***]	[***]	[***]	[***]	[***]	TC, dated June __, 2019, by and between the Company and Kaiser Hospitals [***]	Site License, dated June __, 2019, by and between Company and Kaiser Hospitals	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	Kaiser	[***]	[***]	[***]	[***]	[***]	TC, dated June __, 2019, by and between the Company and Kaiser Hospitals [***]	Site License, dated June __, 2019, by and between Company and Kaiser Hospitals	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	Kaiser	[***]	[***]	[***]	[***]	[***]	TC, dated June __, 2019, by and between the Company and Kaiser Hospitals [***]	Site License, dated June __, 2019, by and between Company and Kaiser Hospitals	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	ESA, by and between 2018 Project Company and [***], dated as of December 26, 2018 [***]		[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	Intel	[***]	[***]	[***]	[***]	[***]	ESA, by and between 2018 Project Company and Intel Corporation, dated as of December 28, 2018 [***]		[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	Intel	[***]	[***]	[***]	[***]	[***]			[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	Intel	[***]	[***]	[***]	[***]	[***]	ESA, by and between 2018 Project Company and Intel Corporation, dated as of December 28, 2018		[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]

[***]	Intel	[***]	[***]	[***]	[***]	[***]	ESA, by and between 2018 Project Company and Intel Corporation, dated as of December 28, 2018		[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	Intel	[***]	[***]	[***]	[***]	[***]			[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	ESA, by and between 2018 Project Company and [***], dated as of December 28, 2018		[***]	-	[***]	[***]		[***]			[***]	[***]	[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	[***]	[***]	[***]	ESA, by and between 2018 Project Company and [***], Inc., dated as of December 21, 2018		[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	ESA, by and between 2018 Project Company and [***], dated as of December 26, 2018 for [***]		[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	ESA, by and between the 2018 Project Company and the [***], dated as of March 29, 2019		[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	Equinix, Inc.	[***]	[***]	[***]	[***]	[***]	ESA, dated as of June 25, 2019, by and between Company and Equinix, Inc.		[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	Equinix, Inc.	[***]	[***]	[***]	[***]	[***]			[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	Equinix, Inc.	[***]	[***]	[***]	[***]	[***]			[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	Equinix, Inc.	[***]	[***]	[***]	[***]	[***]			[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	Equinix, Inc.	[***]	[***]	[***]	[***]	[***]			[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]

[***]	Equinix, Inc.	[***]	[***]	[***]	[***]	[***]			[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	Equinix, Inc.	[***]	[***]	[***]	[***]	[***]			[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]																															

Schedule 1

Master Project Schedule

[***]	Kaiser Hospitals	[***]	[***]	[***]	[***]	[***]	TC, dated June 18, 2019, by and between the Company and Kaiser Hospitals [***]	Site Licence, dated June __, 2019, by and between Company and Kaiser Hospitals	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	Kaiser Hospitals	[***]	[***]	[***]	[***]	[***]	TC, dated June 18, 2019, by and between the Company and Kaiser Hospitals [***]	Site Licence, dated June __, 2019, by and between Company and Kaiser Hospitals	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	Equinix, Inc.	[***]	[***]	[***]	[***]	[***]	ESA, dated as of June 25, 2019, by and between Company and Equinix, Inc.		[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	Equinix, Inc.	[***]	[***]	[***]	[***]	[***]			[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	Equinix, Inc.	[***]	[***]	[***]	[***]	[***]			[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	Equinix, Inc.	[***]	[***]	[***]	[***]	[***]			[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	Equinix, Inc.	[***]	[***]	[***]	[***]	[***]			[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	Equinix, Inc.	[***]	[***]	[***]	[***]	[***]			[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	Equinix, Inc.	[***]	[***]	[***]	[***]	[***]			[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	Equinix, Inc.	[***]	[***]	[***]	[***]	[***]			[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	Equinix, Inc.	[***]	[***]	[***]	[***]	[***]			[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	Equinix, Inc.	[***]	[***]	[***]	[***]	[***]			[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]

[***]	[***]	[***]	[***]	[***]	[***]	[***]	ESA, dated as of June 14, 2019, by and between the Company and [***]		[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]

Schedule 1 - 3

Schedule 1.1
Tax Equity Items

Satisfactory evidence of interconnection rights for Intel Sites located within Silicon Valley Power territory.

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Schedule 1.1 - 2

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Schedule 1.1 - 3

Schedule 2.1
Example Calculation of the Repurchase Value

Schedule 2.1

Repurchase Value - Sample Calculation

ESA Term	15
Renewal Period	10
Straight-line Term Calculation	ESA Term+ Renewal Term- 1
Straight-Line Term	[***]
Annual Decease %	[***]%
Initial Repurchase Value (Example Only)	$1,000.00

Year	Annual Decrease %	Repurchase Value For Year (%)	Repurchase Value For Year ($)
1	[***]%	[***]%	$[***]
2	[***]%	[***]%	$[***]
3	[***]%	[***]%	$[***]
4	[***]%	[***]%	$[***]
5	[***]%	[***]%	$[***]
6	[***]%	[***]%	$[***]
7	[***]%	[***]%	$[***]
8	[***]%	[***]%	$[***]
9	[***]%	[***]%	$[***]
10	[***]%	[***]%	$[***]
11	[***]%	[***]%	$[***]
12	[***]%	[***]%	$[***]
13	[***]%	[***]%	$[***]
14	[***]%	[***]%	$[***]
15	[***]%	[***]%	$[***]
16	[***]%	[***]%	$[***]
17	[***]%	[***]%	$[***]
18	[***]%	[***]%	$[***]
19	[***]%	[***]%	$[***]
20	[***]%	[***]%	$[***]
21	[***]%	[***]%	$[***]
22	[***]%	[***]%	$[***]
23	[***]%	[***]%	$[***]
24	[***]%	[***]%	$[***]
25	[***]%	[***]%	$[***]

Schedule 2.1

Schedule 2.1

Schedule 2.1

Schedule 2.3
Purchase Price Adders

Item	Price	Unit
Battery Solution - Whole Cabinet	$[***]	For each kWh of rated capacity of the Battery Solution
Battery Solution - Partial Cabinet	$[***]	For each kWh of rated capacity of the Battery Solution
DC/DC Convertor	$[***]	For each DC/DC Convertor
AC5	$[***]	For each AC5
DC5	$[***]	For each DC5
MI5	$[***]	For each MI5
SL5	$[***]	For each SL5
Low-Pressure Gas Booster	$[***]	For each kW of the aggregate System Capacity of the Bloom Systems comprising such Facility

Schedule 2.5
Seller Milestone Deliverables

Delivery Milestone Deliverables:

Seller shall submit the items listed below in connection with each invoice issued pursuant to Section 2.3(2):

1. Pictures of delivered and installed fuel cell servers, including front, back and side views sufficient to check for visual damage and pictures of gas and water connection points;
2. Certificate of completed factory acceptance test for each system or other proof that each system passed the factory acceptance test;
3. All applicable interconnection documents, including written approval of the application by the Transmitting Utility, such as technical approval, and the completed interconnection application; and
4. Seller conditional lien waivers.

COO Milestone Deliverables:

Seller shall submit the items listed below in connection with each invoice issued pursuant to Section 2.3(3):

1. Pictures of completed and interconnected server;
2. Access to the Facility's Raw Data;
3. Seller final lien waivers

Post-COO Deliverables:

Seller shall submit the items listed below pursuant to Section 3.4(1)(xv):

1. Punch list items of remaining work to be performed which shall not include anything that materially impacts the operational capability, durability, or reliability of the Facility;
2. Signed PTO letter;
3. All applicable Permits (to the extent not previously delivered); and
4. Signed Interconnection Agreements.

Schedule 2.9
Project Criteria

Portfolio Substitutions:

- Including the proposed New Customer Site, no single ESA Customer that is not an Anchor Customer represents more than [***]% of the overall Portfolio (as measured in $).
  - If such proposed New Customer Site is for an existing ESA Customer:
    - The New Customer Site is covered by the same ESA;
    - The New Customer Site is in an Approved State;
    - By including the proposed New Customer Site ("Substitution Site Criteria"):
      - [***];
      - [***];
      - The aggregate amount of money due and payable (together with amounts paid to date or to become paid in respect of the Aggregate Purchase Price of other Facilities) towards the total Aggregate Purchase Price of the entire Portfolio does not exceed the Maximum Aggregate Portfolio Purchase Price by such inclusion; and
      - [***];
  - If such proposed New Customer Site is for a New Customer:
    - The New Customer is:
      - an Approved Customer; or
      - has an equal or higher external rating than the ESA Customer to be replaced, as confirmed by at least one rating agency; or
      - [***]; and
    - the new ESA for such New Customer is based on the standard Bloom template (attached as Annex I to this Schedule 2.9), and offers warranties and other terms that are in line with or better than replaced ESA; and
  - In all cases:
    - The addition of such New Customer Site (and, if applicable New Customer) will:

- meet all pricing parameters after inclusion in the portfolio [***]); and
- not cause to be exceeded the Maximum Aggregate Portfolio Purchase Price, taking into account the entire Scheduled Portfolio.

- The New Customer Site is not within an area determined to be flood-prone under the Federal Flood Protection Act of 1973 or such Facility will be elevated in accordance with the issued for construction set delivered in connection with Section 2.3(5) with Buyer's consent.

For purposes of this Schedule:

- An "Anchor Customer" is [***].
- An "Approved State" means [***].
- "EBITDA Metric" means the measurement as set forth and calculated in the Project Model.
- "Approved Customer" means [***].
- "Unrated" means, with respect to a Customer, sub investment grade or not rated by S&P and Moody's; [***].

Annex I to Schedule 2.9
Bloom Standard Form ESA

Posted to the Electronic Data Room as “Standard Form ESA” (Index No. 3.2.15)

Schedule 3.3(1)
Specifications for Bloom Systems and Battery Solutions

Energy Server 5			
Nameplate Power Output (AC)	**300 kW**	**250 kW**	**200 kW**
Outputs			
Load output (net AC)	300 kW	250 kW	200 kW
Electrical connection	480v, 3-phase, 60 Hz	480v, 3-phase, 60 Hz	480v, 3-phase, 60 Hz
Inputs			
Fuels	Natural Gas, directed biogas	Natural Gas, directed biogas	Natural Gas, directed biogas
Input Fuel Pressure	10-18 psig (15 psig nominal)	10-18 psig (15 psig nominal)	10-18 psig (15 psig nominal)
Water	None during normal operation	None during normal operation	None during normal operation
Efficiency			
Cumulative electric efficiency (LHV net AC)	65-53%	65-53%	65-53%
Heat rate (HHV)	5,811-7,127 Btu/kWh	5,811-7,127 Btu/kWh	5,811-7,127 Btu/kWh
Emissions			
NOX	0.0017 lbs/MWh	0.0017 lbs/MWh	0.0017 lbs/MWh

SOX	Negligible	Negligible	Negligible
CO	0.034 lbs/MWh	0.034 lbs/MWh	0.034 lbs/MWh
VOCs	0.0159 lbs/MWh	0.0159 lbs/MWh	0.0159 lbs/MWh
CO2 @ stated efficiency	679-833 lbs/MWh on natural gas; carbon neutral on directed biogas	679-833 lbs/MWh on natural gas; carbon neutral on directed biogas	679-833 lbs/MWh on natural gas; carbon neutral on directed biogas
Physical Attributes and Environment			

Energy Server 5			
Weight	15.8 tons	13.6 tons	12.2 tons
Dimensions (variable layouts)	17'11" x 8'8" x 6'9" or 32'3" x 4'4" x7'2"	14'4" x 8'8" x 6'9" or 28'8" x 4'4" x 7'2"	14'4" x 8'8" x 6'9" or 25'1" x 4'4" x 7'2"
temperature range	-20 degrees to 45 degrees C	-20 degrees to 45 degrees C	-20 degrees to 45 degrees C
humidity	0%-100%	0%-100%	0%-100%
Seismic vibration	IBC site class D	IBC site Class D	IBC site Class D
Location	Outdoor	Outdoor	Outdoor
Noise	< 70 dBA @ 6 feet	< 70 dBA @ 6 feet	< 70 dBA @ 6 feet
Codes and Standards			
Complies with	Rule 21 interconnection; IEEE1547 standards; CARB 2007 emissions standards	Rule 21 interconnection; IEEE1547 standards; CARB 2007 emissions standards	Rule 21 interconnection; IEEE1547 standards; CARB 2007 emissions standards
Exempt from	CA Air District permitting	CA Air District permitting	CA Air District permitting
Underwriters Laboratories			
Listed	Stationary Fuel Cell Power System	Stationary Fuel Cell Power System	Stationary Fuel Cell Power System
Reference	ANSI/CSA FC1-2014	ANSI/CSA FC1-2014	ANSI/CSA FC1-2014
UL Category	IRGZ	IRGZ	IRGZ
UL File Number	MH45102	MH45102	MH45102

Battery Solution

Technical Highlights (1ABS-306 FC)	
Outputs	
Nameplate power output (Discharge)	[***] kW
Electrical connection	[***]VDC
Inputs	
Nameplate power output (Charge)	[***] kW
Capacity	
Nominal electrical storage capacity	[***] kWh
Emissions	
None	
Physical Attributes and Environment	
ABS Battery Enclosure Weight (without batteries)	[***]lbs
ABS Battery Enclosure Weight (with batteries)	[***]lbs
ABS PCS Enclosure Weight	[***]lbs
ABS Battery Enclosure Dimensions	97" (H) x 86" (L) x 45" (D)
ABS PCS Enclosure Dimensions	97" (H) x 43" (L) x 45" (D)
Temperature range	[***]° C
Humidity	[***]%
Seismic vibration	[***]
Location	Outdoor
Noise	[***]
Codes and Standards	

ABS is designed as a Storage Battery System to ANSI/UL 1973-2013
Additional Notes
• Interconnect achieved through fuel cell system • Access to a secure website to monitor system performance & benefits • Remotely managed • Multiple ABSs can work together to achieve the optimal capacity for each application

Schedule 3.4(1)(iii)
Design and Installations Procedures

Seller will perform the following activities in connection with the design and installation of each Facility, to the extent necessary to cause such Facility to achieve Commencement of Operations:

- Initial site visits and studies to assess site suitability, including but not limited to due diligence research with local Authorities Having Jurisdiction (AHJs) and utilities, site load validation, and utility locates. When necessary, title reports may be pulled, gas composition may be tested, and geotechnical studies may also be done.

- Produce a complete set of construction drawings, either internally or in conjunction with an external design firm, in accordance with: local, state, and national codes; local electric and gas utility requirements; and site-specific or host customer requirements.

- Procure all necessary permits and/or approvals as required by the local AHJs, including but not limited to Planning, Building, and Fire Departments.

- Secure technical approval to interconnect with the local electric utility, and coordinate the electric interconnection agreement between the host customer and the local utility.

- Engage the local gas utility to design the gas interconnection approach, and coordinate the gas contract for gas delivery to the Bloom system between the host customer and the local utility.

- Secure a general contractor to build the site as designed, obtain final building department sign-off, and pass any other required inspections. Provide Bloom Energy-trained site supervision at key milestones during the construction process to ensure smooth inspections and a positive host customer experience.

- Perform system commissioning once construction is complete and inspections are passed, ensuring the systems operate as intended and reach full power. Remedy any issues preventing full power prior to turning operation over to Bloom's Service team.

- Act as the interface with the host customer, securing all necessary design approvals and site access permissions, as well as coordinating construction schedules. Ensure primary personnel responsible for interfacing with Bloom's system are educated in safety procedures. Deliver customer manuals and emergency procedures to the customer upon project completion, as well as any other close-out documentation required by the contract

Schedule 3.4(1)(v)
Commissioning Procedures

Seller will perform the following activities in connection with the commissioning of each Facility, to the extent necessary to cause such Facility to achieve Commencement of Operations:

- [***]
- [***]
- [***]
- [***]
- [***]
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- [***]
-

Schedule 3.4(1)(v) - 2

Schedule 3.4(1)(xv)
Seller Deliverables

Seller shall submit the items listed below prior to or at the Commencement of Operations:

1. Issued for Construction Drawing Set (aka Final IFC Set or Conformed Set), comprised of some or all of the below, as applicable and necessary given site design:

    a. Cover sheet

    b. Work site plan (work site and general arrangement drawings)

    c. Grading and drainage plan

    d. Soil erosion and sediment control

    e. Foundation plans and details

    f. Structural plans, details and elevation

    g. [***]

    h. Single-line electrical diagrams

    i. Electrical schematic diagrams

    j. [***]

    k. Network Architecture Drawings

    l. Power and control wiring

    m. Grounding plans

    n. Lightning and surge protection drawings

    o. Wiring Diagrams

    p. Bloom Equipment Specifications

    q. Electrical schematic diagrams

    r. [***]

    s. I/O list

2. Example screenshot to be delivered by Seller, with details on sample shown below:

[***]

Seller shall submit the items listed below on or before ninety (90) days following the Commencement of Operations Date:

1. Third party vendor drawings
2. Quality Documentation for Construction activities (if applicable)
3. As-built drawings (aka Approved Plans)
4. Permitting documentation

5. Inspection cards (if applicable)

Schedule 3.9
Seller Corporate Safety Plan

At all times during the Term, Seller shall maintain at Seller's corporate headquarters and adhere to Seller's written corporate safety programs, which shall include without limitation the following programs:

- Contractor Environmental Health & Safety Program
- Injury and Illness Prevention Program
- Heat Illness Prevention Program
- Emergency Action and Fire Prevention Plan
- Hazard Communication Program
- Corporate Electrical Standard – Specific Electrical Safe Work Practices
- Electrical Safety Awareness
- Lockout/Tagout
- Fall Protection Program (Working at Heights)
- Ladder Safety Program
- Powered Industrial Trucks (PIT)
- Hoist Safety Program
- Personal Protective Equipment (PPE)
- Respiratory Protection Program
- Hearing Conservation Program
- Hand and/or Powered Tools Safety Program
- Hot Work Process
- First Aid / CPR Program

(the foregoing, collectively, the "Seller Corporate Safety Plan")

Schedule 3.10
Specified Facilities

Serial #	ESA Customer	Site #	Electric Utility	Address	City	State	Total AC Power (kW)
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]

Schedule 4.2
Operations and Maintenance Procedures

Seller will perform the following operation and maintenance activities for each Facility, to the extent necessary to cause such Facility to perform in accordance with the Warranty Specifications:

- Annual maintenance activities:
    - Check Surge Protection Device and replace as necessary
    - Replace main blower filter element
    - Replace AC unit filter element if applicable
    - Replace auxiliary blower filter element
    - Remove any debris and vacuum inside of each cabinet
    - Remove any debris from the exterior of cabinets
    - Check all FCM hotbox enclosures for any leaking or cracks
    - Replace door filters
    - NG conditioning canister replacement
- Site obligations:
    - An e-mail announcement of a service appointment will be sent to address(es) specified by the client informing of a service visit in advance of a service visit
    - Field Service personnel will sign in at a security office as required by client
    - Field Service personnel will safely and securely maintain and repair the systems as needed in accordance with our established and released procedures
    - Bloom HR and EH&S will work with clients to fulfill requirements for certification of drug testing, training, and other Environmental Health & Safety (EH&S) procedures
- Site visit protocols:
    - Works with customers and Product Development to resolve issues
    - Provides detailed documentation for each maintenance element performed
    - Inspection of installed equipment to ensure peak performance

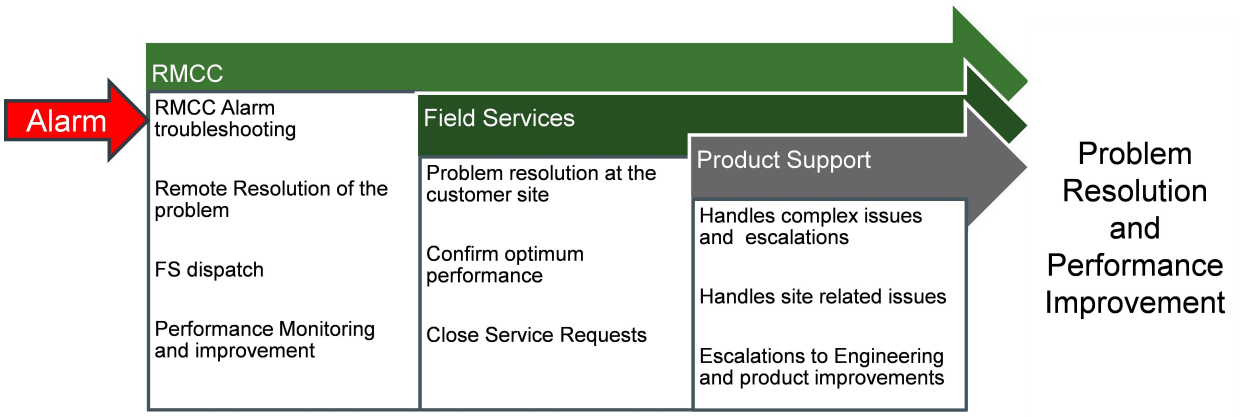
- Inspection of all components to ensure proper operation within product and environmental specifications
- Clearly and professionally interact with customer regarding status of site visits, performance of their systems and general fuel cell education

- Spare Parts

Schedule 4.2 - 1

- Bloom Energy Product Support maintains a list of all spare parts including field replaceable units (FRUs) and consumables for each of its commercial products
- Spare parts are stocked in localized third party logistics depots in each service zone
- The most common and most critical parts are stocked in each local depot and replenished on a weekly schedule
- Parts not stocked in localized depots are dispatched from our Milpitas, CA warehouse via FedEx or other carriers and couriers

- Failure Response Protocol:



- Emergency Response Protocol:
  - Contact lists of BE personnel to be contacted during normal business hours and during off hours (24-7-365 emergency escalation path) are provided for each region where Energy Servers are located in order to remedy situations posing a risk to persons or property
  - Remote shutdown from Bloom RMCC if required
  - Emergency power off button provided onsite
- Remote monitoring:
  - 24/7/365 performance monitoring and control of fleet
  - 1st level troubleshooting
  - Cross-functional interface with engineering, software, controls, quality

- Optimize performance
- Support customer site start-ups

Schedule 4.2 - 2

    - Customer performance analysis – daily
- Standards Compliance:
    - Complies with Rule 21 interconnection
    - ANSI/CSA FC 1: Stationary Fuel Cell Power Systems – Safety
    - IEEE 1547 – Standard for Interconnecting Distributed Resources with Electric Power Systems
    - NFPA 853 – The Standard for Installation of Stationary Fuel Cell Power Systems
    - NFPA 70 – The National Electrical Code
    - NFPA 54 – The National Fuel Gas Code
- Subcontracted Services. The following may in some cases be performed by subcontractors:
    - Water DI system replenishment
    - STS and transfer switch maintenance and repair
    - Some annual maintenance and upgrade work
    - Filter delivery, replacement, removal
    - High Voltage transformer and switchgear maintenance
    - Circuit breaker and similar maintenance
    - Battery replacement
    - Some fuel cell module performance upgrades
    - NG conditioning canister replacement
- Management Staff:
    - Customer Installations Group (CIG) – Turnkey design, engineering, procurement, permitting and installation
    - Services – Commissioning, operations and monitoring of servers
    - Customer Experience – Interface with customer
    - ESA Operations – Certain administrative duties

- All Energy Servers are instrumented to securely record over 1000 data points per server and stored in a Data Historian that resides in a Secure Co-located Data Center and Backed Up for data recovery
- CIG and Service employees are subject to drug tests, background checks and other screening protocols based on customer site requirements

Schedule 4.2 - 3

- Bloom Energy maintains a Code of Safe Practices and ensures that copies are provided to all applicable field service technicians and includes:
    - Injury and illness prevention program
    - Required Personal Protection Equipment (PPE)
    - Corporate EH&S Standard
    - Proper use of Powered Industrial Trucks
    - Contracted Crane Operations
    - Ladder safety program
    - Electrical Safety and Lock-Out Tag-Out (LOTO)
    - Fall protection
    - First Aid/CPR program
    - Contractor EH&S program
    - Bloom Energy Safety Commitment

Schedule 4.3(1)
Service Fees and Service Fee Adders

Service Fees	
Calendar Months since Commencement of Operations for the applicable Facility	**Rate ($/kW)**
1 through 12	$[***]
13 through 24	$[***]
25 through 36	$[***]
37 through 48	$[***]
49 through 60	$[***]
61 through 72	$[***]
73 through 84	$[***]
85 through 96	$[***]
97 through 108	$[***]
109 through 120	$[***]
121 through 132	$[***]
133 through 144	$[***]
145 through 156	$[***]
157 through 168	$[***]
169 through 180	$[***]
181 through 192	$[***]
193 through 204	$[***]
205 through 216	$[***]
217 through 228	$[***]
229 through 240	$[***]
241 through 252	$[***]
253 through 264	$[***]
265 through 276	$[***]
277 through 288	$[***]
289 through 300	$[***]
301 through 312	$[***]
313 through 324	$[***]
325 through 336	$[***]
337 through 348	$[***]
349 through 360	$[***]

Service Fee Adders		
Item	**Price**	**Unit and time period**
Battery Solution	$[***]	Per month for months 1 through 360 for each kWh of rated capacity of the Battery Solution
DC/DC Convertor	$[***]	Per month for months 13 through 360 for each DC/DC convertor
AC5	$[***]	Per month for months 13 through 360 for each AC5
DC5	$[***]	Per month for months 13 through 360 for each DC5
MI5 - Standard multi-server with DC5s	$[***]	Per month for months 13 through 360 for each MI5
MI5 - Standard single-server or Mission Critical	$[***]	Per month for months 13 through 360 for each MI5
SL5 - Standard multi-server with DC5s	$[***]	Per month for months 13 through 360 for each SL5
SL5 - Standard single-server or Mission Critical	$[***]	Per month for months 13 through 360 for each SL5
Low-Pressure Gas Booster	$[***]	Per month for months 13 through 360 for each kW of the aggregate System Capacity of the Bloom Systems comprising such Facility

Schedule 4.6
Parties' Managers

Seller's Manager	[***]
Buyer's Manager	[***]

Schedule 8.1(16)
Credit Support

Serial #	ESA Customer	Site #	Electric Utility	Address	City	State	Reimbursable Deposits and Credit Supports
[***]	[***]	[***]	[***]	[***]	[***]	[***]	$[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	$[***]

Schedule 14.4(a)
"Competitors of Seller"

	Ticker	Company Name
1		General Electric
2		Siemens
3		Mitsubishi Heavy Industries
4		Hitachi
5		Ishikawajima Heavy Industries
6		Kawasaki
7		Rolls-Royce
8		Pratt-Whitney
9		Solar Turbines (division of Caterpillar)
10		Capstone
11		Jenbacher (General Electric)
12		Cummins
13		Generac
14		Caterpillar
15		Wartsila
16		MTU

Schedule 14.4(b)
"Competitor of Seller" Exclusions

	Ticker	Company Name
	Electrics - Primary	
1	[***]	[***]
2	[***]	[***]
3	[***]	[***]
4	[***]	[***]
5	[***]	[***]
6	[***]	[***]
7	[***]	[***]
8	[***]	[***]
9	[***]	[***]
10	[***]	[***]
11	[***]	[***]
12	[***]	[***]
13	[***]	[***]
14	[***]	[***]
15	[***]	[***]
16	[***]	[***]
17	[***]	[***]
18	[***]	[***]
19	[***]	[***]
20	[***]	[***]
21	[***]	[***]
	Electric/LDC/Int'l/E&P Hybrid	
22	[***]	[***]
23	[***]	[***]
24	[***]	[***]
25	[***]	[***]
26	[***]	[***]
27	[***]	[***]
28	[***]	[***]
29	[***]	[***]
30	[***]	[***]
31	[***]	[***]

32	[***]	[***]
33	[***]	[***]
34	[***]	[***]
35	[***]	[***]
	[***]	[***]

	Ticker	Company Name
36	[***]	[***]
37	[***]	[***]
38	[***]	[***]
39	[***]	[***]
40	[***]	[***]
41	[***]	[***]
42	[***]	[***]
43	[***]	[***]
44	[***]	[***]

EXHIBIT 31.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER
PURSUANT TO RULE 13A-14(A) AND RULE 15D-14(A)
OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, KR Sridhar, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q for the period ended June 30, 2019 of Bloom Energy Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements and other financial information included in this report fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c. Evaluated the effectiveness of the registrant's disclosure controls and procedures, and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures as of the end of the period covered by this report based on such evaluation; and

   d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 13, 2019

By: /s/ KR Sridhar
KR Sridhar
Founder, President, Chief Executive Officer and Director
(Principal Executive Officer)

EXHIBIT 31.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER
PURSUANT TO RULE 13A-14(A) AND RULE 15D-14(A)
OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Randy Furr, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q for the period ended June 30, 2019 of Bloom Energy Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements and other financial information included in this report fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c. Evaluated the effectiveness of the registrant's disclosure controls and procedures, and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures as of the end of the period covered by this report based on such evaluation; and

   d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 13, 2019

By: /s/ Randy Furr

Randy Furr
Chief Financial Officer
(Principal Financial Officer)

EXHIBIT 32.1

CERTIFICATIONS OF CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF
THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q for the period ended June 30, 2019 of Bloom Energy Corporation (the "Company") as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, KR Sridhar, Chief Executive Officer certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge:

1. The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

3.

Date: August 13, 2019

By: /s/ KR Sridhar

KR Sridhar
Founder, President, Chief Executive Officer and Director
(Principal Executive Officer)

In connection with the Quarterly Report on Form 10-Q for the period ended June 30, 2019 of Bloom Energy Corporation (the "Company") as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Randy Furr, Chief Financial Officer certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge:

1. The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

Date: August 13, 2019

By: /s/ Randy Furr

Randy Furr
Chief Financial Officer
(Principal Financial Officer)

Document and Entity Information - shares	6 Months Ended Jun. 30, 2019	Aug. 05, 2019
Document Information [Line Items]		
Entity Registrant Name	Bloom Energy Corp	
Entity Central Index Key	0001664703	
Current Fiscal Year End Date	--12-31	
Entity Filer Category	Non-accelerated Filer	
Document Type	10-Q	
Document Period End Date	Jun. 30, 2019	
Document Fiscal Year Focus	2019	
Document Fiscal Period Focus	Q2	
Amendment Flag	false	
Entity Emerging Growth Company	true	
Entity Small Business	false	
Entity Ex Transition Period	false	
Entity Shell Company	false	
Entity Current Reporting Status	Yes	
Class A common stock		
Document Information [Line Items]		
Entity Common Stock, Shares Outstanding		69,993,919
Class B common stock		
Document Information [Line Items]		
Entity Common Stock, Shares Outstanding		46,347,002

Condensed Consolidated Balance Sheets (unaudited) - USD ($) $ in Thousands		Jun. 30, 2019	Dec. 31, 2018
Current assets:			
Cash and cash equivalents	[1]	$ 308,009	$ 220,728
Restricted cash	[1]	23,706	28,657
Short-term investments		0	104,350
Accounts receivable	[1]	38,296	84,887
Inventories		104,934	132,476
Deferred cost of revenue		86,434	62,147
Customer financing receivable	[1]	5,817	5,594
Prepaid expense and other current assets	[1]	25,088	33,742
Total current assets		592,284	672,581
Property, plant and equipment, net	[1]	406,610	481,414
Customer financing receivable, non-current	[1]	64,146	67,082
Restricted cash, non-current	[1]	39,351	31,100
Deferred cost of revenue, non-current		59,213	102,699
Other long-term assets	[1]	60,975	34,792
Total assets		1,222,579	1,389,668
Current liabilities:			
Accounts payable	[1]	61,427	66,889
Accrued warranty		12,393	19,236
Accrued other current liabilities	[1]	109,722	69,535
Deferred revenue and customer deposits	[1]	129,321	94,158
Current portion of recourse debt		15,681	8,686
Current portion of non-recourse debt	[1]	7,654	18,962
Current portion of non-recourse debt from related parties	[1]	2,889	2,200
Total current liabilities		339,087	279,666
Derivative liabilities, net of current portion	[1]	13,079	10,128
Deferred revenue and customer deposits, net of current portion	[1]	181,221	241,794
Long-term portion of recourse debt		362,424	360,339
Long-term portion of non-recourse debt	[1]	219,182	289,241
Long-term portion of recourse debt from related parties		27,734	27,734
Long-term portion of non-recourse debt	[1]	32,643	34,119
Other long-term liabilities	[1]	58,417	55,937
Total liabilities		1,233,787	1,298,958
Commitments and contingencies (Note 13)			
Redeemable noncontrolling interest		505	57,261

Stockholders’ deficit	(115,785)	(91,661)
Noncontrolling interest	104,072	125,110
Total liabilities, redeemable noncontrolling interest, stockholders' deficit and noncontrolling interest	$ 1,222,579	$ 1,389,668

[1] We have variable interest entities which represent a portion of the consolidated balances are recorded within the "Cash and cash equivalents," "Restricted cash," "Accounts receivable," "Customer financing receivable," "Prepaid expenses and other current assets," "Property and equipment, net," "Customer financing receivable, non-current," "Restricted cash, non-current," "Other long-term assets," "Accounts payable," "Accrued other current liabilities," "Deferred revenue and customer deposits," "Current portion of non-recourse debt from related parties," "Derivative liabilities, net of current portion," "Deferred revenue and customer deposits, net of current portion," "Long-term portion of non-recourse debt," and "Other long-term liabilities" financial statement line items in the Condensed Consolidated Balance Sheets (see Note 12 - Power Purchase Agreement Programs).

Condensed Consolidated Statements of Operations (unaudited) - USD ($) shares in Thousands, $ in Thousands	3 Months Ended		6 Months Ended	
	Jun. 30, 2019	Jun. 30, 2018	Jun. 30, 2019	Jun. 30, 2018
Revenue	$ 233,782	$ 168,881	$ 434,489	$ 338,242
Cost of revenue	192,109	136,110	377,061	261,805
Gross profit	41,673	32,771	57,428	76,437
Operating expenses:				
Research and development	29,772	14,413	58,631	29,144
Sales and marketing	18,359	8,254	38,822	16,516
General and administrative	43,662	15,359	82,736	30,347
Total operating expenses	91,793	38,026	180,189	76,007
Gain (loss) from operations	(50,120)	(5,255)	(122,761)	430
Interest income	1,700	444	3,585	859
Interest expense	(16,725)	(22,525)	(32,687)	(43,904)
Interest expense to related parties	(1,606)	(2,672)	(3,218)	(5,299)
Other income (expense), net	(222)	(855)	43	(930)
Loss on revaluation of warrant liabilities and embedded derivatives	0	(19,197)	0	(23,231)
Net loss before income taxes	(66,973)	(50,060)	(155,038)	(72,075)
Income tax provision	258	128	466	461
Net loss	(67,231)	(50,188)	(155,504)	(72,536)
Net loss attributable to noncontrolling interests and redeemable noncontrolling interests	(5,015)	(4,512)	(8,847)	(9,143)
Net loss attributable to Class A and Class B common stockholders	$ (62,216)	$ (45,677)	$ (146,657)	$ (63,393)
Net loss per share attributable to Class A and Class B common stockholders, basic and diluted (in dollars per share)	$ (0.55)	$ (4.34)	$ (1.30)	$ (6.05)
Weighted average shares used to compute net loss per share attributable to Class A and Class B common stockholders, basic and diluted (in shares)	113,622	10,536	112,737	10,470
Product				
Revenue	$ 179,899	$ 108,654	$ 321,633	$ 229,961
Cost of revenue	131,952	70,802	255,952	151,157
Installation				
Revenue	17,285	26,245	39,543	40,363
Cost of revenue	22,116	37,099	46,282	47,537
Service				
Revenue	23,659	19,975	46,949	39,882
Cost of revenue	19,599	19,260	47,156	43,513
Electricity				
Revenue	12,939	14,007	26,364	28,036

Cost of revenue	$ 18,442	$ 8,949	$ 27,671	$ 19,598

Condensed Consolidated Statements of Comprehensive Loss (unaudited) - USD ($) $ in Thousands	3 Months Ended		6 Months Ended	
	Jun. 30, 2019	Jun. 30, 2018	Jun. 30, 2019	Jun. 30, 2018
Statement of Comprehensive Income [Abstract]				
Net loss attributable to Class A and Class B stockholders	$ (62,216)	$ (45,677)	$ (146,657)	$ (63,393)
Other comprehensive income (loss), net of taxes:				
Unrealized gain (loss) on available-for-sale securities	9	100	26	91
Change in derivative instruments designated and qualifying in cash flow hedges	(3,502)	986	(5,693)	3,853
Other comprehensive income (loss), net of taxes	(3,493)	1,086	(5,667)	3,944
Comprehensive loss	(65,709)	(44,591)	(152,324)	(59,449)
Comprehensive loss attributable to noncontrolling interests and redeemable noncontrolling interests	3,340	(984)	5,388	(3,563)
Comprehensive loss attributable to Class A and Class B stockholders	$ (62,369)	$ (45,575)	$ (146,936)	$ (63,012)

Condensed Consolidated Statements of Convertible Redeemable Preferred Stock, Redeemable Noncontrolling Interest, Stockholders' Deficit and Noncontrolling Interest (unaudited) - USD ($) $ in Thousands	Total	Stockholders' Deficit	Common Stock	Additional Paid-In Capital	Accumulated Other Comprehensive Gain (Loss)	Accumulated Deficit	Redeemable Noncontrolling Interest	Noncontrolling Interest	Convertible Redeemable Preferred Stock
Beginning balance (in shares) at Dec. 31, 2017	[1]		10,353,269						
Beginning balance at Dec. 31, 2017		$ (2,180,005)	$ 1	[1] $ 150,803	$ (162)	$ (2,330,647)			
Beginning balance at Dec. 31, 2017							$ 58,154	$ 155,372	
Increase (Decrease) in Stockholders' Equity [Roll Forward]									
Revaluation of common stock warrants		(66)		(66)					
Issuance of restricted stock awards (in shares)	[1]		3,615						
Issuance of restricted stock awards		67		67					
Exercise of stock options (in shares)	[1]		213,757						
Exercise of stock options		743		743					
Stock-based compensation expense		15,256		15,256					
Unrealized gain on available for sale securities	$ 91	91			91				
Change in effective portion of interest rate swap agreement	3,853	288			288		2	3,563	
Distributions to noncontrolling interests							(6,213)	(5,362)	
Net income (loss)	(72,536)	(63,393)				(63,393)	2,997	(12,140)	
Ending balance (in shares) at Jun. 30, 2018	[1]		10,570,641						
Ending balance at Jun. 30, 2018		(2,227,019)	$ 1	[1] 166,803	217	(2,394,040)			
Ending balance at Jun. 30, 2018							54,940	141,433	
Beginning balance (in shares) at Dec. 31, 2017									71,740,162
Beginning balance at Dec. 31, 2017									$ 1,465,841
Ending balance (in shares) at Jun. 30, 2018									71,740,162
Ending balance at Jun. 30, 2018									$ 1,465,841
Beginning balance (in shares) at Mar. 31, 2018	[1]		10,424,982						
Beginning balance at Mar. 31, 2018		(2,189,641)	$ 1	[1] 158,604	117	(2,348,363)			
Beginning balance at Mar. 31, 2018							58,176	149,759	
Increase (Decrease) in Stockholders' Equity [Roll Forward]									
Revaluation of common stock warrants		(66)		(66)					
Exercise of stock options (in shares)	[1]		145,659						
Exercise of stock options		623		623					

Stock-based compensation expense		7,642		7,642				
Unrealized gain on available for sale securities	100	100			100			
Change in effective portion of interest rate swap agreement	986						(1)	987
Distributions to noncontrolling interests							(4,741)	(3,296)
Net income (loss)	(50,188)	(45,677)				(45,677)	1,506	(6,017)
Ending balance (in shares) at Jun. 30, 2018 [1]			10,570,641					
Ending balance at Jun. 30, 2018		(2,227,019)	$ 1	[1] 166,803	217	(2,394,040)		
Ending balance at Jun. 30, 2018							54,940	141,433
Beginning balance (in shares) at Mar. 31, 2018								71,740,162
Beginning balance at Mar. 31, 2018								$ 1,465,841
Ending balance (in shares) at Jun. 30, 2018								71,740,162
Ending balance at Jun. 30, 2018								$ 1,465,841
Beginning balance (in shares) at Dec. 31, 2018			109,421,183					
Beginning balance at Dec. 31, 2018	(91,661)	(91,661)	$ 11	2,480,597	131	(2,572,400)		
Beginning balance at Dec. 31, 2018							57,261	125,110
Increase (Decrease) in Stockholders' Equity [Roll Forward]								
Issuance of restricted stock awards (in shares)			3,504,098					
ESPP purchase (in shares)			696,036					
ESPP purchase		6,916		6,916				
Exercise of stock options (in shares)			328,026					
Exercise of stock options		1,405		1,405				
Stock-based compensation expense		114,361		114,361				
Unrealized gain on available for sale securities	26	26			26			
Change in effective and ineffective portion of interest rate swap agreement		(305)			(305)			(5,388)
Change in effective portion of interest rate swap agreement	(5,693)							
Distributions to noncontrolling interests							(3,537)	(4,208)
Mandatory redemption of noncontrolling interests							(55,684)	
Net income (loss)	(155,504)	(146,657)				(146,657)	2,465	(11,312)
Ending balance (in shares) at Jun. 30, 2019			113,949,343					
Ending balance at Jun. 30, 2019	(115,785)	(115,785)	$ 11	2,603,279	(148)	(2,718,927)		
Ending balance at Jun. 30, 2019							505	104,072
Beginning balance (in shares) at Dec. 31, 2018								0
Beginning balance at Dec. 31, 2018								$ 0
Ending balance (in shares) at Jun. 30, 2019								0

Ending balance at Jun. 30, 2019									$ 0
Beginning balance (in shares) at Mar. 31, 2019			113,214,063						
Beginning balance at Mar. 31, 2019		(105,439)	$ 11	2,551,256	5	(2,656,711)			
Beginning balance at Mar. 31, 2019							58,802	114,664	
Increase (Decrease) in Stockholders' Equity [Roll Forward]									
Issuance of restricted stock awards (in shares)			543,636						
Exercise of stock options (in shares)			191,644						
Exercise of stock options		828		828					
Stock-based compensation expense		51,195		51,195					
Unrealized gain on available for sale securities	9	9			9				
Change in effective and ineffective portion of interest rate swap agreement		(162)			(162)			(3,340)	
Change in effective portion of interest rate swap agreement	(3,502)								
Distributions to noncontrolling interests							(3,255)	(1,595)	
Mandatory redemption of noncontrolling interests							(55,684)		
Net income (loss)	(67,231)	(62,216)				(62,216)	642	(5,657)	
Ending balance (in shares) at Jun. 30, 2019			113,949,343						
Ending balance at Jun. 30, 2019	$ (115,785)	$ (115,785)	$ 11	$ 2,603,279	$ (148)	$ (2,718,927)			
Ending balance at Jun. 30, 2019							$ 505	$ 104,072	
Beginning balance (in shares) at Mar. 31, 2019									0
Beginning balance at Mar. 31, 2019									$ 0
Ending balance (in shares) at Jun. 30, 2019									0
Ending balance at Jun. 30, 2019									$ 0

[1] Common Stock issued and converted to Class A Common and Class B Common effective July 2018.

Consolidated Statements of Cash Flows (unaudited) - USD ($) $ in Thousands	6 Months Ended	
	Jun. 30, 2019	Jun. 30, 2018
Cash flows from operating activities:		
Net income (loss)	$ (155,504)	$ (72,536)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and Amortization	31,023	21,554
Write-off of property, plant and equipment, net	2,704	661
Write-off of PPA II decommissioned assets	25,613	0
Debt make-whole penalty	5,934	0
Revaluation of derivative contracts	555	28,611
Stock-based compensation	115,100	15,773
Loss on long-term REC purchase contract	60	100
Revaluation of stock warrants	0	(7,456)
Revaluation of preferred stock warrants	0	(166)
Amortization of debt issuance cost	11,255	14,420
Changes in operating assets and liabilities:		
Accounts receivable	46,591	(6,486)
Inventories	27,542	(46,172)
Deferred cost of revenue	19,198	48,760
Customer financing receivable and other	2,713	2,439
Prepaid expenses and other current assets	8,477	4,544
Other long-term assets	1,028	15
Accounts payable	(5,461)	5,217
Accrued warranty	(6,843)	(1,883)
Accrued other current liabilities	7,213	(12,815)
Deferred revenue and customer deposits	(25,411)	(31,817)
Other long-term liabilities	3,419	18,652
Net cash provided by (used in) operating activities	115,206	(18,585)
Cash flows from investing activities:		
Purchase of property, plant and equipment	(18,882)	(1,595)
Payments for acquisition of intangible assets	(970)	0
Purchase of marketable securities	0	(15,732)
Proceeds from maturity of marketable securities	104,500	27,000
Net cash provided by investing activities	84,648	9,673
Cash flows from financing activities:		
Repayment of debt	(83,997)	(9,201)
Repayment of debt to related parties	(1,220)	(627)
Debt make-whole payment	(5,934)	0
Payments to redeemable noncontrolling interests related to the PPA II decommissioning	(18,690)	0
Distributions to noncontrolling and redeemable noncontrolling interests	(7,753)	(11,582)
Proceeds from issuance of common stock	8,321	742

Payments of initial public offering issuance costs	0	(1,160)
Net cash used in financing activities	(109,273)	(21,828)
Net increase (decrease) in cash, cash equivalents, and restricted cash	90,581	(30,740)
Beginning of period	280,485	180,612
End of period	371,066	149,872
Supplemental disclosure of cash flow information:		
Cash paid during the period for interest	23,867	16,540
Cash paid during the period for taxes	497	625
Non-cash investing and financing activities:		
Liabilities recorded for property, plant and equipment	4,662	512
Liabilities recorded for intangible assets	0	169
Liabilities recorded for mandatory redeemable noncontrolling interest	36,994	0
Equity investment in PPA II assets	27,809	0
Issuance of restricted stock	0	532
Accrued distributions to Equity Investors	566	566
Accrued interest and issuance for notes	888	16,920
Accrued interest and issuance for notes to related parties	$ 0	$ 1,195

Nature of Business and Liquidity	6 Months Ended Jun. 30, 2019
Organization, Consolidation and Presentation of Financial Statements [Abstract]	
Nature of Business and Liquidity	

Nature of Business and Liquidity

Nature of Business

Throughout this Quarterly Report on Form 10-Q, unless the context otherwise requires, the terms “Bloom Energy,” “we,” “us” and “our” refer to Bloom Energy Corporation and its consolidated subsidiaries.

We design, manufacture, sell and, in certain cases, install solid-oxide fuel cell systems ("Energy Servers") for on-site power generation. Our Energy Servers utilize an innovative fuel cell technology. The Energy Servers provide efficient energy generation with reduced operating costs and lower greenhouse gas emissions. By generating power where it is consumed, our energy producing systems offer increased electrical reliability and improved energy security while providing a path to energy independence. We were originally incorporated in Delaware under the name of Ion America Corporation on January 18, 2001 and on September 16, 2006 were renamed to Bloom Energy Corporation.

Liquidity

We have incurred operating losses and negative cash flows from operations since our inception. Our ability to achieve our long-term business objectives depends upon, among other things, raising additional capital, acceptance of our products and attaining future profitability. We believe we will be successful in raising additional financing from our stockholders or from other sources, in expanding operations and in gaining market share. For example, in July 2018, we successfully completed an initial public stock offering ("IPO") with the sale of 20,700,000 shares of Class A common stock at a price of $15.00 per share, resulting in net cash proceeds of $282.3 million net of underwriting discounts, commissions and offering costs. We believe that our existing cash and cash equivalents and short-term investments will be sufficient to meet our operating and capital cash flow requirements and other cash flow needs for at least the next 12 months from the date of this quarterly report on Form 10-Q. However, there can be no assurance that in the event we require additional financing, such financing will be available on terms which are favorable or at all.

Basis of Presentation and Significant Accounting Policies	6 Months Ended
	Jun. 30, 2019
Accounting Policies [Abstract]	
Basis of Presentation and Summary of Significant Accounting Policies	

Basis of Presentation and Summary of Significant Accounting Policies

We have prepared the condensed consolidated financial statements included herein pursuant to the rules and regulations of the U.S. Securities and Exchange Commission ("SEC"). Certain information and footnote disclosures normally included in the consolidated balance sheets as of June 30, 2019 and December 31, 2018, the consolidated statements of operations, the consolidated statements of comprehensive loss, the consolidated statements of convertible redeemable preferred stock, redeemable noncontrolling interest, stockholders' deficit and noncontrolling interest for the three and six months ended June 30, 2019 and 2018, and the consolidated statements of cash flows for the six months ended June 30, 2019 and 2018, as well as other information disclosed in the accompanying notes, have been prepared in accordance with U.S. generally accepted accounting principles as applied in the United States ("U.S. GAAP") and have been condensed or omitted pursuant to such rules and regulations. However, we believe that the disclosures herein are adequate to ensure the information presented is not misleading. These unaudited condensed consolidated financial statements should be read in conjunction with the audited financial statements and the notes thereto included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2018, as filed with the SEC on March 22, 2019.

We believe that all necessary adjustments, which consisted only of normal recurring items, have been included in the accompanying financial statements to fairly state the results of the interim periods. The results of operations for the interim periods presented are not necessarily indicative of the operating results to be expected for any subsequent interim period or for our fiscal year ending December 31, 2019.

Certain prior year's amounts reported herein have been reclassified to conform to current period presentation.

Principles of Consolidation

These condensed consolidated financial statements reflect our accounts and operations and those of our subsidiaries in which we have a controlling financial interest. We use a qualitative approach in assessing the consolidation requirement for each of our variable interest entities ("VIE"), which we refer to as our power purchase agreement entities ("PPA Entities"). This approach focuses on determining whether we have the power to direct those activities of the PPA Entities that most significantly affect their economic performance and whether we have the obligation to absorb losses, or the right to receive benefits, that could potentially be significant to the PPA Entities. For all periods presented, we have determined that we are the primary beneficiary in all of our operational PPA Entities other than with respect to PPA II, as discussed below.

We evaluate our relationships with the PPA Entities on an ongoing basis to ensure that we continue to be the primary beneficiary. All intercompany transactions and balances have been eliminated in consolidation. On June 14, 2019, we entered into a transaction with SP Diamond State Class B Holdings, LLC (“SPDS”), a wholly owned subsidiary of Southern Power Company, in which SPDS will purchase a majority interest in PPA II, which operates in Delaware providing alternative energy generation for state tariff rate payers (the "PPA II Project"). PPA II will use the funds received to purchase current generation Bloom Energy Servers in connection with the upgrade of its energy generation assets fleet. In connection with the closing of this transaction, SPDS was admitted as a member of Diamond State Generation Partners, LLC ("DSGP"). DSGP, an operating company, is now owned by Diamond State Generation Holdings, LLC ("DSGH") and SPDS. As a result of the PPA II Project, we determined that we no longer retain a controlling interest in PPA II and therefore DSPG will no longer be consolidated as a VIE into our condensed consolidated financial statements as of June 30, 2019. For additional information, see *Note 12 - Power Purchase Agreement Programs - PPA II Upgrade of Energy Servers*.

Use of Estimates

The preparation of condensed consolidated financial statements in conformity with U.S. GAAP requires us to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and the accompanying notes. Significant estimates include assumptions used to compute the best estimate of selling-prices, the fair value of lease and non-lease components such as estimated output, efficiency and residual value of the Energy Servers, estimates for inventory write-downs, estimates for future cash flows and the economic useful lives of property, plant and equipment, the fair value of investment in PPA Entities, the valuation of other long-term assets, the valuation of certain accrued liabilities such as derivative valuations, estimates for accrued warranty and extended maintenance, estimates for recapture of U.S. Treasury grants and similar grants, estimates for income taxes and deferred tax asset valuation allowances, warrant liabilities, stock-based compensation costs and estimates for the allocation of profit and losses to the noncontrolling interests. Actual results could differ materially from these estimates under different assumptions and conditions.

Concentration of Risk

Geographic Risk - The majority of our revenue and long-lived assets are attributable to operations in the United States for all periods presented. Additionally, we sell our Energy Servers in Japan, China, India, and the Republic of Korea (collectively, our Asia Pacific region). In the three and six months ended June 30, 2019, total revenue in the Asia Pacific region was 17.7% and 20.6%, respectively, of our total revenue. In the three and six months ended June 30, 2018, total revenue in the Asia Pacific region was 0.9% and 9.1%, respectively, of our total revenue.

Credit Risk - At June 30, 2019, customer A and customer B accounted for 38.2% and 13.4%, respectively, of accounts receivable. At December 31, 2018, customer A accounted for 66.8% of accounts receivable. At June 30, 2019 and December 31, 2018, we did not maintain any allowances for doubtful accounts as we deemed all of our receivables fully collectible. To date, we have neither provided an allowance for uncollectible accounts nor experienced any credit loss.

Customer Risk - In the three months ended June 30, 2019, revenue from customer A, customer B and customer C represented 17%, 52%, and 2%, respectively, of our total revenue. In the six months ended June 30, 2019, revenue from customer A, customer B and customer C represented 20%, 40%, and 12%, respectively, of our total revenue. Customer A wholly owns a Third-Party PPA which purchases Energy Servers from us, however such purchases and resulting revenue are made on behalf of various customers of this Third-Party PPA. In the three months ended June 30, 2018, revenue from customer B represented 45% of our total revenue. In the six months ended June 30, 2018, revenue from customer B represented 49% of our total revenue.

Fair Value Measurement

Financial Accounting Standards Board ("FASB") Accounting Standards Codification Topic 820 - *Fair Value Measurements and Disclosures* ("ASC 820"), defines fair value, establishes a framework for measuring fair value under U.S. GAAP and enhances disclosures about fair value measurements. Fair value is defined under ASC 820 as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value under ASC 820 must maximize the use of observable inputs and minimize the use of unobservable inputs. The guidance describes a fair value hierarchy based on three levels of inputs, of which the first two are considered observable and the last unobservable, that may be used to measure fair value:

Level 1 Quoted prices in active markets for identical assets or liabilities. Financial assets utilizing Level 1 inputs typically include money market securities and U.S. Treasury securities.

Level 2 Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active or other inputs that are observable or can be corroborated by observable

market data for substantially the full term of the assets or liabilities. Financial instruments utilizing Level 2 inputs include interest rate swaps.

Level 3 Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities. Financial liabilities utilizing Level 3 inputs include natural gas fixed price forward contract derivatives. Derivative liability valuations are performed based on a binomial lattice model and adjusted for illiquidity and/or nontransferability and such adjustments are generally based on available market evidence.

Recent Accounting Pronouncements

Accounting Guidance Implemented in Fiscal Year 2019

Other than the adoption of accounting guidances mentioned below, there have been no other significant changes in our reported financial position or results of operations and cash flows resulting from the adoption of new accounting pronouncements. There have been no changes to our significant accounting policies that were disclosed in our Annual Report on Form 10-K for the fiscal year ended December 31, 2018 that have had a significant impact on our condensed consolidated financial statements or notes thereto as of and for the six months ended June 30, 2019.

Hedging Activities - As of January 1, 2019, we adopted Accounting Standards Update ("ASU") 2017-12 *Derivatives and Hedging (Topic 815), Targeted Improvements to Accounting for Hedging Activities* ("ASU 2017-12") to help entities recognize the economic results of their hedging strategies in the financial statements so that stakeholders can better interpret and understand the effect of hedge accounting on reported results. It is intended to more clearly disclose an entity's risk exposures and how we manage those exposures through hedging, and it is expected to simplify the application of hedge accounting guidance. The new guidance is effective for annual periods beginning after December 15, 2018, with early adoption permitted. There was not a material impact to our condensed consolidated financial statements upon adoption of ASU 2017-12.

In April 2019, the FASB issued ASU 2019-04, Codification Improvements to Topic 326, Financial Instruments-Credit Losses; Topic 815, Derivatives and Hedging; and Topic 825, Financial Instruments, that clarifies and improves areas of guidance related to the recently issued standards on credit losses (ASU 2016-13), hedging (ASU 2017-12), and recognition and measurement of financial instruments (ASU 2016-01), respectively. The amendments generally have the same effective dates as their related standards. If already adopted, the amendments of ASU 2016-01 and ASU 2016-13 are effective for fiscal years beginning after December 15, 2019 and the amendments of ASU 2017-12 are effective as of the beginning of a company's next annual reporting period. Early adoption is permitted. As discussed above, we adopted ASU 2017-12 on January 1, 2019 and do not expect the amendments of ASU 2019-04 will have a material impact on our consolidated financial statements.

Income Taxes - During the first three months of fiscal 2019, we adopted ASU 2016-16, *Income Taxes—Intra-Entity Transfers of Assets Other Than Inventory (Topic 740)*, which requires that entities recognize the income tax consequences of an intra-entity transfer of an asset, other than inventory, when the transfer occurs. The standard is effective for us in our Annual Report on Form 10-K for the fiscal year ended December 31, 2019 and is required to be applied on a modified retrospective basis through a cumulative-effect adjustment directly to retained earnings as of the beginning of the adoption period. Adoption of this standard had no impact on our consolidated financial statements.

Income Taxes - During the first three months of fiscal 2019, we adopted ASU 2018-02 *Income Statement—Reporting Comprehensive Income (Topic 220) Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income* ("ASU 2018-02"), which permits reclassification of certain tax effects in Other Comprehensive Income ("OCI") caused by the U.S.

tax reform enacted in December 2017 to retained earnings. We do not have any tax effect (due to full valuation allowance) in our OCI account, thus this guidance has no impact on us.

New Accounting Guidance to be Implemented

Revenue Recognition - In May 2014, the FASB issued ASU 2014-14, *Revenue From Contracts With Customers,* as amended ("ASU 2014-14"*)*. The guidance provides principles for recognizing revenue for the transfer of promised goods or services to customers with the consideration to which the entity expects to be entitled in exchange for those goods or services, as well as guidance on the recognition of costs related to obtaining and fulfilling customer contracts. The guidance also requires expanded disclosures about the nature, amount, timing, and uncertainty of revenues and cash flows arising from customer contracts, including significant judgments and changes in judgments. ASU 2014-14 is effective for our annual period beginning January 1, 2019, and for our interim periods beginning on January 1, 2020. ASU 2014-14 can be adopted using either of two methods: (i) retrospective to each prior reporting period presented with the option to elect certain practical expedients as defined within the guidance ("full retrospective method"); or (ii) retrospective with the cumulative effect of initially applying the guidance recognized at the date of initial application and providing certain additional disclosures as defined per the guidance ("modified retrospective method"). We will adopt ASU 2014-14 for our fiscal year ended December 31, 2019 using the modified retrospective method, resulting in a cumulative-effect adjustment to retained earnings on January 1, 2019.

We are currently evaluating whether ASU 2014-14 will have a material impact on our consolidated financial statements and expect its adoption to have an impact related to the costs of obtaining our contracts, customer deposits, and deferred revenue. Most notably, the accounting for incremental costs to obtain customer contracts, which primarily consist of sales commissions, will be allocated to the various elements of the transaction and the portion allocated to obtain extended warranty contracts will be deferred and amortized over the expected service period. Further, in preparation for ASU 2014-14, we are in the process of updating our accounting policies, processes, internal controls over financial reporting, and system requirements.

Leases - In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)*, as amended, which provides new authoritative guidance on lease accounting. Among its provisions, the standard requires lessees to recognize right-of-use assets and lease liabilities on the balance sheet for operating leases and also requires additional qualitative and quantitative disclosures about lease arrangements. In March 2019, the FASB issued further guidance in ASU 2019-01, *Leases (Topic 842)*, which provides clarifications to certain lessor transactions and other reporting matters. This guidance will be effective for us beginning January 1, 2020. Early adoption is permitted. We will adopt this guidance on January 1, 2020, prospectively, and expect to recognize right of use assets and lease liabilities for new contracts recognized as operating leases where we are the lessee.

Cloud Computing - In August 2018, the FASB issued ASU 2018-15, *Intangibles-Goodwill and Other-Internal-Use Software (Subtopic 350-40) Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract* ("ASU 2018-15"), to clarify the guidance on the costs of implementing a cloud computing hosting arrangement that is a service contract. Under ASU 2018-15, the entity is required to follow the guidance in Subtopic 350-40, *Internal-Use Software*, to determine which implementation costs under the service contract to be capitalized as an asset and which costs to expense. ASU 2018-15 is effective for us for the annual periods beginning in 2021 and the interim periods in 2022 on a retrospective or prospective basis and early adoption is permitted. We are currently evaluating the timing of adoption and impact of ASU 2018-15 on our consolidated financial statements and related disclosures.

Financial Instruments

6 Months Ended
Jun. 30, 2019

Cash and Cash Equivalents [Abstract]

Financial Instruments

Financial Instruments

Cash, Cash Equivalents and Restricted Cash

The carrying value of cash and cash equivalents approximate fair value and are as follows (in thousands):

	June 30, 2019	December 31, 2018
As held:		
Cash	$ 168,271	$ 136,642
Money market funds	202,795	143,843
	$ 371,066	$ 280,485
As reported:		
Cash and cash equivalents	$ 308,009	$ 220,728
Restricted cash	63,057	59,757
	$ 371,066	$ 280,485

Restricted cash consisted of the following (in thousands):

	June 30, 2019	December 31, 2018
Current		
Restricted cash	$ 21,858	$ 25,740
Restricted cash related to PPA Entities	1,848	$ 2,917
Restricted cash, current	$ 23,706	28,657
Non-current		
Restricted cash	$ 2,615	$ 3,246
Restricted cash related to PPA Entities	36,736 [1]	27,854
Restricted cash, non-current	39,351	31,100
	$ 63,057	$ 59,757

[1] Non-current restricted cash related to PPA Entities includes $20.0 million reclassified for certain contingent indemnification for SPDS under the PPA II Project in the form of a letter of credit to SPDS. See *Note 12 - Power Purchase Agreement Programs - PPA II Upgrade of Energy Servers* for additional information.

Short-Term Investments

As of June 30, 2019 and December 31, 2018, we had no short-term investments and $104.4 million in U.S. Treasury Bills, respectively.

Derivative Instruments

We have derivative financial instruments related to natural gas forward contracts and interest rate swaps. See *Note 7* - *Derivative Financial Instruments* for a full description of our derivative financial instruments.

Fair Value

Fair Value Disclosures [Abstract]

Fair Value

6 Months Ended
Jun. 30, 2019

Fair Value

Financial Assets and Liabilities Measured at Fair Value on a Recurring Basis

The tables below sets forth, by level, our financial assets that were accounted for at fair value for the respective periods. The table does not include assets and liabilities that are measured at historical cost or any basis other than fair value (in thousands):

	Fair Value Measured at Reporting Date Using			
June 30, 2019	**Level 1**	**Level 2**	**Level 3**	**Total**
Assets				
Cash equivalents:				
Money market funds	$ 202,795	$ —	$ —	$ 202,795
Interest rate swap agreements	—	12	—	12
	$ 202,795	$ 12	$ —	$ 202,807
Liabilities				
Accrued other current liabilities	$ 1,636	$ —	$ —	$ 1,636
Derivatives:				
Natural gas fixed price forward contracts	—	—	8,769	8,769
Interest rate swap agreements[1]	—	9,158	—	9,158
	$ 1,636	$ 9,158	$ 8,769	$ 19,563

[1]As of June 30, 2019, $0.6 million of the gain on the interest rate swaps accumulated in other comprehensive income (loss) is expected to be reclassified into earnings in the next twelve months.

	Fair Value Measured at Reporting Date Using			
December 31, 2018	**Level 1**	**Level 2**	**Level 3**	**Total**
Assets				
Cash equivalents:				
Money market funds	$ 143,843	$ —	$ —	$ 143,843
Short-term investments	104,350	—	—	104,350
Interest rate swap agreements	—	82	—	82
	$ 248,193	$ 82	$ —	$ 248,275
Liabilities				
Accrued other current liabilities	$ 1,331	$ —	$ —	$ 1,331
Derivatives:				
Natural gas fixed price forward contracts	—	—	9,729	9,729
Interest rate swap agreements	—	3,630	—	3,630
	$ 1,331	$ 3,630	$ 9,729	$ 14,690

The following table provides the fair value of our natural gas fixed price forward contracts (dollars in thousands):

	June 30, 2019		December 31, 2018	
	Number of Contracts (MMBTU)[2]	Fair Value	Number of Contracts (MMBTU)[2]	Fair Value
Liabilities[1]				
Natural gas fixed price forward contracts (not under hedging relationships)	2,581	$ 8,769	3,096	$ 9,729

[1] Recorded in current liabilities and derivative liabilities in the condensed consolidated balance sheets.

[2] One MMBTU, or one million British Thermal Units, is a traditional unit of energy used to describe the heat value (energy content) of fuels.

For the three months ended June 30, 2019 and 2018, we marked-to-market the fair value of fixed price natural gas forward contracts and recorded a loss of $1.1 million and a gain of $0.8 million, respectively, and recorded gains on the settlement of these contracts of $1.1 million and $1.2 million, respectively, in cost of electricity revenue on the condensed consolidated statement of operations. For the six months ended June 30, 2019 and 2018, we marked-to-market the fair value of fixed price natural gas forward contracts and recorded a loss of $0.7 million and a loss of $0.1 million, respectively, and recorded gains on the settlement of these contracts of $1.6 million and $2.3 million, respectively, in cost of electricity revenue on the condensed consolidated statement of operations.

Embedded Derivative on 6% Convertible Promissory Notes - Between December 2015 and September 2016, we issued $260.0 million convertible promissory notes due December 2020 ("6% Notes") to certain investors. The 6% Notes bore a 5% fixed interest rate, payable monthly either in cash or in kind, at our election. We amended the terms of the 6% Notes in June 2017 to reduce the collateral securing the notes and to increase the interest rate from 5% to 6%. The 6% Notes are convertible at the option of the holders at a conversion price of $11.25 per share. Upon the IPO, the final value of the conversion feature was $177.2 million and was reclassified from a derivative liability to additional paid-in capital.

There were no transfers between fair value measurement classifications during the periods ended June 30, 2019 and 2018. The changes in the Level 3 financial assets were as follows (in thousands):

	Natural Gas Fixed Price Forward Contracts	Preferred Stock Warrants	Embedded Derivative Liability	Total
Balances at December 31, 2018	$ 9,729	$ —	$ —	$ 9,729
Settlement of natural gas fixed price forward contracts	(1,610)	—	—	(1,610)
Changes in fair value	650	—	—	650
Balances at June 30, 2019	$ 8,769	$ —	$ —	$ 8,769

	Natural Gas Fixed Price Forward Contracts	Preferred Stock Warrants	Embedded Derivative Liability	Total

Balances at December 31, 2017	$ 15,368	$ 9,825	$ 140,771	$ 165,964
Settlement of natural gas fixed price forward contracts	(1,102)	—	—	(1,102)
Changes in fair value	855	(3,271)	9,732	7,316
Balances at June 30, 2018	$ 15,121	$ 6,554	$ 150,503	$ 172,178

Significant changes in any assumption input in isolation can result in a significant change in fair value measurement. Generally, an increase in the market price of our shares of common stock, an increase in natural gas prices, an increase in the volatility of ours shares of common stock and an increase in the remaining term of the conversion feature would each result in a directionally similar change in the estimated fair value of our derivative liability. Increases in such assumption values would increase the associated liability while decreases in these assumption values would decrease the associated liability. An increase in the risk-free interest rate or a decrease in the market price of our shares of common stock would result in a decrease in the estimated fair value measurement and thus a decrease in the associated liability.

Financial Assets and Liabilities Not Measured at Fair Value on a Recurring Basis

Customer Receivables and Debt Instruments - We estimate fair value for customer financing receivables, senior secured notes, term loans and convertible promissory notes based on rates currently offered for instruments with similar maturities and terms (Level 3). The following table presents the estimated fair values and carrying values of customer receivables and debt instruments (in thousands):

	June 30, 2019		December 31, 2018	
	Net Carrying Value	Fair Value	Net Carrying Value	Fair Value
Customer receivables:				
Customer financing receivables	$ 69,963	$ 52,517	$ 72,676	$ 51,541
Debt instruments:				
Recourse				
LIBOR + 4% term loan due November 2020	2,376	2,458	3,214	3,311
5% convertible promissory note due December 2020	35,576	33,524	34,706	31,546
6% convertible promissory notes due December 2020	271,503	393,395	263,284	353,368
10% notes due July 2024	96,384	96,859	95,555	99,260
Non-recourse				
5.22% senior secured notes due March 2025	—	—	78,566	80,838
7.5% term loan due September 2028	35,532	41,368	36,319	39,892
LIBOR + 5.25% term loan due October 2020	23,661	25,028	23,916	25,441
6.07% senior secured notes due March 2030	81,223	90,136	82,337	85,917
LIBOR + 2.5% term loan due December 2021	121,952	123,046	123,384	123,040

Long-Lived Assets - Our long-lived assets include property, plant and equipment and equity investments in PPA II assets. The carrying amounts of our long-lived assets are periodically reviewed for impairment whenever events or changes in circumstances indicate that the carrying value of these assets may not be recoverable or that the useful life is shorter than originally estimated.

During the three months ended June 30, 2019, there was a decommissioning in PPA II, including the replacement and scheduled future replacement during 2019 of installed Energy Servers, resulting in charges related to the decommissioning of PPA II Energy Servers on these assets of $8.1 million which was recognized in cost of electricity revenue in our condensed consolidated statement of operations. As a result of the deconsolidation of DSGP, we remeasured our remaining equity interest in DSGP at fair value. The fair value of our interest in DSGP was determined based upon the projected discounted cash flows of DSGP that are attributable to DSGH's remaining interest in DSGP, a level 3 fair value measurement. The most significant inputs into the valuation were a projection of future cash inflows from the PPA II tariff and future cash outflows from operations and maintenance of the Energy Servers not subject to SPDS's purchase interests and the discount rate applied to those cash flows. As a result of our remeasurement, we determined a fair value of $27.8 million as of June 30, 2019, resulting in an immaterial loss relating to the deconsolidation of DSGP for the three and six months ended June 30, 2019. Equity investments in PPA II assets are also financial assets that are not measured on a recurring basis. See *Note 12 - Power Purchase Agreement Programs - PPA II Upgrade of Energy Servers* for additional information.

No material impairment in the fair value assessment of any long-lived assets was identified in the six months ended June 30, 2019 and 2018.

Balance Sheet Components

Organization, Consolidation and Presentation of Financial Statements [Abstract]

Balance Sheet Components

6 Months Ended
Jun. 30, 2019

Balance Sheet Components

Inventories

The components of inventory consisted of the following (in thousands):

	June 30, 2019	December 31, 2018
Raw materials	$ 42,996	$ 53,273
Work-in-progress	28,313	22,303
Finished goods	33,625	56,900
	$ 104,934	$ 132,476

Prepaid Expense and Other Current Assets

Prepaid expenses and other current assets consisted of the following (in thousands):

	June 30, 2019	December 31, 2018
Government incentives receivable	$ 956	$ 1,001
Prepaid expenses and other current assets	24,132	32,741
	$ 25,088	$ 33,742

Property, Plant and Equipment, Net

Property, plant and equipment, net consisted of the following (in thousands):

	June 30, 2019	December 31, 2018
Energy Servers	$ 431,444	$ 511,485
Computers, software and hardware	19,516	16,536
Machinery and equipment	102,532	99,209
Furniture and fixtures	8,986	4,337
Leasehold improvements	36,092	18,629
Building	40,512	40,512
Construction in progress	9,324	29,084
	648,406	719,792

Less: Accumulated depreciation	(241,796)	(238,378)
	$ 406,610	$ 481,414

Our construction in progress decreased $19.8 million, as compared to December 31, 2018, primarily due to our capitalization of leasehold improvements and furniture and fixtures placed in service during the period related to our move to our new corporate headquarters.

Our PPA Entities' property, plant and equipment under operating leases was $397.5 million and $397.5 million as of June 30, 2019 and December 31, 2018, respectively. The accumulated depreciation for these assets was $90.2 million and $77.4 million as of June 30, 2019 and December 31, 2018, respectively. Depreciation expense related to our property, plant and equipment under operating leases was $6.4 million and $6.4 million for the three months ended June 30, 2019 and 2018, respectively, and $12.7 million and $12.7 million for the six months ended June 30, 2019 and 2018, respectively.

During the three months ended June 30, 2019, there was a decommissioning in PPA II, including the replacement and scheduled future replacement during 2019 of installed Energy Servers, resulting in: (i) charges related to the decommissioning of PPA II Energy Servers of $8.1 million recognized in cost of electricity revenue in our condensed consolidated statement of operations; (ii) decommissioning and write-off 10 megawatts of PPA II Energy Servers at net book value of $25.6 million recognized in cost of product revenue in our condensed consolidated statement of operations; and (iii) deconsolidation of our remaining interest in DSGP, primarily related to the Energy Server assets held in PPA II of $27.8 million, and recognition as an equity investment included in other long-term assets on our condensed consolidated balance sheet. See *Note 12 - Power Purchase Agreement Programs - PPA II Upgrade of Energy Servers* for additional information.

Customer Financing Leases, Receivable

The components of investment in sales-type financing leases consisted of the following (in thousands):

	June 30, 2019	December 31, 2018
Total minimum lease payments to be received	$ 96,417	$ 100,816
Less: Amounts representing estimated executing costs	(23,862)	(25,180)
Net present value of minimum lease payments to be received	72,555	75,636
Estimated residual value of leased assets	1,051	1,051
Less: Unearned income	(3,643)	(4,011)
Net investment in sales-type financing leases	69,963	72,676
Less: Current portion	(5,817)	(5,594)
Non-current portion of investment in sales-type financing leases	$ 64,146	$ 67,082

The future scheduled customer payments from sales-type financing leases were as follows as of June 30, 2019 (in thousands):

	Remainder of 2019	2020	2021	2022	2023	Thereafter
Future minimum lease payments, less interest	$ 2,882	$ 6,022	$ 6,415	$ 6,853	$ 7,310	$ 39,430

Other Long-Term Assets

Other long-term assets consisted of the following (in thousands):

	June 30, 2019	December 31, 2018
Prepaid and other long-term assets	$ 25,364	$ 27,086
Equity investment in PPA II assets	27,809	—
Equity-method investments	6,026	6,046
Long-term deposits	1,776	1,660
	$ 60,975	$ 34,792

Equity investment in PPA II assets

On June 14, 2019, we entered into a transaction with SPDS for the PPA II upgrade of Energy Servers. In connection with the closing of this transaction, SPDS was admitted as a member of DSGP. DSGP, an operating company, was a wholly owned subsidiary of DSGH prior to June 14, 2019. As a result of the PPA II Project, we determined that we no longer retain a controlling interest in PPA II and therefore DSGP will no longer be consolidated as a VIE into our condensed consolidated financial statements as of June 30, 2019. We determined that we have retained significant influence over DSGP and consequently recognize our remaining interest in DSGP as an equity investment included in other long-term assets on our condensed consolidated balance sheet as of June 30, 2019. See *Note 12 - Power Purchase Agreement Programs - PPA II Upgrade of Energy Servers*.

Equity-method investments

In May 2013, we entered into a joint venture with Softbank Corp. and established Bloom Energy Japan limited which is accounted for as an equity-method investment. Under this arrangement, we sell Energy Servers and provide maintenance services to the joint venture. Accounts receivable from this joint venture was $9,800 and $3.3 million as of June 30, 2019 and December 31, 2018, respectively.

Accrued Warranty

Accrued warranty liabilities consisted of the following (in thousands):

	June 30, 2019	December 31, 2018
Product warranty	$ 9,808	$ 10,935
Operations and maintenance services agreements	2,585	8,301
	$ 12,393	$ 19,236

Changes during the current period in the standard product warranty liability were as follows (in thousands):

Balances at December 31, 2018	$ 10,935
Accrued warranty, net	3,202
Warranty expenditures during period	(4,329)

Balances at June 30, 2019	$ 9,808

Accrued Other Current Liabilities

Accrued other current liabilities consisted of the following (in thousands):

	June 30, 2019	December 31, 2018
Liabilities recorded for mandatorily redeemable noncontrolling interest[1]	$ 36,994	$ —
Compensation and benefits	18,180	16,742
Current portion of derivative liabilities	4,848	3,232
Managed services liabilities	4,922	5,091
Accrued installation	6,595	6,859
Sales tax liabilities	1,525	1,700
Interest payable	6,136	4,675
Other	30,522	31,236
	$ 109,722	$ 69,535

[1] During June 30, 2019, we entered into a PPA II upgrade transaction which included a commitment to mandatorily redeem the noncontrolling interest in DSGH by March 31, 2020 of certain installed PPA II Energy Servers, resulting in the reclassification of mandatorily redeemable noncontrolling interest into accrued other current liabilities on the condensed consolidated balance sheet as of June 30, 2019. See *Note 12 - Power Purchase Agreement Programs - PPA II Upgrade of Energy Servers*.

Other Long-Term Liabilities

Accrued other long-term liabilities consisted of the following (in thousands):

	June 30, 2019	December 31, 2018
Delaware grant	$ 10,469	$ 10,469
Managed services liabilities	29,498	30,362
Other	18,450	15,106
	$ 58,417	$ 55,937

We have entered into managed services agreements that provide for the payment of property taxes and insurance premiums on behalf of customers. These obligations are included in each agreements' contract value and are recorded as short-term or long-term liabilities based on the estimated payment dates. The long-term managed services liabilities accrued were $29.5 million and $30.4 million as of June 30, 2019 and December 31, 2018, respectively.

Outstanding Loans and Security Agreements

Debt Disclosure [Abstract]

Outstanding Loans and Security Agreements

6 Months Ended Jun. 30, 2019

Outstanding Loans and Security Agreements

The following is a summary of our debt as of June 30, 2019 (in thousands):

	Unpaid Principal Balance	Net Carrying Value			Unused Borrowing Capacity
		Current	Long-Term	Total	
LIBOR + 4% term loan due November 2020	$ 2,429	$ 1,681	$ 695	$ 2,376	$ —
5% convertible promissory note due December 2020	33,104	—	35,576	35,576	—
6% convertible promissory notes due December 2020	296,233	—	271,503	271,503	—
10% notes due July 2024	100,000	14,000	82,384	96,384	—
Total recourse debt	431,766	15,681	390,158	405,839	—
7.5% term loan due September 2028	39,317	2,889	32,643	35,532	—
LIBOR + 5.25% term loan due October 2020	24,262	957	22,704	23,661	—
6.07% senior secured notes due March 2030	82,269	2,803	78,420	81,223	—
LIBOR + 2.5% term loan due December 2021	123,664	3,894	118,058	121,952	—
Letters of Credit due December 2021	—	—	—	—	1,220
Total non-recourse debt	269,512	10,543	251,825	262,368	1,220
Total debt	$ 701,278	$ 26,224	$641,983	$668,207	$ 1,220

The following is a summary of our debt as of December 31, 2018 (in thousands):

	Unpaid Principal Balance	Net Carrying Value			Unused Borrowing Capacity
		Current	Long-Term	Total	
LIBOR + 4% term loan due November 2020	$ 3,286	$ 1,686	$ 1,528	$ 3,214	$ —
5% convertible promissory notes due December 2020	33,104	—	34,706	34,706	—
6% convertible promissory notes due December 2020	296,233	—	263,284	263,284	—
10% notes due July 2024	100,000	7,000	88,555	95,555	—
Total recourse debt	432,623	8,686	388,073	396,759	—
5.22% senior secured term notes due March 2025	79,698	11,994	66,572	78,566	—

7.5% term loan due September 2028	40,538	2,200	34,119	36,319	—
LIBOR + 5.25% term loan due October 2020	24,723	827	23,089	23,916	—
6.07% senior secured notes due March 2030	83,457	2,469	79,868	82,337	—
LIBOR + 2.5% term loan due December 2021	125,456	3,672	119,712	123,384	—
Letters of Credit due December 2021	—	—	—	—	1,220
Total non-recourse debt	353,872	21,162	323,360	344,522	1,220
Total debt	$ 786,495	$ 29,848	$711,433	$741,281	$ 1,220

Recourse debt refers to debt that Bloom Energy Corporation has an obligation to pay. Non-recourse debt refers to debt that is recourse to only specified assets or our subsidiaries. The differences between the unpaid principal balances and the net carrying values apply to debt discounts and deferred financing costs. We were in compliance with all financial covenants as of June 30, 2019 and December 31, 2018.

Recourse Debt Facilities

LIBOR + 4% Term Loan due November 2020 - In May 2013, we entered into a $5.0 million credit agreement and a $12.0 million financing agreement to help fund the building of a new facility in Newark, Delaware. The $5.0 million credit agreement expired in December 2016. The $12.0 million financing agreement has a term of 90 months, payable monthly at a variable rate equal to one-month LIBOR plus the applicable margin. The weighted average interest rate as of June 30, 2019 and December 31, 2018 was 6.5% and 5.9%, respectively. The loan requires monthly payments and is secured by the manufacturing facility. In addition, the credit agreements also include a cross-default provision which provides that the remaining balance of borrowings under the agreements will be due and payable immediately if a lien is placed on the Newark facility in the event we default on any indebtedness in excess of $100,000 individually or $300,000 in the aggregate. Under the terms of these credit agreements, we are required to comply with various restrictive covenants. As of June 30, 2019 and December 31, 2018, the debt outstanding was $2.4 million and $3.3 million, respectively.

5% Convertible Promissory Notes due 2020 (Originally 8% Convertible Promissory Notes due December 2018) - Between December 2014 and June 2016, we issued $193.2 million of three-year convertible promissory notes ("8% Notes") to certain investors. The 8% Notes had a fixed interest rate of 8% compounded monthly, due at maturity or at the election of the investor with accrued interest due in December of each year.

On January 18, 2018, amendments were finalized to extend the maturity dates for all the 8% Notes to December 2019. At the same time, the portion of the 8% Notes that was held by Constellation NewEnergy, Inc. ("Constellation") was extended to December 2020 and the interest rate decreased from 8% to 5% ("5% Notes").

Investors held the right to convert the unpaid principal and accrued interest of both the 8% and 5% notes to Series G convertible preferred stock at any time at the price of $38.64. In July 2018, upon the Company’s IPO, the $221.6 million of principal and accrued interest of outstanding 8% Notes automatically converted into additional paid-in capital, the conversion of which included all the related-party noteholders. The 8% Notes converted to shares of Series G convertible preferred stock and, concurrently, each such share of Series G convertible preferred stock converted automatically into one share of Class B common stock. Upon the IPO, conversions of 5,734,440 shares of Class B common stock were issued and the 8% Notes were retired. Constellation, the holder of the 5% Notes, had not elected to convert as of June 30, 2019. The outstanding unpaid principal and accrued interest debt balance of the5% Notes of $35.6

million was classified as non-current as of June 30, 2019, and the outstanding unpaid principal and accrued interest debt balances of the 5% Notes of $34.7 million as of December 31, 2018.

6% Convertible Promissory Notes due December 2020 - Between December 2015 and September 2016, we issued $260.0 million convertible promissory notes due December 2020 ("6% Notes") to certain investors. The 6% Notes bore a 5% fixed interest rate, payable monthly either in cash or in kind, at our election. We amended the terms of the 6% Notes in June 2017 to reduce the collateral securing the notes and to increase the interest rate from 5% to 6%.

As of June 30, 2019 and December 31, 2018, the amount outstanding on the 6% Notes, which includes interest paid in kind through the IPO date, was $296.2 million and $296.2 million, respectively. Upon the IPO, the debt was convertible at the option of the holders at the conversion price of $11.25 per share into common stock at any time through the maturity date. In January 2018, we amended the terms of the 6% Notes to extend the convertible put option, which investors could elect only if the IPO did not occur prior to December 2019. After the IPO, we paid the interest in cash when due and no additional interest accrued on the consolidated balance sheet on the 6% Notes.

On or after July 27, 2020, we may redeem, at our option, all or part of the 6% Notes if the last reported sale price of our common stock has been at least $22.50 for at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading days ending within the three trading days immediately preceding the date on which we provide written notice of redemption. In certain circumstances, the 6% Notes are also redeemable at our option in connection with a change of control.

Under the terms of the indenture governing the 6% Notes, we are required to comply with various restrictive covenants, including meeting reporting requirements, such as the preparation and delivery of audited consolidated financial statements, and restrictions on investments. In addition, we are required to maintain collateral which secures the 6% Notes in an amount equal to 200% of the principal amount of and accrued and unpaid interest on the outstanding notes. This minimum collateral test is not a negative covenant and does not result in a default if not met. However, the minimum collateral test does restrict us with respect to investing in non-PPA subsidiaries. If we do not meet the minimum collateral test, we cannot invest cash into any non-PPA subsidiary that is not a guarantor of the notes. The 6% Notes also include a cross-acceleration provision which provides that the holders of at least 25% of the outstanding principal amount of the 6% Notes may cause such notes to become immediately due and payable if we or any of our subsidiaries default on any indebtedness in excess of $15.0 million such that the repayment of such indebtedness is accelerated.

In connection with the issuance of the 6% Notes, we agreed to issue to J.P. Morgan and CPPIB, upon the occurrence of certain conditions, warrants to purchase our common stock up to a maximum of 146,666 shares and 166,222 shares, respectively. On August 31, 2017, J.P. Morgan transferred its rights to CPPIB. Upon completion of the IPO, the 312,888 warrants were net exercised for 312,575 shares of Class B Common stock.

10% Notes due July 2024 - In June 2017, we issued $100.0 million of senior secured notes ("10% Notes"). The 10% Notes mature between 2019 and 2024 and bear a 10.0% fixed rate of interest, payable semi-annually. The 10% Notes have a continuing security interest in the cash flows payable to us as servicing, operations and maintenance fees and administrative fees from the five active power purchase agreements in our Bloom Electrons program. Under the terms of the indenture governing the notes, we are required to comply with various restrictive covenants including, among other things, to maintain certain financial ratios such as debt service coverage ratios, to incur additional debt, issue guarantees, incur liens, make loans or investments, make asset dispositions, issue or sell share capital of our subsidiaries and pay dividends, meet reporting requirements, including the preparation and delivery of audited consolidated financial statements, or maintain certain restrictions on investments and requirements in incurring new debt. In addition, we are required to maintain collateral which secures the 10% Notes based on debt ratio analyses. This minimum collateral test is not a negative covenant and does not result in a default if not met. However, the minimum collateral test does restrict us with respect to investing in non-PPA subsidiaries. If we do not meet the minimum collateral test, we cannot invest cash into any non-PPA subsidiary that is not a guarantor of the notes.

Non-recourse Debt Facilities

5.22% Senior Secured Term Notes - In March 2013, PPA II refinanced its existing debt by issuing 5.22% Senior Secured Notes ("5.22% Notes") due March 30, 2025. The total amount of the loan proceeds was $144.8 million, including $28.8 million to repay outstanding principal of existing debt, $21.7 million for debt service reserves and transaction costs and $94.3 million to fund the remaining system purchases. The loan is a fixed rate term loan that bears an annual interest rate of 5.22% payable quarterly. The loan has a fixed amortization schedule of the principal, payable quarterly, which began March 30, 2014 that requires repayment in full by March 30, 2025. The Note Purchase Agreement requires us to maintain a debt service reserve, the balance of which was zero and $11.2 million as of June 30, 2019 and December 31, 2018, respectively, and which was included as part of long-term restricted cash in the condensed consolidated balance sheets. The notes were secured by all the assets of PPA II. These notes were pre-paid in full on June 14, 2019 and all obligations and liabilities related to such 5.22% Notes have been terminated. During the three months ended June 30, 2019, there was a decommissioning in PPA II, including the retirement of the 5.22% Notes outstanding unpaid debt of $76.6 million, which included the accumulated unpaid interest on the debt. See *Note 12 - Power Purchase Agreement Programs - PPA II Upgrade of Energy Servers* for additional information.

7.5% Term Loan due September 2028 - In December 2012 and later amended in August 2013, PPA IIIa entered into a $46.8 million credit agreement to help fund the purchase and installation of Energy Servers. The loan bears a fixed interest rate of 7.5% payable quarterly. The loan requires quarterly principal payments which began in March 2014. The credit agreement requires us to maintain a debt service reserve for all funded systems, the balance of which was $3.8 million and $3.7 million as of June 30, 2019 and December 31, 2018, respectively, and which was included as part of long-term restricted cash in the condensed consolidated balance sheets. The loan is secured by all assets of PPA IIIa.

LIBOR + 5.25% Term Loan due October 2020 - In September 2013, PPA IIIb entered into a credit agreement to help fund the purchase and installation of Energy Servers. In accordance with that agreement, PPA IIIb issued floating rate debt based on LIBOR plus a margin of 5.2%, paid quarterly. The aggregate amount of the debt facility is $32.5 million. The loan is secured by all assets of PPA IIIb and requires quarterly principal payments which began in July 2014. The credit agreement requires us to maintain a debt service reserve for all funded systems, the balance of which was $1.7 million and $1.7 million June 30, 2019 and December 31, 2018, respectively, and which was included as part of long-term restricted cash in the condensed consolidated balance sheets. In September 2013, PPA IIIb entered into pay-fixed, receive-float interest rate swap agreement to convert the floating-rate loan into a fixed-rate loan.

6.07% Senior Secured Notes due March 2025 - In July 2014, PPA IV issued senior secured notes amounting to $99.0 million to third parties to help fund the purchase and installation of Energy Servers. The notes bear a fixed interest rate of 6.07% payable quarterly which began in December 2015 and ends in March 2030. The notes are secured by all the assets of the PPA IV. The Note Purchase Agreement requires us to maintain a debt service reserve, the balance of which was $7.7 million as of June 30, 2019 and $7.5 million as of December 31, 2018, and which was included as part of long-term restricted cash in the condensed consolidated balance sheets.

LIBOR + 2.5% Term Loan due December 2021 - In June 2015, PPA V entered into a $131.2 million credit agreement to fund the purchase and installation of Energy Servers. The lenders are a group of five financial institutions. The loan was initially advanced as a construction loan during the development of the PPA V Project and converted into a term loan on February 28, 2017 (the “Term Conversion Date”). As part of the term loan’s conversion, the LC facility commitments were adjusted. The loan's terms included commitments to a letters of credit ("LC") facility (see below).

In accordance with the credit agreement, PPA V was issued a floating rate debt based on LIBOR plus a margin, paid quarterly. The applicable margins used for calculating interest expense are 2.25% for years 1-3 following the Term Conversion Date and 2.5% thereafter. For the Lenders’ commitments to the loan and the commitments to the LC loan, the PPA V also pays commitment fees at 0.50% per annum over the outstanding commitments, paid quarterly. The

loan is secured by all the assets of the PPA V and requires quarterly principal payments which began in March 2017. In connection with the floating-rate credit agreement, in July 2015 the PPA V entered into pay-fixed, receive-float interest rate swap agreements to convert its floating-rate loan into a fixed-rate loan.

Letters of Credit due December 2021 - In connection with the June 2015 PPA V credit agreement, we obtained commitments to a LC facility with the aggregate principal amount of $6.4 million, later adjusted down to $6.2 million. The amount reserved under the LC as of June 30, 2019 and December 31, 2018 was $5.0 million. The unused LC borrowing capacity was $1.2 million as of June 30, 2019 and December 31, 2018, respectively.

Debt Repayment Schedule and Interest Expense

The following table presents our total outstanding debt's unpaid principal balance repayment schedule as of June 30, 2019 (in thousands):

Remainder of 2019	$ 12,365
2020	379,242
2021	140,334
2022	26,046
2023	29,450
Thereafter	113,841
	$ 701,278

Interest expense of $18.3 million and $25.2 million for the three months ended June 30, 2019 and 2018, respectively, was recorded in interest expense on the condensed consolidated statements of operations.

Related Party Debt

Portions of the above described recourse and non-recourse debt is held by various related parties. See *Note 15* - *Related Party Transactions* for a full description.

Derivative Financial Instruments

Derivative Instruments and Hedging Activities Disclosure [Abstract]

Derivative Financial Instruments

6 Months Ended Jun. 30, 2019

Derivative Financial Instruments

Interest Rate Swaps

We use various financial instruments to minimize the impact of variable market conditions on its results of operations. We use interest rate swaps to minimize the impact of fluctuations of interest rate changes on its outstanding debt where LIBOR is applied. We do not enter into derivative contracts for trading or speculative purposes.

The fair values of the derivatives related to interest rate swap agreements applied to two of our PPA companies designated as cash flow hedges as of June 30, 2019 and December 31, 2018 on our consolidated balance sheets were as follows (in thousands):

	June 30, 2019	December 31, 2018
Assets		
Prepaid expenses and other current assets	$ —	$ 42
Other long-term assets	12	40
	$ 12	$ 82
Liabilities		
Accrued other current liabilities	$ 706	$ 4
Derivative liabilities	8,453	3,626
	$ 9,159	$ 3,630

PPA Company IIIb - In September 2013, PPA Company IIIb entered into an interest rate swap arrangement to convert a variable interest rate debt to a fixed rate. We designated and documented our interest rate swap arrangement as a cash flow hedge. The swap's term ends on October 1, 2020, which is concurrent with the final maturity of the debt floating interest rates reset on a quarterly basis. We evaluate and calculate the effectiveness of the hedge at each reporting date. The effective change was recorded in accumulated other comprehensive income (loss) and was recognized as interest expense on settlement. The notional amounts of the swap were $24.3 million and $24.7 million as of June 30, 2019 and December 31, 2018, respectively. We measure the swap at fair value on a recurring basis. Fair value is determined by discounting future cash flows using LIBOR rates with appropriate adjustment for credit risk.

We recorded a loss of $23,000 and a gain of $54,000 during the three months ended June 30, 2019 and 2018, respectively, attributable to the change in swap's fair value. These gains and losses were included in gain (loss) on revaluation of warrant liabilities and embedded derivatives in the condensed consolidated statement of operations.

PPA Company V - In July 2015, PPA Company V entered into zero interest rate swap agreements to convert a variable interest rate debt to a fixed rate. The loss on the swaps prior to designation was recorded in current-period earnings. In July 2015, we designated and documented its interest rate swap arrangements as cash flow hedges. Zero of these swaps matured in 2016, zero will mature on December 21, 2021 and the remaining zero will mature on September 30, 2031. We evaluate and calculate the effectiveness of the hedge at each reporting

date. The effective change was recorded in accumulated other comprehensive income (loss) and was recognized as interest expense on settlement. The notional amounts of the swaps were $185.8 million and $186.6 million as of June 30, 2019 and December 31, 2018, respectively.

We measure the swaps at fair value on a recurring basis. Fair value is determined by discounting future cash flows using LIBOR rates with appropriate adjustment for credit risk. We recorded a gain of $36,000 and a gain of $55,000 attributable to the change in valuation during the three months ended June 30, 2019 and 2018, respectively. We recorded a gain of $12,000 and a gain of $109,000 attributable to the change in valuation during the six months ended June 30, 2019 and 2018, respectively. These gains were included in gain (loss) on revaluation of warrant liabilities and embedded derivatives in the condensed consolidated statement of operations.

The changes in fair value of the derivative contracts designated as cash flow hedges and the amounts recognized in accumulated other comprehensive income (loss) and in earnings for the three and six months ended June 30, 2019 and 2018 were as follows (in thousands):

	Three Months Ended		Six Months Ended	
	June 30, 2019	June 30, 2018	June 30, 2019	June 30, 2018
Beginning balance	$ 5,692	$ 2,909	$ 3,548	$ 5,853
Loss (gain) recognized in other comprehensive income (loss)	3,460	(982)	5,590	(3,622)
Amounts reclassified from other comprehensive income (loss) to earnings	42	(85)	103	(297)
Net loss (gain) recognized in other comprehensive income (loss)	3,502	(1,067)	5,693	(3,919)
Gain reclassified from other comprehensive income (loss) to earnings	(48)	(71)	(95)	(163)
Ending balance	$ 9,146	$ 1,771	$ 9,146	$ 1,771

Natural Gas Derivatives

On September 1, 2011, we entered into a fixed price fixed quantity fuel forward contract with a gas supplier. This fuel forward contract is used as part of our program to manage the risk for controlling the overall cost of natural gas. Our PPA Company I is the only PPA Company for which we provided natural gas. The fuel forward contract meets the definition of a derivative under U.S. GAAP. We have not elected to designate this contract as a hedge and, accordingly, any changes in its fair value is recorded within cost of electricity revenue in the condensed consolidated statements of operations. The fair value of the contract is determined using a combination of factors including the counterparty's credit rate and estimates of future natural gas prices.

For the three months ended June 30, 2019 and 2018, we marked-to-market the fair value of our fixed price natural gas forward contract and recorded a loss of $1.1 million and a gain of $0.8 million, respectively. For the six months ended June 30, 2019 and 2018, we marked-to-market the fair value of our fixed price natural gas forward contract and recorded a loss of $0.7 million and a loss of $0.1 million, respectively. For the three months ended June 30, 2019 and 2018, we recorded gains of $1.1 million and $1.2 million, respectively, on the settlement of these contracts. For the six months ended June 30, 2019 and 2018, we recorded gains of $1.6 million and $2.3 million, respectively, on the settlement of these contracts. Gains and losses are recorded in cost of electricity revenue in the condensed consolidated statements of operations.

6% Convertible Promissory Notes

On December 15, 2015, January 29, 2016, and September 10, 2016, we issued $160.0 million, $25.0 million, and $75.0 million, respectively, of 6% Convertible Promissory Notes ("6% Notes") that mature in December 2020. The 6% Notes are contractually convertible at the option of the holders at a conversion price per share equal to the lower of $20.61 or 75% of the offering

price of our common stock sold in an initial public offering. Upon the IPO, the options are convertible at the option of the holders at the conversion price of $11.25 per share.

The valuation of this embedded put feature was recorded as a derivative liability in the consolidated balance sheet, measured each reporting period. Fair value was determined using the binomial lattice method. We recorded $0 and a loss of $23.5 million attributable to the change in valuation for the three months ended June 30, 2019 and 2018, respectively. We recorded $0 and a loss of $31.0 million attributable to the change in valuation for the six months ended June 30, 2019 and 2018, respectively. These gains and losses were included within loss on revaluation of warrant liabilities and embedded derivatives in gain (loss) on revaluation of warrant liabilities and embedded derivatives in the condensed consolidated statements of operations. Upon the IPO, the final value of the conversion feature was $177.2 million and was reclassified from a derivative liability to additional paid-in capital.

Common Stock Warrants	6 Months Ended Jun. 30, 2019
Equity [Abstract]	
Common Stock Warrants	

Common Stock Warrants*

During 2018, all of the preferred and common stock warrants we issued in connection with loan agreements and a dispute settlement converted to warrants to purchase shares of Class B common stock. As of June 30, 2019, we had Class B common stock warrants outstanding to purchase 481,181and 12,940 shares of Class B common stock at exercise prices of $27.78 and $38.64, respectively. As of December 31, 2018, we had Class B common stock warrants outstanding to purchase 481,182 and 312,939 shares of Class B common stock at exercise prices of $27.78 and $38.64, respectively.

Income Taxes	6 Months Ended Jun. 30, 2019
Income Tax Disclosure [Abstract]	
Income Taxes	

Income Taxes

For the three months ended June 30, 2019 and 2018, we recorded a provision for income taxes of $0.3 million on a pre-tax loss of $67.0 million for an effective tax rate of (0.4)%, and a provision for income taxes of $0.1 million on a pre-tax loss of $50.1 million for an effective tax rate of (0.3)%, respectively.

For the six months ended June 30, 2019 and 2018, we recorded a provision for income taxes of $0.5 million on a pre-tax loss of $155.0 million for an effective tax rate of (0.3)%, and a provision for income taxes of $0.5 million on a pre-tax loss of $72.1 million for an effective tax rate of (0.6)%, respectively.

The effective tax impact for the three and six months ended June 30, 2019 and 2018 is lower than the statutory federal tax rate primarily due to a full valuation allowance against U.S. deferred tax assets.

Net Loss per Share Attributable to Common Stockholders

Earnings Per Share [Abstract]

Net Loss per Share Attributable to Common Stockholders

6 Months Ended

Jun. 30, 2019

Net Loss per Share Attributable to Common Stockholders

Net loss per share (basic) attributable to common stockholders is calculated by dividing net loss attributable to common stockholders by the weighted-average shares of common stock outstanding for the period. Net loss per share (diluted) is computed by using the "if-converted" method when calculating the potential dilutive effect, if any, of convertible shares whereby net loss attributable to common stockholders is adjusted by the effect of dilutive securities such as awards under equity compensation plans and inducement awards under separate restricted stock unit ("RSU") award agreements. Net loss per share (diluted) attributable to common stockholders is then calculated by dividing the resulting adjusted net loss attributable to common stockholders by the combined weighted-average number of fully diluted common shares outstanding.

In July 2018, we completed an initial public offering of our common shares wherein 20,700,000 shares of Class A common stock were sold into the market. Added to existing shares of Class B common stock were shares mandatorily converted from various financial instruments as a result of the IPO.

There were no adjustments to net loss attributable to common stockholders in determining net loss attributable to common stockholders (diluted). Equally, there were no adjustments to the weighted average number of outstanding shares of common stock (basic) in arriving at the weighted average number of outstanding shares (diluted), as such adjustments would have been antidilutive.

Net loss per share is the same for each class of common stock as they are entitled to the same liquidation and dividend rights with the exception of voting rights. As a result, net loss per share (basic) and net loss per share (diluted) attributed to common stockholders are the same for both Class A and Class B common stock and are combined for presentation. The following table sets forth the computation of our net loss per share (basic) and net loss per share (diluted) attributable to common stockholders (in thousands, except per share amounts):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Numerator:				
Net loss attributable to Class A and Class B common stockholders	$ (62,216)	$ (45,677)	$(146,657)	$ (63,393)
Denominator:				
Weighted average shares used to compute net loss per share attributable to Class A and Class B common stockholders, basic and diluted	113,622	10,536	112,737	10,470
Net loss per share attributable to Class A and Class B common stockholders, basic and diluted	$ (0.55)	$ (4.34)	$ (1.30)	$ (6.05)

The following common stock equivalents were excluded from the computation of net loss per share attributable to common shareholders (diluted) for the periods presented as their inclusion would have been antidilutive (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Convertible and non-convertible redeemable preferred stock and convertible notes	27,253	85,945	27,253	85,945
Stock options to purchase common stock	6,480	2,148	5,811	2,148
Convertible redeemable preferred stock warrants	—	60	—	60
Convertible redeemable common stock warrants	—	312	—	312
	33,733	88,465	33,064	88,465

Stock-Based Compensation and Employee Benefit Plan	6 Months Ended Jun. 30, 2019
Compensation Related Costs [Abstract]	
Stock-Based Compensation and Employee Benefit Plan	

Stock-Based Compensation and Employee Benefit Plan

2002 Stock Plan

Our 2002 Stock Plan (the "2002 Plan") was approved in April 2002 and amended in June 2011. In August 2012 and in connection with the adoption of the 2012 Equity Incentive Plan (the "2012 Plan"), shares authorized for issuance under the 2002 Plan were cancelled, except for those shares reserved for issuance upon exercise of outstanding stock options. As of June 30, 2019, options to purchase 2,033,654 shares of Class B common stock were outstanding and the weighted average exercise price of outstanding options was $22.74 per share.

2012 Equity Incentive Plan

Our 2012 Plan was approved in August 2012. In April 2018 and in connection with the adoption of the 2018 Equity Incentive Plan (the "2018 Plan"), any reserved shares not issued were carried over to the 2018 Equity Incentive Plan. As of June 30, 2019, options to purchase 10,728,356 shares of Class B common stock were outstanding under the 2012 Plan and the weighted average exercise price of outstanding options under the 2012 Plan was $27.14 per share. As of June 30, 2019, we had outstanding RSU awards that may be settled for 11,908,017 shares of Class B common stock under the 2012 Plan.

2018 Equity Incentive Plan

The 2018 Plan was approved in April 2018. The 2018 Plan became effective upon the IPO and will serve as the successor to the 2012 Plan.

The 2018 Plan authorizes the award of stock options, restricted stock awards, stock appreciation rights, RSUs, performance awards and stock bonuses. The 2018 Plan provides for the grant of awards to employees, directors, consultants, independent contractors and advisors provided the consultants, independent contractors, directors and advisors render services not in connection with the offer and sale of securities in a capital-raising transaction. The exercise price of stock options is at least equal to the fair market value of Class A common stock on the date of grant.

As of June 30, 2019, options to purchase 2,150,999 shares of Class A common stock were outstanding under the 2018 Plan and the weighted average exercise price of outstanding options was $19.71 per share. As of June 30, 2019, we had outstanding RSUs that may be settled for 4,022,886 shares of Class A common stock and 19,787,061 shares of Class A common stock were available for future grant.

2018 Employee Stock Purchase Plan

In April 2018, we adopted the 2018 Employee Stock Purchase Plan ("ESPP"). The ESPP is qualified under Section 423 of the Internal Revenue Code. As of June 30, 2019, there were 4,052,804 shares of Class A common stock available for future issuance.

Stock Option Activity

A summary of stock option activity under our stock plans during the six months ended June 30, 2019 is as follows:

	Outstanding Options			
	Number of Shares	Weighted Average Exercise Price	Remaining Contractual Life (Years)	Aggregate Intrinsic Value

				(in thousands)
Balances at December 31, 2018	14,558,420	$ 25.93	6.78	$ 3,084
Granted	981,105	11.44		
Exercised	(328,026)	4.28		
Cancelled	(298,490)	25.37		
Balances at June 30, 2019	14,913,009	25.47	6.53	2,557
Vested and expected to vest at June 30, 2019	14,541,060	25.64	6.47	2,523
Exercisable at June 30, 2019	8,716,781	28.77	4.96	1,764

RSUs Activity

A summary of our restricted stock units ("RSUs") activity and related information during the six months ended June 30, 2019 is as follows:

	Number of Awards Outstanding	Weighted Average Grant Date Fair Value
Unvested Balance at December 31, 2018	16,784,800	$ 18.74
Granted	2,966,254	12.36
Vested	(3,504,098)	20.51
Forfeited	(316,053)	17.38
Unvested Balance at June 30, 2019	15,930,903	17.19

Stock-Based Compensation Expense

We used the following weighted-average assumptions in applying the Black-Scholes valuation model:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Risk-free interest rate	2.4% - 2.5%	2.7% - 2.8%	2.4% - 2.6%	2.5% - 2.8%
Expected term (years)	6.4 - 6.7	6.2 - 6.7	6.4 - 6.7	6.2 - 6.7
Expected dividend yield	—	—	—	—
Expected volatility	47.5%	54.6%	47.5% - 50.2%	54.6% - 55.1%

Stock-based Compensation - No stock-based compensation costs were capitalized in the three months ended June 30, 2019 and 2018. The following table summarizes the components of stock-based compensation expense in the consolidated statements of operations (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018

Cost of revenue	$ 10,392	$ 1,971	$ 24,764	$ 3,869
Research and development	12,218	1,739	26,448	3,376
Sales and marketing	8,935	1,214	20,447	2,166
General and administrative	19,673	2,894	43,441	6,362
Total stock-based compensation	$ 51,218	$ 7,818	$ 115,100	$ 15,773

During the six months ended June 30, 2019 and 2018, we recognized $115.1 million and $15.8 million of stock-based compensation expense, respectively. Our stock-based compensation expense is associated with stock options, RSUs, and our ESPP.

As of June 30, 2019, there was unrecognized compensation expense related to unvested stock options of $56.8 million. This expense is expected to be recognized over the remaining weighted-average period of 2.6 years. We had no excess tax benefits in the six months ended June 30, 2019 and 2018.

As of June 30, 2019, there was $108.2 million of unrecognized stock-based compensation cost related to unvested RSUs. This expense is expected to be recognized over a weighted average period of 1.1 years.

As of June 30, 2019, there was $6.3 million of unrecognized stock-based compensation cost related to the ESPP. This expense is expected to be recognized over a weighted average period of 0.9 years.

Power Purchase Agreement Programs	6 Months Ended Jun. 30, 2019
Organization, Consolidation and Presentation of Financial Statements [Abstract]	
Power Purchase Agreement Programs	

Power Purchase Agreement Programs

Overview

In mid-2010, we began offering our Energy Servers through our Bloom Electrons program, which we denote as Power Purchase Agreement Programs, financed via investment entities. Under these arrangements, an operating entity is created (the "Operating Company") which purchases the Energy Server from us. The end customer then enters into a power purchase agreement ("PPA") with the Operating Company to purchase the power generated by the Energy Server(s) at a specified rate per kilowatt hour for a specified term which can range from 10 to 21 years. In some cases similar to direct purchases and leases, the standard one-year warranty and performance guaranties are included in the price of the product. The Operating Company also enters into a master services agreement ("MSA") with us following the first year of service to extend the warranty services and guaranties over the term of the PPA. In other cases, the MSA including warranties and guaranties are billed on a quarterly basis starting in the first quarter following the placed-in-service date of the Energy Servers and continuing over the term of the PPA. The first of such arrangements was considered a sales-type lease and the product revenue from that agreement was recognized up front in the same manner as direct purchase and lease transactions. Substantially all of our subsequent PPAs have been accounted for as operating leases with the related revenue under those agreements recognized ratably over the PPA term as electricity revenue. We recognize the cost of revenue, primarily product costs and maintenance service costs, over the shorter of the estimated useful life of the Energy Server or the term of the PPA.

We and our third-party equity investors (together "Equity Investors") contribute funds into a limited liability investment entity ("Investment Company") that owns and is parent to the Operating Company (together, the "PPA Entities"). The PPA Entities constitute variable investment entities ("VIEs") under U.S. GAAP. We have considered the provisions within the contractual agreements which grant us power to manage and make decisions affecting the operations of these VIEs. We consider that the rights granted to the Equity Investors under the contractual agreements are more protective in nature rather than participating. Therefore, we have determined under the power and benefits criterion of ASC 810 - *Consolidations* that we are the primary beneficiary of these VIEs. On June 14, 2019, we entered into a PPA II upgrade of Energy Servers transaction, and as a result we determined that we no longer retain a controlling interest in PPA II and therefore it will no longer be consolidated as a VIE into our condensed consolidated financial statements as of June 30, 2019. See further discussion below.

As the primary beneficiary of these VIEs, we consolidate in our financial statements the financial position, results of operations and cash flows of the PPA Entities, and all intercompany balances and transactions between us and the PPA Entities are eliminated in the condensed consolidated financial statements.

The Operating Company acquires Energy Servers from us for cash payments that are made on a similar schedule as if the Operating Company were a customer purchasing an Energy Server from us outright. In the condensed consolidated financial statements, the sales of our Energy Servers to the Operating Company are treated as intercompany transactions after the elimination of intercompany balances. The acquisition of Energy Servers by the Operating Company is accounted for as a non-cash reclassification from inventory to Energy Servers within property, plant and equipment, net on our condensed consolidated balance sheets. In arrangements qualifying for sales-type leases, we reduce these recorded assets by amounts received from U.S. Treasury Department cash grants and from similar state incentive rebates.

The Operating Company sells the electricity to end customers under PPAs. Cash generated by the electricity sales, as well as receipts from any applicable government incentive program, is used to pay operating expenses (including the management and services we provide to maintain the Energy Servers over the term of the PPA) and to service the non-recourse debt with the remaining cash flows distributed to the Equity Investors. In transactions accounted for as sales-type leases, we recognize subsequent customer billings as electricity revenue over the term of the PPA and amortizes any applicable government incentive program grants as a reduction to depreciation expense of the Energy Server over the term of the PPA. In transactions accounted for as operating leases, we recognize subsequent customer payments and any applicable government incentive program grants as electricity revenue over the term of the PPA.

Upon sale or liquidation of a PPA Entity, distributions would occur in the order of priority specified in the contractual agreements.

We have established six different PPA Entities to date. The contributed funds are restricted for use by the Operating Company to the purchase of Energy Servers manufactured by us in our normal course of operations, all six PPA Entities utilized their entire available financing capacity and have completed the purchase of their Energy Servers. Any debt incurred by the Operating Companies is non-recourse to us. Under these structures, each Investment Company is treated as a partnership for U.S. federal income tax purposes. Equity Investors receive investment tax credits and accelerated tax depreciation benefits. In 2016, we purchased the tax equity investor's interest in PPA I, which resulted in a change in our ownership interest in PPA I while we continued to hold the controlling financial interest in this company.

PPA II Upgrade of Energy Servers

Transaction Overview

On June 14, 2019, we entered into a transaction with SP Diamond State Class B Holdings, LLC ("SPDS"), a wholly owned subsidiary of Southern Power Company, in which SPDS will purchase a majority interest in PPA II, which operates in Delaware providing alternative energy generation for state tariff rate payers (the "PPA II Project"). PPA II will use the received funds to purchase current generation Bloom fuel cell energy servers in connection with the upgrade of its energy generation assets fleet.

In connection with the closing of this transaction, SPDS was admitted as a member of Diamond State Generation Partners, LLC ("DSGP"). DSGP, an operating company, is now owned by Diamond State Generation Holdings, LLC ("DSGH") and SPDS. Subject to (i) the satisfaction by Bloom of certain conditions precedent, and (ii) the non-occurrence of certain events outside of our control, SPDS has agreed to make capital contributions to DSGP sufficient for DSGP to purchase up to approximately 18 megawatts of Energy Servers from us in one or more phases following the closing, decommissioning 19 megawatts of our less efficient older generation Energy Servers. Prior to selling the new generation Energy Servers to DSGP in each phase, we will repurchase a proportionate number of DSGP's existing Energy Servers and remove such existing Energy Servers from PPA II's site. In the future, subject to our ability to secure additional capital commitments from sources yet to be identified, the remaining 11 megawatts of existing Energy Servers that constitute PPA II may be repurchased by Bloom and replaced by up to approximately 9 megawatts of new Energy Servers to be sold by us to DSGP. After accounting for the funds committed by SPDS, we estimate that we will need to secure approximately $92 million of additional funding in order to complete the upgrade of the PPA II Project. In the event that we are unable to secure financing to fund the deployment of the additional 9 megawatts of new Energy Servers at the PPA II Project, we expect to continue to operate the existing Energy Servers, in which case we may need to amend certain operating permits for the PPA II Project. We will continue as operator of PPA II, but management of DSGP will transfer to SPDS as of the date we have completed the repurchase of all of the interests of Mehetia, Inc., a wholly-owned subsidiary of Credit Suisse AG ("Mehetia"), in the PPA II Project.

Obligations to the PPA II Financiers

After giving effect to the admission of SPDS as a member of DSGP at the closing and the retirement of the existing debt, there are three investors in the PPA II Project: Bloom Energy, Mehetia, and SPDS.

At closing, we made a partial payment for repurchase of the existing Energy Servers owned by DSGP in the amount of approximately $72.3 million, all of which was used by DSGP (along with additional DSGP's cash reserves) to prepay all of its existing indebtedness associated with PPA II. We also agreed to purchase all of the equity interests in PPA II currently held by Mehetia for an estimated purchase price of $57.5 million. The purchase of Mehetia's equity interests in PPA II will be effected via multiple payments by us with the final payment to be made no later than March 31, 2020.

In connection with the admission of SPDS as a member of DSGP, the DSGP limited liability company agreement was amended to provide, among other things, for the allocation of revenues, benefits and expenses between us, Mehetia and SPDS. Under the amended limited liability company agreement, until such time as all of Mehetia's equity interests in PPA II have been repurchased, Mehetia is entitled to 100% of the revenues generated by the PPA II Project from the operation of the existing Energy Servers and we are entitled to none of such revenues. From and after the date that all of Mehetia's equity interests in PPA II have been repurchased, we will be entitled to 100% of the revenues generated by the PPA II Project from the operation of the existing Energy Servers. Additionally, SPDS is entitled to 100% of the revenues generated by the PPA II Project from the operation of the new Energy Servers. SPDS is also entitled to 100% of any tax attributes, income and loss associated with the new energy servers.

Obligations to DSGP

At closing, we and DSGP entered into two primary commercial contracts: first, a contract for the purchase, sale and installation of the new Energy Servers (the "EPC Agreement"), and second, a contract for the operation and maintenance of the PPA II Project, including both the existing Energy Servers and the new Energy Servers (the "O&M Agreement"). Both the upfront purchase price for the new Energy Servers under the EPC Agreement and the ongoing fees for our operations and maintenance of the PPA II Project under the O&M Agreement are paid on a fixed dollar per kilowatt ($/kW) basis.

Our obligations to DSGP pursuant to the EPC Agreement include: (i) designing, manufacturing, and installing the new Energy Servers, and selling such Energy Servers to DSGP; (ii) obtaining all necessary permits and other governmental approvals necessary for the installation and operation of the new Energy Servers; and (iii) commissioning each of the new Energy Servers upon the completion of installation.

Our obligations to DSGP pursuant to the O&M Agreement include: (i) maintaining all necessary permits and other governmental approvals necessary for the operation of the PPA II Project, and maintaining such permits and approvals throughout the term of the O&M Agreement; (ii) operating and maintaining the PPA II Project in compliance with all applicable laws, permits and regulations; (iii) satisfying the efficiency and output obligations set forth in such O&M Agreement ("Performance Requirements"); and (iv) complying with the requirements of the PPA II Tariff. The O&M Agreement obligates us to repurchase some or all of the Energy Servers constituting the PPA II Project in the event the PPA II Project fails to comply with the Performance Requirements and we fail to remedy such failure after a cure period.

The O&M Agreement for the PPA II Project provides for the following Performance Requirements and indemnity obligations:

Efficiency Guaranty. We warrant to DSGP that the PPA II Project will operate at a cumulative average efficiency level of 50%, including period of operation prior to closing of the PPA II upgrade transaction. If the aggregate average efficiency falls below the specified threshold, we are obligated to make a payment to DSGP equal to the increased expense resulting from such efficiency shortfall, with our aggregate liability for such payments capped at an amount specified in the O&M Agreement. During the period from September 2010 to June 30, 2019, no payments have been made pursuant to the Efficiency Guaranty.

Existing Energy Server Output Warranty. We warrant to DSGP that the remaining existing Energy Servers at the PPA II Project will, in the aggregate, generate a minimum amount of electricity in each calendar quarter, and we are obligated to repair or replace Energy Servers if such Energy Servers fail to satisfy this warranty. If we determine that a repair or replacement is not feasible, we are obligated to repurchase such Energy Servers at the original purchase price. During the period from September 2010 to June 30, 2019, no Energy Servers have been repurchased pursuant to the Existing Energy Server Output Warranty.

New Energy Server Output Warranty. We warrant to DSGP that the new Energy Servers purchased by DSGP in connection with the PPA II Project will, in the aggregate, generate a minimum amount of electricity on a cumulative basis, and we are obligated to repair or replace Energy Servers if such Energy Servers fail to satisfy this warranty. If we determine that a repair or replacement is not feasible, we are obligated to repurchase such Energy Servers at the original purchase price. During the period from the closing of the upgrade to June 30, 2019, no Energy Servers have been repurchased pursuant to the New Energy Server Output Warranty.

New Energy Server Output Guaranty. We warrant to DSGP that the new Energy Servers purchased by DSGP in connection with the PPA II Project will, in the aggregate, generate a minimum amount of electricity on a cumulative basis, and we are obligated to make a payment to DSGP to make DSGP for lost revenues resulting from the shortfall below the guaranteed level if such Energy Servers fail to satisfy this warranty, with our aggregate liability for such payments capped at an amount specified in the O&M Agreement. During the period from the closing of the upgrade to June 30, 2019, no payments have been made pursuant to the New Energy Server Output Guaranty.

Other Obligations

In addition to the rights and obligations set forth above, the transaction documents related to the upgrade of the PPA II Project contain certain representations, warranties and covenants of Bloom, DSGH, DSGP, Mehetia and SPDS, including representations and warranties of Bloom and DSGP relating to the conduct of their respective businesses prior to the closing of the transaction, as well as indemnity obligations related to the breach of such representations, warranties and covenants. In addition, we have agreed to indemnify SPDS for losses that may be incurred in the event of certain regulatory, legal or legislative development in an aggregate amount of up to $97.2 million and we have also agreed to indemnify SPDS for losses that may be incurred in connection with the loss or disallowance of certain tax benefits that we expect the upgrade of the PPA II Project to generate, in an aggregate amount of up to $7.5 million. As of June 30, 2019, we established a cash-collateralized letter of credit of $20.0 million under this obligation, and we committed to fund an additional cash-collateralized letter of credit of $20.0 million subsequent to June 30, 2019. Under the terms of the Equity Capital Contribution Agreement, in some circumstances, including in the event that our shares of common stock are trading at a specified price for a specified period, Southern has the right to require that Bloom either (a) provide supplemental Tariff Damages Collateral (as defined in the agreement) in the amount of the difference between the then-applicable Tariff Damages and the Tariff Damages Collateral then-available to Southern pursuant to the LLC Agreement, or (b) make a payment to Southern in the amount of such difference. Based on current deployments, in the event our shares of common stock are trading at a specified price for a specified period, then based on current deployments we anticipate a potential commitment resulting from the difference between the Tariff Damage Collateral and Tariff Damage to be up to an additional $57.2 million.

Obligations Under the PPA II Tariff Agreement

In the event that DSGP claims that a “Forced Outage Event” has occurred under the PPA II tariff, DSGP is obligated to purchase and deliver replacement renewable energy credits ("RECs") in an amount equal to the number of megawatt hours for which it receives compensation under the ‘forced outage’ provisions of the tariff, but only if such replacement RECs are available in sufficient quantities and can be purchased for less than $45 per REC. A “Forced Outage Event” is defined under the PPA II tariff agreement as the inability of DSGP to obtain a replacement component part or a service necessary for the operation of the Energy Servers at their nameplate capacity. The PPA II tariff agreement provides for payments to DSGP

in the event of a Forced Outage Event lasting in excess of 90 days. For the first 90 days following the occurrence of a Forced Outage Event, no payments are made under this provision of the tariff. Thereafter, DSGP is entitled to payments equal to 70% of the payments that would have been made under the tariff but for the occurrence of the Forced Outage Event-that is, the "Forced Outage Event" provision of the PPA II tariff agreement provides for payments to DSGP under the tariff equal to the amount that would be paid were PPA II Project energy servers operating at 70% of their nameplate capacity, irrespective of actual output. The PPA II tariff agreement also provides that the "Forced Outage Event" protections afforded thereunder shall automatically terminate in the event that we obtain an investment grade rating.

Impact of PPA II Project on Consolidated Financial Statements

As described above, the PPA II Project documents contain certain representations, warranties and covenants of Bloom, DSGH, DSGP, Mehetia and SPDS, including representations and warranties of Bloom and DSGP relating to the conduct of their respective businesses prior to the closing of the transaction, as well as indemnity obligations related to the breach of such representations, warranties and covenants. In addition, we have agreed to indemnify SPDS for losses that may be incurred in the event of certain regulatory, legal or legislative development in an aggregate amount of up to $97.2 million. As of June 30, 2019, we believe these events to be remote and therefore, no liability has been recorded on our condensed consolidated financial statements.

As a result of the transaction with SPDS, we reconsidered whether we should continue to consolidate DSGP. We use a qualitative approach in assessing the consolidation requirement for each of our PPA Entities. This approach focuses on determining whether we have the power to direct those activities of the PPA Entities that most significantly affect their economic performance and whether we have the obligation to absorb losses, or the right to receive benefits, that could potentially be significant to the PPA Entities. As a result of the PPA II Project, we determined that we no longer retain a controlling interest in PPA II and therefore it will no longer be consolidated as a VIE into our condensed consolidated financial statements as of June 30, 2019. We determined that we have retained significant influence over DSGP and consequently recognize our remaining interest in DSGP as an equity-method investment as of June 30, 2019.

The PPA II Project occurs in two phases, phase 1 where initially SPDS had its purchased interest in 9.7 megawatts of Energy Servers installed during June 2019, and its remaining phase 2 purchased interest in 8.0 megawatts of Energy Servers to be installed which is expected to occur during the remainder of 2019. As of June 30, 2019, we have sold 9.7 megawatts of our current generation Energy Servers for $87.8 million to DSGP subsequent to its deconsolidation, which is included in product revenue, and recognized installation services of $3.9 million which is included in installation revenue, in our condensed consolidated statements of operations for the three and six months ended June 30, 2019. Concurrently, we had repurchased and written-off 10.0 megawatts of our earlier generation energy serves for $25.6 million and had installed the 9.7 megawatts of servers at a cost of goods sold of $26.3 million, which is included in cost of product revenue in our condensed consolidated statements of operations for the three and six months ended June 30, 2019. In anticipation of replacing the remaining installed 9.0 megawatts of Energy Servers during 2019 under phase 2 which reduced their previously expected useful lives, we recognized charges related to the decommissioning of PPA II Energy Servers of $8.1 million, which is included in cost of electricity revenue in our condensed consolidated statements of operations for the three and six months ended June 30, 2019. Additionally, in paying-off the outstanding debt and interest of PPA II amounting to $77.7 million, we incurred a debt payoff make-whole penalty of $5.9 million, which is included in general and administrative expense in our condensed consolidated statements of operations for the three and six months ended June 30, 2019. Finally, we had PPA II debt issuance costs written-off of $1.0 million and additional interest expense incurred for PPA 2 debt payoff of $0.1 million, which is included in interest expense in our condensed consolidated statements of operations for the three and six months ended June 30, 2019.

The PPA II Project resulted in the following impacts on our condensed consolidated balance sheet as of June 30, 2019: (i) cash and cash equivalents increased $4.6 million, comprised

of $115.6 million cash receipts for the sale of new systems to PPA II, mostly offset by $72.3 million used for the repayment of all PPA II debt plus a make-whole payment fee, a $18.7 million distribution to Credit Suisse, the other investor in PPA II, and a $20.0 million reclassification into restricted cash for certain contingent indemnifications for SPDS under the PPA II Project in the form of a letter of credit to SPDS; (ii) inventories decreased $27.0 million due to the sale of 9.7 megawatts of current generation Energy Servers to PPA II during June 2019; (iii) property, plant and equipment decreased $33.7 million, comprised of $25.6 million due to the repurchase and write-off of 10.0 megawatts of older Energy Servers from PPA II plus $8.1 million of charges related to the decommissioning of PPA II Energy Servers for the second phase of energy server replacement, anticipated to occur during the remainder of 2019; (iv) restricted cash long-term increased $8.7 million, comprised of $20.0 million for certain contingent indemnifications for SPDS under the PPA II Project, partially offset by $11.3 million used for the repayment of debt; (v) current portion of non-recourse debt decreased $12.2 million; (vi) deferred revenue and customer deposits increased $23.8 million related to deposit funding paid by SPDS for new systems in phase 2; (vii) accrued other current liabilities increased $0.4 million, comprised of an increase of $1.1 million for the accrued installation cost for the Energy Servers purchased by SPDS, mostly offset by a decrease of $0.7 million related to the payoff of accrued interest made on PPA II's debt; (viii) long-term portion of non-recourse debt decreased $63.7 million for the payoff of long term portion of PPA II debt, net of debt issuance costs written-off; (ix) noncontrolling interest decreased $18.4 million, comprised of $18.7 million of cash distribution to Credit Suisse resulting from our repurchase of 10.0 megawatts existing Energy Servers, partially offset by $0.3 million related to the HLBV adjustment; and (x) the reclass of $37.0 million from noncontrolling interest to accrued other current liabilities related to our commitment to mandatorily redeem the noncontrolling interest in DSGH by March 31, 2020 under the PPA II Project.

PPA Entities' Activities Summary

The table below shows the details of the five continuing Investment Companies and their cumulative activities from inception to the periods indicated (dollars in thousands):

	PPA II	PPA IIIa	PPA IIIb	PPA IV	PPA V
Overview:					
Maximum size of installation (in megawatts)	30	10	6	21	40
Installed size (in megawatts)	20 [4]	10	5	19	37
Term of power purchase agreements (years)	21	15	15	15	15
First system installed	Jun-12	Feb-13	Aug-13	Sep-14	Jun-15
Last system installed	Nov-13	Jun-14	Jun-15	Mar-16	Dec-16
Income (loss) and tax benefits allocation to Equity Investor	99%	99%	99%	90%	99%
Cash allocation to Equity Investor	99%	99%	99%	90%	90%
Income (loss), tax and cash allocations to Equity Investor after the flip date	5%	5%	5%	No flip	No flip
Equity Investor [1]	Credit Suisse	US Bank	US Bank	Exelon Corporation	Exelon Corporation
Put option date [2]	March 31, 2020	1st anniversary of flip point	1st anniversary of flip point	N/A	N/A
Company cash contributions	$ 22,442	$ 32,223	$ 22,658	$ 11,669	$ 27,932
Company non-cash contributions [3]	$ —	$ 8,655	$ 2,082	$ —	$ —
Equity Investor cash contributions	$ 139,993	$ 36,967	$ 20,152	$ 84,782	$ 227,344
Debt financing	$ 144,813	$ 44,968	$ 28,676	$ 99,000	$ 131,237
Cumulative Activity as of June 30, 2019:					
Distributions to Equity Investor	$ 138,602	$ 4,430	$ 2,007	$ 6,420	$ 69,099

Debt repayment—principal	$ 144,813	$ 5,651	$ 4,414	$ 16,731	$ 7,572
Cumulative Activity as of December 31, 2018:					
Distributions to Equity Investor	$ 116,942	$ 4,063	$ 1,807	$ 4,568	$ 66,745
Debt repayment—principal	$ 65,114	$ 4,431	$ 3,953	$ 15,543	$ 5,780

[1] Investor name represents ultimate parent of subsidiary financing the project.

[2] Investor right on the certain date, upon giving us advance written notice, to sell the membership interests to us or resign or withdraw from the investment partnership.

[3] Non-cash contributions consisted of warrants that were issued by us to respective lenders to each PPA Entity, as required by such entity's credit agreements. The corresponding values are amortized using the effective interest method over the debt term.

[4] Installed base decreased from March 31, 2019 due to the repurchase of 10 megawatts of our Energy Servers during June 2019 under the PPA II Project. See disclosures above.

Some of our PPA Entities contain structured provisions whereby the allocation of income and equity to the Equity Investors changes at some point in time after the formation of the PPA Entity. The change in allocations to Equity Investors (or the "flip") occurs based either on a specified future date or once the Equity Investors reaches its targeted rate of return. For PPA Entities with a specified future date for the flip, the flip occurs January 1 of the calendar year immediately following the year that includes the fifth anniversary of the date the last site achieves commercial operation.

The noncontrolling interests in PPA IIIa and PPA IIIb are redeemable as a result of the put option held by the Equity Investors as of June 30, 2019 . The noncontrolling interests in PPA II, IIIa and PPA IIIb are redeemable as a result of the put option held by the Equity Investors as of December 31, 2018. The redemption value is the put amount. At June 30, 2019, and December 31, 2018, the carrying value of redeemable noncontrolling interests of $0.5 million and $57.3 million, respectively, exceeded the maximum redemption value.

PPA Entities' Aggregate Assets and Liabilities

Generally, Operating Company assets can be used to settle only the Operating Company obligations and Operating Company creditors do not have recourse to us. The aggregate carrying values of the PPA Entities' assets and liabilities in the condensed consolidated balance sheets, after eliminations of intercompany transactions and balances, were as follows (in thousands):

	June 30, 2019 [1]	December 31, 2018
Assets		
Current assets:		
Cash and cash equivalents	$ 18,043	$ 5,295
Restricted cash	1,848	2,917
Accounts receivable	6,533	7,516
Customer financing receivable	5,817	5,594
Prepaid expenses and other current assets	1,585	4,909
Total current assets	33,826	26,231
Property and equipment, net	321,886	399,060
Customer financing receivable, non-current	64,146	67,082
Restricted cash	36,736	27,854
Other long-term assets	30,329	2,692
Total assets	$ 486,923	$ 522,919
Liabilities		
Current liabilities:		

Accounts payable	$ 443	$ 724
Accrued other current liabilities	39,028	1,442
Deferred revenue and customer deposits	786	786
Current portion of debt	10,544	21,162
Total current liabilities	50,801	24,114
Derivative liabilities, net of current portion	8,453	3,626
Deferred revenue, net of current portion	8,306	8,696
Long-term portion of debt	251,826	323,360
Other long-term liabilities	2,078	1,798
Total liabilities	$ 321,464	$ 361,594

[1] These amounts include PPA II financial statement balances. See discussion above.

As stated above, we are a minority shareholder in the PPA Entities for the administration of our Bloom Electrons program. PPA Entities contain debt that is non-recourse to us. The PPA Entities also own Energy Server assets for which we do not have title. Although we will continue to have Power Purchase Agreement Program entities in the future and offer customers the ability to purchase electricity without the purchase of Energy Servers, we do not intend to be a minority investor in any new Power Purchase Agreement Program entities.

We believe that by presenting assets and liabilities separate from the PPA Entities, we provide a better view of the true operations of our core business. The table below provides detail into the assets and liabilities of Bloom Energy separate from the PPA Entities. The following table shows Bloom Energy's stand-alone, the PPA Entities combined and these consolidated balances as of June 30, 2019, and December 31, 2018 (in thousands):

	June 30, 2019			December 31, 2018		
	Bloom	PPA Entities	Consolidated	Bloom	PPA Entities	Consolidated
Assets						
Current assets	$558,458	$ 33,826	$ 592,284	$646,350	$ 26,231	$ 672,581
Long-term assets	177,198	453,097	630,295	220,399	496,688	717,087
Total assets	$735,656	$486,923	$ 1,222,579	$866,749	$522,919	$ 1,389,668
Liabilities						
Current liabilities	$272,606	$ 40,257	$ 312,863	$246,866	$ 2,952	$ 249,818
Current portion of debt	15,680	10,544	26,224	8,686	21,162	29,848
Long-term liabilities	233,880	18,837	252,717	293,739	14,120	307,859
Long-term portion of debt	390,157	251,826	641,983	388,073	323,360	711,433

Total liabilities	$912,323	$321,464	$ 1,233,787	$937,364	$361,594	$ 1,298,958

Commitments and Contingencies	6 Months Ended Jun. 30, 2019
Commitments and Contingencies Disclosure [Abstract]	
Commitments and Contingencies	

Commitments and Contingencies

Commitments

Operating Leases

During the six months ended June 30, 2019 and 2018, rent expense for our facilities was $3.8 million and $2.9 million, respectively.

At June 30, 2019, future minimum lease payments under operating leases were as follows (in thousands):

Remainder of 2019	$ 8,410
2020	16,342
2021	13,683
2022	12,979
2023	12,532
Thereafter	48,297
	$ 112,243

Equipment Leases - Beginning in December 2015, we are a party to master lease agreements that provide for the sale of Energy Servers to third parties and the simultaneous leaseback of the systems which we then subleases to customers. The lease agreements expire on various dates through 2025 and there was no recorded rent expense for the six months ended June 30, 2019 and 2018.

Purchase Commitments with Suppliers and Contract Manufacturers - In order to reduce manufacturing lead-times and to ensure an adequate supply of inventories, we have agreements with our component suppliers and contract manufacturers to allow long lead-time component inventory procurement based on a rolling production forecast. We are contractually obligated to purchase long lead-time component inventory procured by certain manufacturers in accordance with our forecasts. We can generally give notice of order cancellation at least 90 days prior to the delivery date. However, we may also issue purchase orders to certain of our component suppliers and third-party manufacturers that may not be cancelable. As of June 30, 2019 and 2018, we had no material open purchase orders with our component suppliers and third-party manufacturers that are not cancelable.

Power Purchase Agreement Program - Under the terms of the Bloom Electrons program (see *Note 12 - Power Purchase Agreement Programs - PPA II Upgrade of Energy Servers*), customers agree to purchase power from our Energy Servers at negotiated rates, generally for periods of up to twenty-one years. We are responsible for all operating costs necessary to maintain, monitor and repair these Energy Servers, including the fuel necessary to operate the systems under certain PPA contracts. The risk associated with the future market price of fuel purchase obligations is mitigated with commodity contract futures.

The PPA Entities guarantee the performance of Energy Servers at certain levels of output and efficiency to its customers over the contractual term. The PPA Entities monitor the need for any accruals arising from such guaranties, which are calculated as the difference between committed and actual power output or between natural gas consumption at warranted efficiency levels and actual consumption, multiplied by the contractual rates with the customer. Amounts payable under these guaranties are accrued in periods when the guaranties are not met and are

recorded in cost of service revenue in the consolidated statements of operations. We paid $3.5 million and $0.9 million for the six months ended June 30, 2019 and 2018, respectively.

In June 2015, PPA V entered into a $131.2 million credit agreement to fund the purchase and installation of Energy Servers. The lenders have commitments to an LC facility with the aggregate principal amount of $6.2 million. The LC facility is to fund the Debt Service Reserve Account. The amount reserved under the LC as of June 30, 2019 and 2018 was $5.0 million.

Contingencies

Indemnification Agreements - We enter into standard indemnification agreements with our customers and certain other business partners in the ordinary course of business. Our exposure under these agreements is unknown because it involves future claims that may be made against us but have not yet been made. To date, we have not paid any claims or been required to defend any action related to our indemnification obligations. However, we may record charges in the future as a result of these indemnification obligations.

Warranty Costs - We generally warrant our products sold to our direct customers for one year following the date of acceptance of the products under a standard one-year warranty. As part of our MSAs, we provide output and efficiency guaranties (collectively "performance guaranties") to our customers when systems operate below contractually specified levels of efficiency and output. Such amounts have not been material to date.

The standard one-year warranty covers defects in materials and workmanship under normal use and service conditions, and against manufacturing or performance defects. We accrue this warranty expense using our best estimate of the amount necessary to settle future and existing warranty claims as of the balance sheet date.

Our obligations under our standard one-year warranty and MSA are generally in the form of product replacement, repair or reimbursement for higher customer electricity costs. Further, if the Energy Servers run at a lower efficiency or power output than we committed under our performance guaranty, we will reimburse the customer for the underperformance. Our aggregate reimbursement obligation for this performance guaranty for each order is capped at a portion of the purchase price. Prior to fiscal year 2014, certain MSAs with direct customers were accounted for as separately-priced warranty contracts under ASC 605-20-25 *Separately Priced Extended Warranty and Product Maintenance Contracts* (formerly FTB 90-1), in which we recorded an accrual for any expected costs that exceed the contracted revenues for that one-year service renewal arrangement, and is included as a component of the accrued warranty liability. Customers may renew the MSAs leading to future expense that is not recognized under GAAP until the renewal occurs. Over time, as our service offering evolved and we began managing the Energy Servers taking into consideration individual customer arrangements as well as our Bloom Energy Server fleet management objectives, our service offering evolved to the point that our services changed, becoming a more strategic offering for both us and our customers. Additionally, virtually all of our sales arrangements included bundled sales of maintenance service agreements along with the Energy Servers. The result is that we allocate a certain portion of the contractual revenue related to the Energy Servers to the MSAs based on our BESP compared to the stated amount in the service contracts.

Delaware Economic Development Authority - In March 2012, we entered into an agreement with the Delaware Economic Development Authority to provide a grant of $16.5 million as an incentive to establish a new manufacturing facility in Delaware and to provide employment for full time workers at the facility over a certain period of time. The grant contains two types of milestones that we must complete to retain the entire amount of the grant proceeds. The first milestone was to provide employment for 900 full time workers in Delaware by the end of the first recapture period of September 30, 2017. The second milestone was to pay these full time workers a cumulative total of $108.0 million in compensation by September 30, 2017. There are two additional recapture periods at which time we must continue to employ 900 full time workers and the cumulative total compensation paid by us is required to be at least $324.0 million by September 30, 2023. As of June 30, 2019, we had 317 full time workers in Delaware and paid $105.6 million in cumulative compensation. As of June 30, 2018, we had 328 full time workers in Delaware and paid $80.4 million in cumulative compensation. We have so far received $12.0 million of the grant which is contingent upon meeting the milestones through September 30,

2023. In the event that we do not meet the milestones, we may have to repay the Delaware Economic Development Authority, including up to $5.0 million on September 30, 2021 and up to an additional $2.5 million on September 30, 2023. As of June 30, 2019 we had cumulatively paid $1.5 million for recapture provisions and recorded $10.5 million in other long-term liabilities for potential recapture.

Self-Generation Incentive Program ("SGIP") - Our PPA Entities' customers receive payments under the SGIP which is a program specific to the State of California that provides financial incentives for the installation of qualifying new self-generation equipment that we own. The SGIP program issues 50% of the fully anticipated amount in the first year the equipment is placed into service. The remaining incentive is then paid based on the size of the equipment (i.e., nameplate kilowatt capacity) over the subsequent five years.

The SGIP program has operational criteria primarily related to fuel mixture and minimum output for the first five years after the qualified equipment is placed in service. If the operational criteria are not fulfilled, it could result in a partial refund of funds received. However, for certain PPA Entities, we make SGIP reservations on behalf of the PPA Entity and, therefore, the PPA Entity bears the risk of loss if these funds are not paid.

Investment Tax Credits ("ITCs") - Our Energy Servers are eligible for federal ITCs that accrued to qualified property under Internal Revenue Code Section 48 when placed into service. However, the ITC program has operational criteria that extend for five years. If the energy property is disposed or otherwise ceases to be qualified investment credit property before the close of the five year recapture period is fulfilled, it could result in a partial reduction of the incentives. The purchase of Energy Servers were made by the PPA Entities and, therefore, the PPA Entities bear the risk of repayment if the assets placed in service do not meet the ITC operational criteria in the future.

Legal Matters - From time to time, we are involved in disputes, claims, litigation, investigations, proceedings and/or other legal actions consisting of commercial, securities and employment matters that arise in the ordinary course of business. We review all legal matters at least quarterly and assesses whether an accrual for loss contingencies needs to be recorded. The assessment reflects the impact of negotiations, settlements, rulings, advice of legal counsel and other information and events pertaining to a particular situation. We record an accrual for loss contingencies when management believes that it is both probable that a liability has been incurred and the amount of the loss can be reasonably estimated. Legal matters are subject to uncertainties and are inherently unpredictable, so the actual liability in any such matters may be materially different from our estimates. If an unfavorable resolution were to occur, there exists the possibility of a material adverse impact on the consolidated financial condition, results of operations or cash flows for the period in which the resolution occurs or on future periods.

In July of 2018, two former executives of Advanced Equities, Inc., Keith Daubenspeck and Dwight Badger, filed a Statement of Claim with the American Arbitration Association in Santa Clara, CA, against us, Kleiner Perkins, Caufield & Byers, LLC ("KPCB"), New Enterprise Associates, LLC ("NEA") and affiliated entities of both KPCB and NEA seeking to compel arbitration and alleging a breach of a confidential agreement executed between the parties on June 27, 2014 ("Confidential Agreement"). On May 7, 2019, KPCB and NEA were dismissed with prejudice. On June 15, 2019, a Second Amended Statement of Claim was filed against us alleging securities fraud, fraudulent inducement, a breach of the Confidential Agreement, and violation of the California unfair competition law. On July 16, 2019, we filed our Answering Statement and Affirmative Defenses. We believe the Second Amended Statement of Claim to be without merit and, as a result, we have recorded no loss contingency related to this claim.

In June of 2019. Messrs. Daubenspeck and Badger filed a complaint against our CEO, out CFO and our former CFO in the United States District Court for the Northern District of Illinois, Case No. 1:19-cv-04305, asserting nearly identical claims as those in the pending arbitration discussed above. We believe the complaint to be without merit and, as a result, we have recorded no loss contingency related to this claim.

In March of 2019, the Lincolnshire Police Pension fund filed a class action complaint in the Superior Court of the State of California, County of Santa Clara, against us, certain members

of our senior management, certain of our directors and the underwriters in our initial public offering alleging violations under Sections 11 and 15 of the Securities Act of 1933, as amended, for alleged misleading statements or omissions in our Form S-1 Registration Statement filed with the Securities and Exchange Commission in connection with our July 25, 2018 initial public offering. Two related class action cases were subsequently filed in the Santa Clara County Superior Court against the same defendants containing the same allegations; Rodriquez vs Bloom Energy et al was filed on April 22, 2019 and Evans vs Bloom Energy et al. was filed on May 7, 2019. These cases have been consolidated and a case management schedule has been set, with Plaintiffs' Consolidated Amended Complaint due to be filed with the court by October 14, 2019. Discovery is currently stayed.

In May of 2019, Elissa Roberts filed a class action complaint in the federal district court for the Northern District of California against us and certain of our directors alleging violations under Section 11 and 15 of the Securities Act of 1933, as amended, for alleged misleading statements or omissions in our Form S-1 Registration Statement filed with the Securities and Exchange Commission in connection with our July 25, 2018 initial public offering. Lead plaintiff applications were submitted to the court on July 29, 2019 and the lead plaintiff selection hearing is scheduled for September 4, 2019.

Segment Information	6 Months Ended Jun. 30, 2019
Risks and Uncertainties [Abstract]	
Segment Information	

Segment Information

Segments and the Chief Operating Decision Maker

Our chief operating decision makers ("CODMs"), the Chief Executive Officer and the Chief Financial Officer, review financial information presented on a consolidated basis for purposes of allocating resources and evaluating financial performance. The CODMs allocate resources and make operational decisions based on direct involvement with our operations and product development efforts. Bloom Energy is managed under a functionally-based organizational structure with the head of each function reporting to the Chief Executive Officer. The CODMs assess performance, including incentive compensation, based upon consolidated operations performance and financial results on a consolidated basis. As such, we have a single reporting segment and operating unit structure.

Related Party Transactions

Related Party Transactions [Abstract]

Related Party Transactions

6 Months Ended Jun. 30, 2019

Related Party Transactions

Our results of operations included the following related party transactions (in thousands):

	Six Months Ended June 30,	
	2019	2018
Total revenue from related parties	$ 93,204	$ 30,925
Consulting expenses paid to related parties (included in general and administrative expense)	102	102
Interest expense on debt to related parties	3,218	5,299

Bloom Energy Japan Limited

In May 2013, we entered into a joint venture with Softbank Corp., which is accounted for as an equity method investment. Under this arrangement, we sell Energy Servers and provide maintenance services to the joint venture. We recognized related party service revenue of $0.8 million for the three months ended June 30, 2019 and related party revenue of $1.7 million, comprised of service revenue of $0.2 million and installation revenue of $1.5 million, for the three months ended June 30, 2018. We recognized related party service revenue of $1.6 million for the six months ended June 30, 2019 and related party revenue of $30.9 million, comprised of service revenue of $0.3 million, product revenue of $28.3 million, and installation revenue of $2.3 million, for the six months ended June 30, 2018. Accounts receivable from this joint venture was $9,800 as of June 30, 2019 and $3.3 million as of December 31, 2018.

Diamond State Generation Holdings, LLC

On June 14, 2019, we entered into a transaction with SP Diamond State Class B Holdings for the PPA II upgrade of Energy Servers. In connection with the closing of this transaction, SPDS was admitted as a member of Diamond State Generation Partners, LLC ("DSGP"). DSGP, an operating company was a wholly owned subsidiary of DSGH prior to June 14, 2019. As a result of the PPA II upgrade of Energy Servers transaction, we determined that we no longer retain a controlling interest in PPA II and therefore it will no longer be consolidated as a variable interest entity, or VIE, into our condensed consolidated financial statements as of June 30, 2019. DSGP is considered to be a related party as regards to our PPA II upgrade of Energy Servers transaction for which we recognized related party revenue of approximately $91.6 million, comprised of product revenue of approximately $87.7 million and installation revenue of $3.9 million, for the three and six months ended June 30, 2019. We determined that we have retained significant influence over DSGP and consequently recognize our remaining interest in DSGP as an equity investment as of June 30, 2019. See Note 12 - Power Purchase Agreement Programs - PPA II Upgrade of Energy Servers. We had no accounts receivable from DSGP as of June 30, 2019.

Consulting Arrangement

In January 2009, we entered into a consulting agreement with General Colin L. Powell, a member of our board of directors, pursuant to which General Powell performs certain strategic planning and advisory services for us. Pursuant to this consulting agreement, General Powell receives compensation of $125,000 per year and reimbursement for reasonable expenses.

Debt to Related Parties

The following is a summary of our debt and convertible notes from investors considered to be related parties as of June 30, 2019 (in thousands):

	Unpaid Principal Balance	Net Carrying Value		
		Current	Long-Term	Total
Recourse debt from related parties:				
6% convertible promissory notes due December 2020 from related parties	$ 27,734	$ —	$ 27,734	$ 27,734
Non-recourse debt from related parties:				
7.5% term loan due September 2028 from related parties	39,317	2,889	32,643	35,532
Total debt from related parties	$ 67,051	$ 2,889	$ 60,377	$ 63,266

The following is a summary of our debt and convertible notes from investors considered to be related parties as of December 31, 2018 (in thousands):

	Unpaid Principal Balance	Net Carrying Value		
		Current	Long-Term	Total
Recourse debt from related parties:				
6% convertible promissory notes due December 2020 from related parties	$ 27,734	$ —	$ 27,734	$ 27,734
Non-recourse debt from related parties:				
7.5% term loan due September 2028 from related parties	40,538	2,200	34,119	36,319
Total debt from related parties	$ 68,272	$ 2,200	$ 61,853	$ 64,053

Regarding non-recourse debt from related parties, we repaid $0.4 million and $0.7 million of principal and interest in the three months ended June 30, 2019, and we repaid $1.2 million and $1.5 million of principal and interest in the six months ended June 30, 2019, respectively. No other significant changes have occurred in total debt from related parties since December 31, 2018. See *Note 6 - Outstanding Loans and Security Agreements* for additional information on our debt facilities. During the three months ended June 30, 2019 and 2018, interest expense on debt from related parties was $1.6 million and $2.7 million, and during the six months ended June 30, 2019 and 2018, interest expense on debt from related parties was $3.2 million and $5.3 million, respectively.

Subsequent Events	6 Months Ended Jun. 30, 2019
Subsequent Events [Abstract]	
Subsequent Events	

Subsequent Events

There have been no subsequent events that occurred during the period subsequent to the date of these financial statements that would require adjustment to, or disclosure in, the financial statements as presented.

Basis of Presentation and Significant Accounting Policies (Policies)

6 Months Ended

Jun. 30, 2019

Accounting Policies [Abstract]

Unaudited Interim Consolidated Financial Statements

We have prepared the condensed consolidated financial statements included herein pursuant to the rules and regulations of the U.S. Securities and Exchange Commission ("SEC"). Certain information and footnote disclosures normally included in the consolidated balance sheets as of June 30, 2019 and December 31, 2018, the consolidated statements of operations, the consolidated statements of comprehensive loss, the consolidated statements of convertible redeemable preferred stock, redeemable noncontrolling interest, stockholders' deficit and noncontrolling interest for the three and six months ended June 30, 2019 and 2018, and the consolidated statements of cash flows for the six months ended June 30, 2019 and 2018, as well as other information disclosed in the accompanying notes, have been prepared in accordance with U.S. generally accepted accounting principles as applied in the United States ("U.S. GAAP") and have been condensed or omitted pursuant to such rules and regulations. However, we believe that the disclosures herein are adequate to ensure the information presented is not misleading. These unaudited condensed consolidated financial statements should be read in conjunction with the audited financial statements and the notes thereto included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2018, as filed with the SEC on March 22, 2019.

We believe that all necessary adjustments, which consisted only of normal recurring items, have been included in the accompanying financial statements to fairly state the results of the interim periods. The results of operations for the interim periods presented are not necessarily indicative of the operating results to be expected for any subsequent interim period or for our fiscal year ending December 31, 2019.

Principles of Consolidation

Principles of Consolidation

These condensed consolidated financial statements reflect our accounts and operations and those of our subsidiaries in which we have a controlling financial interest. We use a qualitative approach in assessing the consolidation requirement for each of our variable interest entities ("VIE"), which we refer to as our power purchase agreement entities ("PPA Entities"). This approach focuses on determining whether we have the power to direct those activities of the PPA Entities that most significantly affect their economic performance and whether we have the obligation to absorb losses, or the right to receive benefits, that could potentially be significant to the PPA Entities. For all periods presented, we have determined that we are the primary beneficiary in all of our operational PPA Entities other than with respect to PPA II, as discussed below.

We evaluate our relationships with the PPA Entities on an ongoing basis to ensure that we continue to be the primary beneficiary. All intercompany transactions and balances have been eliminated in consolidation.

Use of Estimates

Use of Estimates

The preparation of condensed consolidated financial statements in conformity with U.S. GAAP requires us to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and the accompanying notes. Significant estimates include assumptions used to compute the best estimate of selling-prices, the fair value of lease and non-lease components such as estimated output, efficiency and residual value of the Energy Servers, estimates for inventory write-downs, estimates for future cash flows and the economic useful lives of property, plant and equipment, the fair value of investment in PPA Entities, the valuation of other long-term assets, the valuation of certain accrued liabilities such as derivative valuations, estimates for accrued warranty and extended maintenance, estimates for recapture of U.S. Treasury grants and similar grants, estimates for income taxes and deferred tax asset valuation allowances, warrant liabilities, stock-based compensation costs and estimates for the allocation of

profit and losses to the noncontrolling interests. Actual results could differ materially from these estimates under different assumptions and conditions.

Fair Value Measurement

Fair Value Measurement

Financial Accounting Standards Board ("FASB") Accounting Standards Codification Topic 820 - *Fair Value Measurements and Disclosures* ("ASC 820"), defines fair value, establishes a framework for measuring fair value under U.S. GAAP and enhances disclosures about fair value measurements. Fair value is defined under ASC 820 as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value under ASC 820 must maximize the use of observable inputs and minimize the use of unobservable inputs. The guidance describes a fair value hierarchy based on three levels of inputs, of which the first two are considered observable and the last unobservable, that may be used to measure fair value:

Level 1 Quoted prices in active markets for identical assets or liabilities. Financial assets utilizing Level 1 inputs typically include money market securities and U.S. Treasury securities.

Level 2 Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities. Financial instruments utilizing Level 2 inputs include interest rate swaps.

Level 3 Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities. Financial liabilities utilizing Level 3 inputs include natural gas fixed price forward contract derivatives. Derivative liability valuations are performed based on a binomial lattice model and adjusted for illiquidity and/or nontransferability and such adjustments are generally based on available market evidence.

Recent Accounting Pronouncements

Recent Accounting Pronouncements

Accounting Guidance Implemented in Fiscal Year 2019

Other than the adoption of accounting guidances mentioned below, there have been no other significant changes in our reported financial position or results of operations and cash flows resulting from the adoption of new accounting pronouncements. There have been no changes to our significant accounting policies that were disclosed in our Annual Report on Form 10-K for the fiscal year ended December 31, 2018 that have had a significant impact on our condensed consolidated financial statements or notes thereto as of and for the six months ended June 30, 2019.

Hedging Activities - As of January 1, 2019, we adopted Accounting Standards Update ("ASU") 2017-12 *Derivatives and Hedging (Topic 815), Targeted Improvements to Accounting for Hedging Activities* ("ASU 2017-12") to help entities recognize the economic results of their hedging strategies in the financial statements so that stakeholders can better interpret and understand the effect of hedge accounting on reported results. It is intended to more clearly disclose an entity's risk exposures and how we manage those exposures through hedging, and it is expected to simplify the application of hedge accounting guidance. The new guidance is effective for annual periods beginning after December 15, 2018, with early adoption permitted. There was not a material impact to our condensed consolidated financial statements upon adoption of ASU 2017-12.

In April 2019, the FASB issued ASU 2019-04, Codification Improvements to Topic 326, Financial Instruments-Credit Losses; Topic 815, Derivatives and Hedging; and Topic 825, Financial Instruments, that clarifies and improves areas of guidance related to the recently issued

standards on credit losses (ASU 2016-13), hedging (ASU 2017-12), and recognition and measurement of financial instruments (ASU 2016-01), respectively. The amendments generally have the same effective dates as their related standards. If already adopted, the amendments of ASU 2016-01 and ASU 2016-13 are effective for fiscal years beginning after December 15, 2019 and the amendments of ASU 2017-12 are effective as of the beginning of a company's next annual reporting period. Early adoption is permitted. As discussed above, we adopted ASU 2017-12 on January 1, 2019 and do not expect the amendments of ASU 2019-04 will have a material impact on our consolidated financial statements.

Income Taxes - During the first three months of fiscal 2019, we adopted ASU 2016-16, *Income Taxes—Intra-Entity Transfers of Assets Other Than Inventory (Topic 740)*, which requires that entities recognize the income tax consequences of an intra-entity transfer of an asset, other than inventory, when the transfer occurs. The standard is effective for us in our Annual Report on Form 10-K for the fiscal year ended December 31, 2019 and is required to be applied on a modified retrospective basis through a cumulative-effect adjustment directly to retained earnings as of the beginning of the adoption period. Adoption of this standard had no impact on our consolidated financial statements.

Income Taxes - During the first three months of fiscal 2019, we adopted ASU 2018-02 *Income Statement—Reporting Comprehensive Income (Topic 220) Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income* ("ASU 2018-02"), which permits reclassification of certain tax effects in Other Comprehensive Income ("OCI") caused by the U.S. tax reform enacted in December 2017 to retained earnings. We do not have any tax effect (due to full valuation allowance) in our OCI account, thus this guidance has no impact on us.

New Accounting Guidance to be Implemented

Revenue Recognition - In May 2014, the FASB issued ASU 2014-14, *Revenue From Contracts With Customers,* as amended ("ASU 2014-14"*)*. The guidance provides principles for recognizing revenue for the transfer of promised goods or services to customers with the consideration to which the entity expects to be entitled in exchange for those goods or services, as well as guidance on the recognition of costs related to obtaining and fulfilling customer contracts. The guidance also requires expanded disclosures about the nature, amount, timing, and uncertainty of revenues and cash flows arising from customer contracts, including significant judgments and changes in judgments. ASU 2014-14 is effective for our annual period beginning January 1, 2019, and for our interim periods beginning on January 1, 2020. ASU 2014-14 can be adopted using either of two methods: (i) retrospective to each prior reporting period presented with the option to elect certain practical expedients as defined within the guidance ("full retrospective method"); or (ii) retrospective with the cumulative effect of initially applying the guidance recognized at the date of initial application and providing certain additional disclosures as defined per the guidance ("modified retrospective method"). We will adopt ASU 2014-14 for our fiscal year ended December 31, 2019 using the modified retrospective method, resulting in a cumulative-effect adjustment to retained earnings on January 1, 2019.

We are currently evaluating whether ASU 2014-14 will have a material impact on our consolidated financial statements and expect its adoption to have an impact related to the costs of obtaining our contracts, customer deposits, and deferred revenue. Most notably, the accounting for incremental costs to obtain customer contracts, which primarily consist of sales commissions, will be allocated to the various elements of the transaction and the portion allocated to obtain extended warranty contracts will be deferred and amortized over the expected service period. Further, in preparation for ASU 2014-14, we are in the process of updating our accounting policies, processes, internal controls over financial reporting, and system requirements.

Leases - In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)*, as amended, which provides new authoritative guidance on lease accounting. Among its provisions, the standard requires lessees to recognize right-of-use assets and lease liabilities on the balance sheet for operating leases and also requires additional qualitative and quantitative disclosures about lease arrangements. In March 2019, the FASB issued further guidance in ASU 2019-01, *Leases (Topic 842)*, which provides clarifications to certain lessor transactions and other reporting matters. This guidance will be effective for us beginning January 1, 2020. Early adoption is

permitted. We will adopt this guidance on January 1, 2020, prospectively, and expect to recognize right of use assets and lease liabilities for new contracts recognized as operating leases where we are the lessee.

Cloud Computing - In August 2018, the FASB issued ASU 2018-15, *Intangibles-Goodwill and Other-Internal-Use Software (Subtopic 350-40) Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract* ("ASU 2018-15"), to clarify the guidance on the costs of implementing a cloud computing hosting arrangement that is a service contract. Under ASU 2018-15, the entity is required to follow the guidance in Subtopic 350-40, *Internal-Use Software*, to determine which implementation costs under the service contract to be capitalized as an asset and which costs to expense. ASU 2018-15 is effective for us for the annual periods beginning in 2021 and the interim periods in 2022 on a retrospective or prospective basis and early adoption is permitted. We are currently evaluating the timing of adoption and impact of ASU 2018-15 on our consolidated financial statements and related disclosures.

Financial Instruments (Tables)

6 Months Ended Jun. 30, 2019

Cash and Cash Equivalents [Abstract]

Schedule of Cash and Cash Equivalents

The carrying value of cash and cash equivalents approximate fair value and are as follows (in thousands):

	June 30, 2019	December 31, 2018
As held:		
Cash	$ 168,271	$ 136,642
Money market funds	202,795	143,843
	$ 371,066	$ 280,485
As reported:		
Cash and cash equivalents	$ 308,009	$ 220,728
Restricted cash	63,057	59,757
	$ 371,066	$ 280,485

Restrictions on Cash and Cash Equivalents

Restricted cash consisted of the following (in thousands):

	June 30, 2019	December 31, 2018
Current		
Restricted cash	$ 21,858	$ 25,740
Restricted cash related to PPA Entities	1,848	$ 2,917
Restricted cash, current	$ 23,706	28,657
Non-current		
Restricted cash	$ 2,615	$ 3,246
Restricted cash related to PPA Entities	36,736 [1]	27,854
Restricted cash, non-current	39,351	31,100
	$ 63,057	$ 59,757

[1] Non-current restricted cash related to PPA Entities includes $20.0 million reclassified for certain contingent indemnification for SPDS under the PPA II Project in the form of a letter of credit to SPDS. See *Note 12 - Power Purchase Agreement Programs - PPA II Upgrade of Energy Servers* for additional information.

The carrying value of cash and cash equivalents approximate fair value and are as follows (in thousands):

	June 30, 2019	December 31, 2018
As held:		
Cash	$ 168,271	$ 136,642
Money market funds	202,795	143,843
	$ 371,066	$ 280,485

As reported:		
Cash and cash equivalents	$ 308,009	$ 220,728
Restricted cash	63,057	59,757
	$ 371,066	$ 280,485

Fair Value (Tables)

6 Months Ended
Jun. 30, 2019

Fair Value Disclosures [Abstract]

Fair Value, Assets and Liabilities Measured on Recurring Basis

The tables below sets forth, by level, our financial assets that were accounted for at fair value for the respective periods. The table does not include assets and liabilities that are measured at historical cost or any basis other than fair value (in thousands):

	Fair Value Measured at Reporting Date Using			
June 30, 2019	**Level 1**	**Level 2**	**Level 3**	**Total**
Assets				
Cash equivalents:				
Money market funds	$ 202,795	$ —	$ —	$ 202,795
Interest rate swap agreements	—	12	—	12
	$ 202,795	$ 12	$ —	$ 202,807
Liabilities				
Accrued other current liabilities	$ 1,636	$ —	$ —	$ 1,636
Derivatives:				
Natural gas fixed price forward contracts	—	—	8,769	8,769
Interest rate swap agreements[1]	—	9,158	—	9,158
	$ 1,636	$ 9,158	$ 8,769	$ 19,563

[1]As of June 30, 2019, $0.6 million of the gain on the interest rate swaps accumulated in other comprehensive income (loss) is expected to be reclassified into earnings in the next twelve months.

	Fair Value Measured at Reporting Date Using			
December 31, 2018	**Level 1**	**Level 2**	**Level 3**	**Total**
Assets				
Cash equivalents:				
Money market funds	$ 143,843	$ —	$ —	$ 143,843
Short-term investments	104,350	—	—	104,350
Interest rate swap agreements	—	82	—	82
	$ 248,193	$ 82	$ —	$ 248,275
Liabilities				
Accrued other current liabilities	$ 1,331	$ —	$ —	$ 1,331
Derivatives:				
Natural gas fixed price forward contracts	—	—	9,729	9,729
Interest rate swap agreements	—	3,630	—	3,630
	$ 1,331	$ 3,630	$ 9,729	$ 14,690

Schedule of Natural Gas Forward Contracts

The following table provides the fair value of our natural gas fixed price forward contracts (dollars in thousands):

	June 30, 2019		December 31, 2018	
	Number of Contracts (MMBTU)[2]	Fair Value	Number of Contracts (MMBTU)[2]	Fair Value
Liabilities[1]				
Natural gas fixed price forward contracts (not under hedging relationships)	2,581	$ 8,769	3,096	$ 9,729

[1] Recorded in current liabilities and derivative liabilities in the condensed consolidated balance sheets.

[2] One MMBTU, or one million British Thermal Units, is a traditional unit of energy used to describe the heat value (energy content) of fuels.

Change in Level 3 Financial Liabilities

The changes in the Level 3 financial assets were as follows (in thousands):

	Natural Gas Fixed Price Forward Contracts	Preferred Stock Warrants	Embedded Derivative Liability	Total
Balances at December 31, 2018	$ 9,729	$ —	$ —	$ 9,729
Settlement of natural gas fixed price forward contracts	(1,610)	—	—	(1,610)
Changes in fair value	650	—	—	650
Balances at June 30, 2019	$ 8,769	$ —	$ —	$ 8,769

	Natural Gas Fixed Price Forward Contracts	Preferred Stock Warrants	Embedded Derivative Liability	Total
Balances at December 31, 2017	$ 15,368	$ 9,825	$ 140,771	$ 165,964
Settlement of natural gas fixed price forward contracts	(1,102)	—	—	(1,102)
Changes in fair value	855	(3,271)	9,732	7,316
Balances at June 30, 2018	$ 15,121	$ 6,554	$ 150,503	$ 172,178

Schedule of Fair Values and Carrying Values of Customer Receivables and Debt Instruments

The following table presents the estimated fair values and carrying values of customer receivables and debt instruments (in thousands):

	June 30, 2019		December 31, 2018	
	Net Carrying Value	Fair Value	Net Carrying Value	Fair Value
Customer receivables:				
Customer financing receivables	$ 69,963	$ 52,517	$ 72,676	$ 51,541
Debt instruments:				

Recourse				
LIBOR + 4% term loan due November 2020	2,376	2,458	3,214	3,311
5% convertible promissory note due December 2020	35,576	33,524	34,706	31,546
6% convertible promissory notes due December 2020	271,503	393,395	263,284	353,368
10% notes due July 2024	96,384	96,859	95,555	99,260
Non-recourse				
5.22% senior secured notes due March 2025	—	—	78,566	80,838
7.5% term loan due September 2028	35,532	41,368	36,319	39,892
LIBOR + 5.25% term loan due October 2020	23,661	25,028	23,916	25,441
6.07% senior secured notes due March 2030	81,223	90,136	82,337	85,917
LIBOR + 2.5% term loan due December 2021	121,952	123,046	123,384	123,040

Balance Sheet Components (Tables)

6 Months Ended Jun. 30, 2019

Organization, Consolidation and Presentation of Financial Statements [Abstract]

Inventory, net

The components of inventory consisted of the following (in thousands):

	June 30, 2019	December 31, 2018
Raw materials	$ 42,996	$ 53,273
Work-in-progress	28,313	22,303
Finished goods	33,625	56,900
	$ 104,934	$ 132,476

Prepaid Expense and Other Current Assets

Prepaid expenses and other current assets consisted of the following (in thousands):

	June 30, 2019	December 31, 2018
Government incentives receivable	$ 956	$ 1,001
Prepaid expenses and other current assets	24,132	32,741
	$ 25,088	$ 33,742

Property, Plant and Equipment, Net

Property, plant and equipment, net consisted of the following (in thousands):

	June 30, 2019	December 31, 2018
Energy Servers	$ 431,444	$ 511,485
Computers, software and hardware	19,516	16,536
Machinery and equipment	102,532	99,209
Furniture and fixtures	8,986	4,337
Leasehold improvements	36,092	18,629
Building	40,512	40,512
Construction in progress	9,324	29,084
	648,406	719,792
Less: Accumulated depreciation	(241,796)	(238,378)
	$ 406,610	$ 481,414

Customer Financing Leases, Receivable

The components of investment in sales-type financing leases consisted of the following (in thousands):

	June 30, 2019	December 31, 2018
Total minimum lease payments to be received	$ 96,417	$ 100,816
Less: Amounts representing estimated executing costs	(23,862)	(25,180)
Net present value of minimum lease payments to be received	72,555	75,636
Estimated residual value of leased assets	1,051	1,051
Less: Unearned income	(3,643)	(4,011)
Net investment in sales-type financing leases	69,963	72,676
Less: Current portion	(5,817)	(5,594)
Non-current portion of investment in sales-type financing leases	$ 64,146	$ 67,082

Schedule of Customer Payments from Sales-Type Financing Leases

The future scheduled customer payments from sales-type financing leases were as follows as of June 30, 2019 (in thousands):

	Remainder of 2019	2020	2021	2022	2023	Thereafter
Future minimum lease payments, less interest	$ 2,882	$ 6,022	$ 6,415	$ 6,853	$ 7,310	$ 39,430

Other Long-Term Assets

Other long-term assets consisted of the following (in thousands):

	June 30, 2019	December 31, 2018
Prepaid and other long-term assets	$ 25,364	$ 27,086
Equity investment in PPA II assets	27,809	—
Equity-method investments	6,026	6,046
Long-term deposits	1,776	1,660
	$ 60,975	$ 34,792

Accrued Warranty

Accrued warranty liabilities consisted of the following (in thousands):

	June 30, 2019	December 31, 2018
Product warranty	$ 9,808	$ 10,935
Operations and maintenance services agreements	2,585	8,301
	$ 12,393	$ 19,236

Changes during the current period in the standard product warranty liability were as follows (in thousands):

Balances at December 31, 2018	$ 10,935
Accrued warranty, net	3,202
Warranty expenditures during period	(4,329)

Balances at June 30, 2019	$ 9,808

Accrued Other Current Liabilities

Accrued other current liabilities consisted of the following (in thousands):

	June 30, 2019	December 31, 2018
Liabilities recorded for mandatorily redeemable noncontrolling interest[1]	$ 36,994	$ —
Compensation and benefits	18,180	16,742
Current portion of derivative liabilities	4,848	3,232
Managed services liabilities	4,922	5,091
Accrued installation	6,595	6,859
Sales tax liabilities	1,525	1,700
Interest payable	6,136	4,675
Other	30,522	31,236
	$ 109,722	$ 69,535

[1] During June 30, 2019, we entered into a PPA II upgrade transaction which included a commitment to mandatorily redeem the noncontrolling interest in DSGH by March 31, 2020 of certain installed PPA II Energy Servers, resulting in the reclassification of mandatorily redeemable noncontrolling interest into accrued other current liabilities on the condensed consolidated balance sheet as of June 30, 2019. See *Note 12 - Power Purchase Agreement Programs - PPA II Upgrade of Energy Servers*.

Other Long-Term Liabilities

Accrued other long-term liabilities consisted of the following (in thousands):

	June 30, 2019	December 31, 2018
Delaware grant	$ 10,469	$ 10,469
Managed services liabilities	29,498	30,362
Other	18,450	15,106
	$ 58,417	$ 55,937

Outstanding Loans and Security Agreements (Tables)

Debt Disclosure [Abstract]

Schedule of debt

6 Months Ended

Jun. 30, 2019

The following is a summary of our debt as of June 30, 2019 (in thousands):

	Unpaid Principal Balance	Net Carrying Value			Unused Borrowing Capacity
		Current	Long-Term	Total	
LIBOR + 4% term loan due November 2020	$ 2,429	$ 1,681	$ 695	$ 2,376	$ —
5% convertible promissory note due December 2020	33,104	—	35,576	35,576	—
6% convertible promissory notes due December 2020	296,233	—	271,503	271,503	—
10% notes due July 2024	100,000	14,000	82,384	96,384	—
Total recourse debt	431,766	15,681	390,158	405,839	—
7.5% term loan due September 2028	39,317	2,889	32,643	35,532	—
LIBOR + 5.25% term loan due October 2020	24,262	957	22,704	23,661	—
6.07% senior secured notes due March 2030	82,269	2,803	78,420	81,223	—
LIBOR + 2.5% term loan due December 2021	123,664	3,894	118,058	121,952	—
Letters of Credit due December 2021	—	—	—	—	1,220
Total non-recourse debt	269,512	10,543	251,825	262,368	1,220
Total debt	$ 701,278	$ 26,224	$641,983	$668,207	$ 1,220

The following is a summary of our debt as of December 31, 2018 (in thousands):

	Unpaid Principal Balance	Net Carrying Value			Unused Borrowing Capacity
		Current	Long-Term	Total	
LIBOR + 4% term loan due November 2020	$ 3,286	$ 1,686	$ 1,528	$ 3,214	$ —
5% convertible promissory notes due December 2020	33,104	—	34,706	34,706	—
6% convertible promissory notes due December 2020	296,233	—	263,284	263,284	—
10% notes due July 2024	100,000	7,000	88,555	95,555	—
Total recourse debt	432,623	8,686	388,073	396,759	—
5.22% senior secured term notes due March 2025	79,698	11,994	66,572	78,566	—

7.5% term loan due September 2028	40,538	2,200	34,119	36,319	—
LIBOR + 5.25% term loan due October 2020	24,723	827	23,089	23,916	—
6.07% senior secured notes due March 2030	83,457	2,469	79,868	82,337	—
LIBOR + 2.5% term loan due December 2021	125,456	3,672	119,712	123,384	—
Letters of Credit due December 2021	—	—	—	—	1,220
Total non-recourse debt	353,872	21,162	323,360	344,522	1,220
Total debt	$ 786,495	$ 29,848	$711,433	$741,281	$ 1,220

Schedule of repayment

The following table presents our total outstanding debt's unpaid principal balance repayment schedule as of June 30, 2019 (in thousands):

Remainder of 2019	$ 12,365
2020	379,242
2021	140,334
2022	26,046
2023	29,450
Thereafter	113,841
	$ 701,278

Derivative Financial Instruments (Tables)

6 Months Ended Jun. 30, 2019

Derivative Instruments and Hedging Activities Disclosure [Abstract]

Fair Value Derivatives

The fair values of the derivatives related to interest rate swap agreements applied to two of our PPA companies designated as cash flow hedges as of June 30, 2019 and December 31, 2018 on our consolidated balance sheets were as follows (in thousands):

	June 30, 2019	December 31, 2018
Assets		
Prepaid expenses and other current assets	$ —	$ 42
Other long-term assets	12	40
	$ 12	$ 82
Liabilities		
Accrued other current liabilities	$ 706	$ 4
Derivative liabilities	8,453	3,626
	$ 9,159	$ 3,630

Schedule of Net Investment Hedges in Accumulated Other Comprehensive Income (Loss)

The changes in fair value of the derivative contracts designated as cash flow hedges and the amounts recognized in accumulated other comprehensive income (loss) and in earnings for the three and six months ended June 30, 2019 and 2018 were as follows (in thousands):

	Three Months Ended		Six Months Ended	
	June 30, 2019	June 30, 2018	June 30, 2019	June 30, 2018
Beginning balance	$ 5,692	$ 2,909	$ 3,548	$ 5,853
Loss (gain) recognized in other comprehensive income (loss)	3,460	(982)	5,590	(3,622)
Amounts reclassified from other comprehensive income (loss) to earnings	42	(85)	103	(297)
Net loss (gain) recognized in other comprehensive income (loss)	3,502	(1,067)	5,693	(3,919)
Gain reclassified from other comprehensive income (loss) to earnings	(48)	(71)	(95)	(163)
Ending balance	$ 9,146	$ 1,771	$ 9,146	$ 1,771

Net Loss per Share Attributable to Common Stockholders (Tables)

6 Months Ended

Jun. 30, 2019

Earnings Per Share [Abstract]

Schedule of Earnings Per Share, Basic and Diluted

The following table sets forth the computation of our net loss per share (basic) and net loss per share (diluted) attributable to common stockholders (in thousands, except per share amounts):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Numerator:				
Net loss attributable to Class A and Class B common stockholders	$ (62,216)	$ (45,677)	$(146,657)	$ (63,393)
Denominator:				
Weighted average shares used to compute net loss per share attributable to Class A and Class B common stockholders, basic and diluted	113,622	10,536	112,737	10,470
Net loss per share attributable to Class A and Class B common stockholders, basic and diluted	$ (0.55)	$ (4.34)	$ (1.30)	$ (6.05)

Schedule of Antidilutive Securities Excluded from Computation of Diluted Net Loss Per Share

The following common stock equivalents were excluded from the computation of net loss per share attributable to common shareholders (diluted) for the periods presented as their inclusion would have been antidilutive (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Convertible and non-convertible redeemable preferred stock and convertible notes	27,253	85,945	27,253	85,945
Stock options to purchase common stock	6,480	2,148	5,811	2,148
Convertible redeemable preferred stock warrants	—	60	—	60
Convertible redeemable common stock warrants	—	312	—	312
	33,733	88,465	33,064	88,465

Stock-Based Compensation and Employee Benefit Plan (Tables)

6 Months Ended

Jun. 30, 2019

Compensation Related Costs [Abstract]

Stock Option and RSU Activity

A summary of stock option activity under our stock plans during the six months ended June 30, 2019 is as follows:

	Outstanding Options			
	Number of Shares	Weighted Average Exercise Price	Remaining Contractual Life (Years)	Aggregate Intrinsic Value
				(in thousands)
Balances at December 31, 2018	14,558,420	$ 25.93	6.78	$ 3,084
Granted	981,105	11.44		
Exercised	(328,026)	4.28		
Cancelled	(298,490)	25.37		
Balances at June 30, 2019	14,913,009	25.47	6.53	2,557
Vested and expected to vest at June 30, 2019	14,541,060	25.64	6.47	2,523
Exercisable at June 30, 2019	8,716,781	28.77	4.96	1,764

RSU Activity and Related Information

A summary of our restricted stock units ("RSUs") activity and related information during the six months ended June 30, 2019 is as follows:

	Number of Awards Outstanding	Weighted Average Grant Date Fair Value
Unvested Balance at December 31, 2018	16,784,800	$ 18.74
Granted	2,966,254	12.36
Vested	(3,504,098)	20.51
Forfeited	(316,053)	17.38
Unvested Balance at June 30, 2019	15,930,903	17.19

Weighted-Average Valuation Assumptions

We used the following weighted-average assumptions in applying the Black-Scholes valuation model:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Risk-free interest rate	2.4% - 2.5%	2.7% - 2.8%	2.4% - 2.6%	2.5% - 2.8%
Expected term (years)	6.4 - 6.7	6.2 - 6.7	6.4 - 6.7	6.2 - 6.7
Expected dividend yield	—	—	—	—

Expected volatility	47.5%	54.6%	47.5% - 50.2%	54.6% - 55.1%

Employee and Non-Employee Stock-Based Compensation Expense

The following table summarizes the components of stock-based compensation expense in the consolidated statements of operations (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	**2018**	**2019**	**2018**
Cost of revenue	$ 10,392	$ 1,971	$ 24,764	$ 3,869
Research and development	12,218	1,739	26,448	3,376
Sales and marketing	8,935	1,214	20,447	2,166
General and administrative	19,673	2,894	43,441	6,362
Total stock-based compensation	$ 51,218	$ 7,818	$115,100	$ 15,773

Power Purchase Agreement Programs (Tables)

Organization, Consolidation and Presentation of Financial Statements [Abstract]

Schedule of Variable Interest Entities

6 Months Ended Jun. 30, 2019

The following table shows Bloom Energy's stand-alone, the PPA Entities combined and these consolidated balances as of June 30, 2019, and December 31, 2018 (in thousands):

	June 30, 2019			December 31, 2018		
	Bloom	PPA Entities	Consolidated	Bloom	PPA Entities	Consolidated
Assets						
Current assets	$558,458	$ 33,826	$ 592,284	$646,350	$ 26,231	$ 672,581
Long-term assets	177,198	453,097	630,295	220,399	496,688	717,087
Total assets	$735,656	$486,923	$ 1,222,579	$866,749	$522,919	$ 1,389,668
Liabilities						
Current liabilities	$272,606	$ 40,257	$ 312,863	$246,866	$ 2,952	$ 249,818
Current portion of debt	15,680	10,544	26,224	8,686	21,162	29,848
Long-term liabilities	233,880	18,837	252,717	293,739	14,120	307,859
Long-term portion of debt	390,157	251,826	641,983	388,073	323,360	711,433
Total liabilities	$912,323	$321,464	$ 1,233,787	$937,364	$361,594	$ 1,298,958

The aggregate carrying values of the PPA Entities' assets and liabilities in the condensed consolidated balance sheets, after eliminations of intercompany transactions and balances, were as follows (in thousands):

	June 30, 2019 [1]	December 31, 2018
Assets		
Current assets:		
Cash and cash equivalents	$ 18,043	$ 5,295
Restricted cash	1,848	2,917
Accounts receivable	6,533	7,516
Customer financing receivable	5,817	5,594

Prepaid expenses and other current assets	1,585	4,909
Total current assets	33,826	26,231
Property and equipment, net	321,886	399,060
Customer financing receivable, non-current	64,146	67,082
Restricted cash	36,736	27,854
Other long-term assets	30,329	2,692
Total assets	$ 486,923	$ 522,919
Liabilities		
Current liabilities:		
Accounts payable	$ 443	$ 724
Accrued other current liabilities	39,028	1,442
Deferred revenue and customer deposits	786	786
Current portion of debt	10,544	21,162
Total current liabilities	50,801	24,114
Derivative liabilities, net of current portion	8,453	3,626
Deferred revenue, net of current portion	8,306	8,696
Long-term portion of debt	251,826	323,360
Other long-term liabilities	2,078	1,798
Total liabilities	$ 321,464	$ 361,594

[1] These amounts include PPA II financial statement balances. See discussion above.

The table below shows the details of the five continuing Investment Companies and their cumulative activities from inception to the periods indicated (dollars in thousands):

	PPA II	PPA IIIa	PPA IIIb	PPA IV	PPA V
Overview:					
Maximum size of installation (in megawatts)	30	10	6	21	40
Installed size (in megawatts)	20 [4]	10	5	19	37
Term of power purchase agreements (years)	21	15	15	15	15
First system installed	Jun-12	Feb-13	Aug-13	Sep-14	Jun-15
Last system installed	Nov-13	Jun-14	Jun-15	Mar-16	Dec-16
Income (loss) and tax benefits allocation to Equity Investor	99%	99%	99%	90%	99%
Cash allocation to Equity Investor	99%	99%	99%	90%	90%
Income (loss), tax and cash allocations to Equity Investor after the flip date	5%	5%	5%	No flip	No flip
Equity Investor [1]	Credit Suisse	US Bank	US Bank	Exelon Corporation	Exelon Corporation
Put option date [2]	March 31, 2020	1st anniversary of flip point	1st anniversary of flip point	N/A	N/A
Company cash contributions	$ 22,442	$ 32,223	$ 22,658	$ 11,669	$ 27,932
Company non-cash contributions [3]	$ —	$ 8,655	$ 2,082	$ —	$ —
Equity Investor cash contributions	$ 139,993	$ 36,967	$ 20,152	$ 84,782	$ 227,344
Debt financing	$ 144,813	$ 44,968	$ 28,676	$ 99,000	$ 131,237
Cumulative Activity as of June 30, 2019:					
Distributions to Equity Investor	$ 138,602	$ 4,430	$ 2,007	$ 6,420	$ 69,099

Debt repayment—principal	$ 144,813	$ 5,651	$ 4,414	$ 16,731	$ 7,572
Cumulative Activity as of December 31, 2018:					
Distributions to Equity Investor	$ 116,942	$ 4,063	$ 1,807	$ 4,568	$ 66,745
Debt repayment—principal	$ 65,114	$ 4,431	$ 3,953	$ 15,543	$ 5,780

[1] Investor name represents ultimate parent of subsidiary financing the project.

[2] Investor right on the certain date, upon giving us advance written notice, to sell the membership interests to us or resign or withdraw from the investment partnership.

[3] Non-cash contributions consisted of warrants that were issued by us to respective lenders to each PPA Entity, as required by such entity's credit agreements. The corresponding values are amortized using the effective interest method over the debt term.

[4] Installed base decreased from March 31, 2019 due to the repurchase of 10 megawatts of our Energy Servers during June 2019 under the PPA II Project. See disclosures above.

Commitments and Contingencies (Tables)	6 Months Ended Jun. 30, 2019
Commitments and Contingencies Disclosure [Abstract]	
Schedule of Future Minimum Rental Payments for Operating Leases	At June 30, 2019, future minimum lease payments under operating leases were as follows (in thousands):

Remainder of 2019	$ 8,410
2020	16,342
2021	13,683
2022	12,979
2023	12,532
Thereafter	48,297
	$ 112,243

Related Party Transactions (Tables)

Related Party Transactions [Abstract]

Schedule of Related Party Transactions

6 Months Ended Jun. 30, 2019

Our results of operations included the following related party transactions (in thousands):

	Six Months Ended June 30,	
	2019	2018
Total revenue from related parties	$ 93,204	$ 30,925
Consulting expenses paid to related parties (included in general and administrative expense)	102	102
Interest expense on debt to related parties	3,218	5,299

The following is a summary of our debt and convertible notes from investors considered to be related parties as of June 30, 2019 (in thousands):

	Unpaid Principal Balance	Net Carrying Value		
		Current	Long-Term	Total
Recourse debt from related parties:				
6% convertible promissory notes due December 2020 from related parties	$ 27,734	$ —	$ 27,734	$ 27,734
Non-recourse debt from related parties:				
7.5% term loan due September 2028 from related parties	39,317	2,889	32,643	35,532
Total debt from related parties	$ 67,051	$ 2,889	$ 60,377	$ 63,266

The following is a summary of our debt and convertible notes from investors considered to be related parties as of December 31, 2018 (in thousands):

	Unpaid Principal Balance	Net Carrying Value		
		Current	Long-Term	Total
Recourse debt from related parties:				
6% convertible promissory notes due December 2020 from related parties	$ 27,734	$ —	$ 27,734	$ 27,734
Non-recourse debt from related parties:				
7.5% term loan due September 2028 from related parties	40,538	2,200	34,119	36,319
Total debt from related parties	$ 68,272	$ 2,200	$ 61,853	$ 64,053

Nature of Business and Liquidity - Liquidity (Additional Information) (Details) - IPO $ / shares in Units, $ in Millions	1 Months Ended Jul. 31, 2018 USD ($) $ / shares shares
Subsidiary, Sale of Stock [Line Items]	
Shares sold in offering (in shares) | shares	20,700,000
Offering price per share (in dollars per share) | $ / shares	$ 15.00
Net proceeds from stock offering | $	$ 282.3

Basis of Presentation and Significant Accounting Policies - Concentration of Risk (Details)	3 Months Ended		6 Months Ended		12 Months Ended
	Jun. 30, 2019	Jun. 30, 2018	Jun. 30, 2019	Jun. 30, 2018	Dec. 31, 2018
Accounts Receivable | Customer Concentration Risk | Customer One					
Concentration Risk [Line Items]					
Concentration risk, percentage			38.20%		66.80%
Accounts Receivable | Customer Concentration Risk | Customer Two					
Concentration Risk [Line Items]					
Concentration risk, percentage			13.40%		
Sales Revenue, Net | Customer Concentration Risk | Customer One					
Concentration Risk [Line Items]					
Concentration risk, percentage	17.00%		20.00%		
Sales Revenue, Net | Customer Concentration Risk | Customer Two					
Concentration Risk [Line Items]					
Concentration risk, percentage	52.00%	45.00%	40.00%	49.00%	
Sales Revenue, Net | Customer Concentration Risk | Customer Three					
Concentration Risk [Line Items]					
Concentration risk, percentage	2.00%		12.00%		
Asia Pacific | Sales Revenue, Net | Geographic Concentration Risk					
Concentration Risk [Line Items]					
Concentration risk, percentage	17.70%	0.90%	20.60%	9.10%	

Financial Instruments - Cash and Cash Equivalents and Restricted Cash (Details) - USD ($) $ in Thousands		Jun. 30, 2019	Dec. 31, 2018	Jun. 30, 2018	Dec. 31, 2017
Debt Securities, Available-for-sale [Line Items]					
Cash and cash equivalents	[1]	$ 308,009	$ 220,728		
Cash, cash equivalents and restricted cash		371,066	280,485	$ 149,872	$ 180,612
Fair Value					
Debt Securities, Available-for-sale [Line Items]					
Cash and cash equivalents		308,009	220,728		
Restricted cash		63,057	59,757		
Cash, cash equivalents and restricted cash		371,066	280,485		
Fair Value | Cash					
Debt Securities, Available-for-sale [Line Items]					
Cash, cash equivalents and restricted cash		168,271	136,642		
Fair Value | Money market funds					
Debt Securities, Available-for-sale [Line Items]					
Cash, cash equivalents and restricted cash		$ 202,795	$ 143,843		

[1] We have variable interest entities which represent a portion of the consolidated balances are recorded within the "Cash and cash equivalents," "Restricted cash," "Accounts receivable," "Customer financing receivable," "Prepaid expenses and other current assets," "Property and equipment, net," "Customer financing receivable, non-current," "Restricted cash, non-current," "Other long-term assets," "Accounts payable," "Accrued other current liabilities," "Deferred revenue and customer deposits," "Current portion of non-recourse debt from related parties," "Derivative liabilities, net of current portion," "Deferred revenue and customer deposits, net of current portion," "Long-term portion of non-recourse debt," and "Other long-term liabilities" financial statement line items in the Condensed Consolidated Balance Sheets (see Note 12 - Power Purchase Agreement Programs).

Financial Instruments - Restricted Cash (Details) - USD ($)		Jun. 30, 2019	Dec. 31, 2018
Variable Interest Entity [Line Items]			
Restricted cash, current	[1]	$ 23,706,000	$ 28,657,000
Restricted cash, non-current	[1]	39,351,000	31,100,000
Total restricted cash		63,057,000	59,757,000
Consolidated Entity, Excluding VIEs			
Variable Interest Entity [Line Items]			
Restricted cash, current		21,858,000	25,740,000
Restricted cash, non-current		2,615,000	3,246,000
Variable Interest Entity, Primary Beneficiary			
Variable Interest Entity [Line Items]			
Restricted cash, current		1,848,000	2,917,000
Restricted cash, non-current		36,736,000	$ 27,854,000
PPA II | Variable Interest Entity, Primary Beneficiary			
Variable Interest Entity [Line Items]			
Restricted cash, non-current		$ 20,000,000.0	

[1] We have variable interest entities which represent a portion of the consolidated balances are recorded within the "Cash and cash equivalents," "Restricted cash," "Accounts receivable," "Customer financing receivable," "Prepaid expenses and other current assets," "Property and equipment, net," "Customer financing receivable, non-current," "Restricted cash, non-current," "Other long-term assets," "Accounts payable," "Accrued other current liabilities," "Deferred revenue and customer deposits," "Current portion of non-recourse debt from related parties," "Derivative liabilities, net of current portion," "Deferred revenue and customer deposits, net of current portion," "Long-term portion of non-recourse debt," and "Other long-term liabilities" financial statement line items in the Condensed Consolidated Balance Sheets (see Note 12 - Power Purchase Agreement Programs).

Financial Instruments - Short-Term Investments (Details) - USD ($) $ in Thousands	Jun. 30, 2019	Dec. 31, 2018
Cash and Cash Equivalents [Abstract]		
Short-term investments	$ 0	$ 104,350

Fair Value - Financial Assets and Liabilities Measured at Fair Value (Details) - USD ($) $ in Thousands	6 Months Ended	
	Jun. 30, 2019	Dec. 31, 2018
Assets		
Total assets	$ 202,807	$ 248,275
Liabilities		
Accrued other current liabilities	1,636	1,331
Total liabilities	19,563	14,690
Cash flow hedge gain to be reclassified within 12 months	600	
Money market funds		
Assets		
Cash equivalents:	202,795	143,843
Short-term investments		
Assets		
Short-term investments		104,350
Natural gas fixed price forward contracts		
Liabilities		
Derivatives:	8,769	9,729
Interest rate swap agreements		
Assets		
Interest rate swap agreements	12	82
Liabilities		
Derivatives:	9,158	3,630
Level 1		
Assets		
Total assets	202,795	248,193
Liabilities		
Accrued other current liabilities	1,636	1,331
Total liabilities	1,636	1,331
Level 1 | Money market funds		
Assets		
Cash equivalents:	202,795	143,843
Level 1 | Short-term investments		
Assets		
Short-term investments		104,350
Level 1 | Natural gas fixed price forward contracts		
Liabilities		
Derivatives:	0	0
Level 1 | Interest rate swap agreements		
Assets		
Interest rate swap agreements	0	0
Liabilities		

Derivatives:	0	0
Level 2		
Assets		
Total assets	12	82
Liabilities		
Accrued other current liabilities	0	0
Total liabilities	9,158	3,630
Level 2 | Money market funds		
Assets		
Cash equivalents:	0	0
Level 2 | Short-term investments		
Assets		
Short-term investments		0
Level 2 | Natural gas fixed price forward contracts		
Liabilities		
Derivatives:	0	0
Level 2 | Interest rate swap agreements		
Assets		
Interest rate swap agreements	12	82
Liabilities		
Derivatives:	9,158	3,630
Level 3		
Assets		
Total assets	0	0
Liabilities		
Accrued other current liabilities	0	0
Total liabilities	8,769	9,729
Level 3 | Money market funds		
Assets		
Cash equivalents:	0	0
Level 3 | Short-term investments		
Assets		
Short-term investments		0
Level 3 | Natural gas fixed price forward contracts		
Liabilities		
Derivatives:	8,769	9,729
Level 3 | Interest rate swap agreements		
Assets		
Interest rate swap agreements	0	0
Liabilities		
Derivatives:	$ 0	$ 0

Fair Value - Natural Gas Derivatives (Details) - Not designated as hedging instrument - Natural gas forward contract MMBTU in Thousands, $ in Thousands	6 Months Ended	12 Months Ended
	Jun. 30, 2019 USD ($) MMBTU	Dec. 31, 2018 USD ($) MMBTU
Derivatives, Fair Value [Line Items]		
Number of Contracts (MMBTU) | MMBTU	2,581	3,096
Derivative liability | $	$ 8,769	$ 9,729

Fair Value - Additional Information (Details) - USD ($)	3 Months Ended		6 Months Ended						
	Jun. 30, 2019	Jun. 30, 2018	Jun. 30, 2019	Jun. 30, 2018	Jun. 30, 2017	Sep. 30, 2016	Sep. 10, 2016	Jan. 29, 2016	Dec. 15, 2015
Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis [Line Items]									
Cost of revenue	$ 192,109,000	$ 136,110,000	$ 377,061,000	$ 261,805,000					
Not designated as hedging instrument | Natural gas forward contract									
Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis [Line Items]									
Gain (loss) on derivative	(1,100,000)	800,000	(700,000)	(100,000)					
Gain on the settlement of contracts	$ 1,100,000	$ 1,200,000	$ 1,600,000	$ 2,300,000					
Convertible promissory notes | Convertible Promissory Notes due December 2020, Recourse									
Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis [Line Items]									
Debt face amount							$ 75,000,000	$ 25,000,000	$ 160,000,000
Interest rate percentage	6.00%		6.00%						
Convertible stock price (in dollars per share)	$ 11.25		$ 11.25				$ 20.61		$ 11.25
Embedded derivative liability	$ 177,200,000		$ 177,200,000				$ 177,200,000		
Affiliated entity | Convertible promissory notes | Convertible Promissory Notes due December 2020, Recourse									
Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis [Line Items]									
Debt face amount						$ 260,000,000			
Interest rate percentage					6.00%	5.00%			
Energy Servers, Change In Useful Lives									
Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis [Line Items]									
Cost of revenue	8,100,000								
Diamond State Generation Partners, LLC									
Fair Value, Assets and Liabilities Measured on									

Recurring and Nonrecurring Basis [Line Items]		
Equity method investments, fair value	$ 27,800,000	$ 27,800,000

Fair Value - Change in Level 3 Financial Assets (Details) - USD ($) $ in Thousands	6 Months Ended	
	Jun. 30, 2019	Jun. 30, 2018
Fair Value, Liabilities Measured on Recurring Basis, Unobservable Input Reconciliation, Calculation [Roll Forward]		
Balance	$ 9,729	$ 165,964
Settlement of natural gas fixed price forward contracts	(1,610)	(1,102)
Changes in fair value	650	7,316
Balance	8,769	172,178
Natural gas fixed price forward contract		
Fair Value, Liabilities Measured on Recurring Basis, Unobservable Input Reconciliation, Calculation [Roll Forward]		
Balance	9,729	15,368
Settlement of natural gas fixed price forward contracts	(1,610)	(1,102)
Changes in fair value	650	855
Balance	8,769	15,121
Preferred stock warrants		
Fair Value, Liabilities Measured on Recurring Basis, Unobservable Input Reconciliation, Calculation [Roll Forward]		
Balance	0	9,825
Changes in fair value	0	(3,271)
Balance	0	6,554
Embedded Derivative Liability		
Fair Value, Liabilities Measured on Recurring Basis, Unobservable Input Reconciliation, Calculation [Roll Forward]		
Balance	0	140,771
Changes in fair value	0	9,732
Balance	$ 0	$ 150,503

Fair Value - Estimated Fair Values and Carrying Values for Customer Receivables and Debt Instruments (Details) - USD ($) $ in Thousands	Jun. 30, 2019	Dec. 31, 2018
Notes due July 2024, Recourse		
Fair Value, Balance Sheet Grouping, Financial Statement Captions [Line Items]		
Interest rate percentage	10.00%	
Senior secured notes | Senior Secured Notes due March 2025, Non-Recourse | Net Carrying Value		
Fair Value, Balance Sheet Grouping, Financial Statement Captions [Line Items]		
Debt Instrument	$ 0	$ 78,566
Senior secured notes | Senior Secured Notes due March 2025, Non-Recourse | Fair Value		
Fair Value, Balance Sheet Grouping, Financial Statement Captions [Line Items]		
Debt Instrument	0	80,838
Senior secured notes | Senior Secured Notes due March 2030, Non-Recourse | Net Carrying Value		
Fair Value, Balance Sheet Grouping, Financial Statement Captions [Line Items]		
Debt Instrument	81,223	82,337
Senior secured notes | Senior Secured Notes due March 2030, Non-Recourse | Fair Value		
Fair Value, Balance Sheet Grouping, Financial Statement Captions [Line Items]		
Debt Instrument	90,136	85,917
Term loan | Term Loan due November 2020, Recourse | Net Carrying Value		
Fair Value, Balance Sheet Grouping, Financial Statement Captions [Line Items]		
Debt Instrument	2,376	3,214
Term loan | Term Loan due November 2020, Recourse | Fair Value		
Fair Value, Balance Sheet Grouping, Financial Statement Captions [Line Items]		
Debt Instrument	2,458	3,311
Term loan | Term Loan due September 2028, Non-Recourse | Net Carrying Value		
Fair Value, Balance Sheet Grouping, Financial Statement Captions [Line Items]		
Debt Instrument	35,532	36,319
Term loan | Term Loan due September 2028, Non-Recourse | Fair Value		
Fair Value, Balance Sheet Grouping, Financial Statement Captions [Line Items]		
Debt Instrument	41,368	39,892
Term loan | Senior Secured Notes due October 2020, Non-Recourse | Net Carrying Value		
Fair Value, Balance Sheet Grouping, Financial Statement Captions [Line Items]		
Debt Instrument	23,661	23,916
Term loan | Senior Secured Notes due October 2020, Non-Recourse | Fair Value		
Fair Value, Balance Sheet Grouping, Financial Statement Captions [Line Items]		
Debt Instrument	25,028	25,441
Term loan | Term Loan due December 2021, Non-Recourse | Net Carrying Value		
Fair Value, Balance Sheet Grouping, Financial Statement Captions [Line Items]		
Debt Instrument	121,952	123,384

Term loan | Term Loan due December 2021, Non-Recourse | Fair Value		
Fair Value, Balance Sheet Grouping, Financial Statement Captions [Line Items]		
Debt Instrument	$ 123,046	123,040
Convertible promissory notes | Convertible Promissory Notes due December 2019 and 2020, Recourse | Net Carrying Value		
Fair Value, Balance Sheet Grouping, Financial Statement Captions [Line Items]		
Interest rate percentage	5.00%	
Debt Instrument	$ 35,576	34,706
Convertible promissory notes | Convertible Promissory Notes due December 2019 and 2020, Recourse | Fair Value		
Fair Value, Balance Sheet Grouping, Financial Statement Captions [Line Items]		
Debt Instrument	33,524	31,546
Convertible promissory notes | Convertible Promissory Notes One due December 2020 | Net Carrying Value		
Fair Value, Balance Sheet Grouping, Financial Statement Captions [Line Items]		
Debt Instrument	271,503	263,284
Convertible promissory notes | Convertible Promissory Notes One due December 2020 | Fair Value		
Fair Value, Balance Sheet Grouping, Financial Statement Captions [Line Items]		
Debt Instrument	393,395	353,368
Notes | Notes due July 2024, Recourse | Net Carrying Value		
Fair Value, Balance Sheet Grouping, Financial Statement Captions [Line Items]		
Debt Instrument	96,384	95,555
Notes | Notes due July 2024, Recourse | Fair Value		
Fair Value, Balance Sheet Grouping, Financial Statement Captions [Line Items]		
Debt Instrument	96,859	99,260
Customer financing receivables | Net Carrying Value		
Fair Value, Balance Sheet Grouping, Financial Statement Captions [Line Items]		
Customer financing receivables	69,963	72,676
Customer financing receivables | Fair Value		
Fair Value, Balance Sheet Grouping, Financial Statement Captions [Line Items]		
Customer financing receivables	$ 52,517	$ 51,541
PPA II | Senior secured notes | Senior Secured Notes due March 2025, Non-Recourse		
Fair Value, Balance Sheet Grouping, Financial Statement Captions [Line Items]		
Interest rate percentage	5.22%	
PPA IIIa | Term loan | Term Loan due September 2028, Non-Recourse		
Fair Value, Balance Sheet Grouping, Financial Statement Captions [Line Items]		
Interest rate percentage	7.50%	
PPA IV | Senior secured notes | Senior Secured Notes due March 2030, Non-Recourse		
Fair Value, Balance Sheet Grouping, Financial Statement Captions [Line Items]		
Interest rate percentage	6.07%	
Affiliated entity | Term Loan due November 2020, Recourse		
Fair Value, Balance Sheet Grouping, Financial Statement Captions [Line Items]		
Interest rate percentage	4.00%	
Affiliated entity | Senior Secured Notes due October 2020, Non-Recourse		

Fair Value, Balance Sheet Grouping, Financial Statement Captions [Line Items]	
Interest rate percentage	5.25%
Affiliated entity | Term Loan due December 2021, Non-Recourse	
Fair Value, Balance Sheet Grouping, Financial Statement Captions [Line Items]	
Interest rate percentage	2.50%
Affiliated entity | Convertible promissory notes | Convertible Promissory Notes One due December 2020 | Net Carrying Value	
Fair Value, Balance Sheet Grouping, Financial Statement Captions [Line Items]	
Interest rate percentage	6.00%

Balance Sheet Components - Inventories, Net (Details) - USD ($) $ in Thousands	Jun. 30, 2019	Dec. 31, 2018
Organization, Consolidation and Presentation of Financial Statements [Abstract]		
Raw materials	$ 42,996	$ 53,273
Work-in-progress	28,313	22,303
Finished goods	33,625	56,900
Inventory, net	$ 104,934	$ 132,476

Balance Sheet Components - Prepaid Expense and Other Current Assets (Details) - USD ($) $ in Thousands	Jun. 30, 2019	Dec. 31, 2018
Organization, Consolidation and Presentation of Financial Statements [Abstract]		
Government incentives receivable	$ 956	$ 1,001
Prepaid expenses and other current assets	24,132	32,741
Total	[1] $ 25,088	$ 33,742

[1] We have variable interest entities which represent a portion of the consolidated balances are recorded within the "Cash and cash equivalents," "Restricted cash," "Accounts receivable," "Customer financing receivable," "Prepaid expenses and other current assets," "Property and equipment, net," "Customer financing receivable, non-current," "Restricted cash, non-current," "Other long-term assets," "Accounts payable," "Accrued other current liabilities," "Deferred revenue and customer deposits," "Current portion of non-recourse debt from related parties," "Derivative liabilities, net of current portion," "Deferred revenue and customer deposits, net of current portion," "Long-term portion of non-recourse debt," and "Other long-term liabilities" financial statement line items in the Condensed Consolidated Balance Sheets (see Note 12 - Power Purchase Agreement Programs).

Balance Sheet Components - Property, Plant and Equipment (Details) - USD ($) $ in Thousands		Jun. 30, 2019	Dec. 31, 2018
Property, Plant and Equipment [Line Items]			
Property, plant and equipment, gross		$ 648,406	$ 719,792
Less: Accumulated depreciation		(241,796)	(238,378)
Property, plant and equipment, net	[1]	406,610	481,414
Energy Servers			
Property, Plant and Equipment [Line Items]			
Property, plant and equipment, gross		431,444	511,485
Computers, software and hardware			
Property, Plant and Equipment [Line Items]			
Property, plant and equipment, gross		19,516	16,536
Machinery and equipment			
Property, Plant and Equipment [Line Items]			
Property, plant and equipment, gross		102,532	99,209
Furniture and fixtures			
Property, Plant and Equipment [Line Items]			
Property, plant and equipment, gross		8,986	4,337
Leasehold improvements			
Property, Plant and Equipment [Line Items]			
Property, plant and equipment, gross		36,092	18,629
Building			
Property, Plant and Equipment [Line Items]			
Property, plant and equipment, gross		40,512	40,512
Construction in progress			
Property, Plant and Equipment [Line Items]			
Property, plant and equipment, gross		$ 9,324	$ 29,084

[1] We have variable interest entities which represent a portion of the consolidated balances are recorded within the "Cash and cash equivalents," "Restricted cash," "Accounts receivable," "Customer financing receivable," "Prepaid expenses and other current assets," "Property and equipment, net," "Customer financing receivable, non-current," "Restricted cash, non-current," "Other long-term assets," "Accounts payable," "Accrued other current liabilities," "Deferred revenue and customer deposits," "Current portion of non-recourse debt from related parties," "Derivative liabilities, net of current portion," "Deferred revenue and customer deposits, net of current portion," "Long-term portion of non-recourse debt," and "Other long-term liabilities" financial statement line items in the Condensed Consolidated Balance Sheets (see Note 12 - Power Purchase Agreement Programs).

Balance Sheet Components - Property Plant and Equipment, Net (Additional Information) (Details) - USD ($) $ in Thousands	3 Months Ended		6 Months Ended		
	Jun. 30, 2019	Jun. 30, 2018	Jun. 30, 2019	Jun. 30, 2018	Dec. 31, 2018
Property Subject to or Available for Operating Lease [Line Items]					
Decrease in property plant and equipment			$ (19,800)		
Depreciation and Amortization			31,023	$ 21,554	
Cost of revenue	$ 192,109	$ 136,110	377,061	261,805	
Equity-method investments	6,026		6,026		$ 6,046
Property subject to operating lease					
Property Subject to or Available for Operating Lease [Line Items]					
Property, plant and equipment	397,500		397,500		397,500
Accumulated depreciation	90,200		90,200		$ 77,400
Property, Plant and Equipment					
Property Subject to or Available for Operating Lease [Line Items]					
Depreciation and Amortization	6,400	$ 6,400	$ 12,700	$ 12,700	
Energy Servers, Change In Useful Lives					
Property Subject to or Available for Operating Lease [Line Items]					
Cost of revenue	8,100				
Write Off Of Energy Servers					
Property Subject to or Available for Operating Lease [Line Items]					
Cost of revenue	$ 25,600				

Balance Sheet Components - Customer Financing Leases Receivable (Details) - USD ($) $ in Thousands	Jun. 30, 2019	Dec. 31, 2018
Organization, Consolidation and Presentation of Financial Statements [Abstract]		
Total minimum lease payments to be received	$ 96,417	$ 100,816
Less: Amounts representing estimated executing costs	(23,862)	(25,180)
Net present value of minimum lease payments to be received	72,555	75,636
Estimated residual value of leased assets	1,051	1,051
Less: Unearned income	(3,643)	(4,011)
Net investment in sales-type financing leases	69,963	72,676
Less: Current portion	[1] (5,817)	(5,594)
Non-current portion of investment in sales-type financing leases	[1] $ 64,146	$ 67,082

[1] We have variable interest entities which represent a portion of the consolidated balances are recorded within the "Cash and cash equivalents," "Restricted cash," "Accounts receivable," "Customer financing receivable," "Prepaid expenses and other current assets," "Property and equipment, net," "Customer financing receivable, non-current," "Restricted cash, non-current," "Other long-term assets," "Accounts payable," "Accrued other current liabilities," "Deferred revenue and customer deposits," "Current portion of non-recourse debt from related parties," "Derivative liabilities, net of current portion," "Deferred revenue and customer deposits, net of current portion," "Long-term portion of non-recourse debt," and "Other long-term liabilities" financial statement line items in the Condensed Consolidated Balance Sheets (see Note 12 - Power Purchase Agreement Programs).

Balance Sheet Components - Future Scheduled Customer Payments (Details) $ in Thousands	Jun. 30, 2019 USD ($)
Capital Leases, Future Minimum Payments Receivable, Fiscal Year Maturity [Abstract]	
Remainder of 2019	$ 2,882
2020	6,022
2021	6,415
2022	6,853
2023	7,310
Thereafter	$ 39,430

Balance Sheet Components - Other Long-Term Assets (Details) - USD ($) $ in Thousands		Jun. 30, 2019	Dec. 31, 2018
Investment [Line Items]			
Prepaid and other long-term assets		$ 25,364	$ 27,086
Equity-method investments		6,026	6,046
Long-term deposits		1,776	1,660
Other long-term assets	[1]	60,975	34,792
Diamond State Generation Partners, LLC			
Investment [Line Items]			
Equity-method investments		$ 27,809	$ 0

[1] We have variable interest entities which represent a portion of the consolidated balances are recorded within the "Cash and cash equivalents," "Restricted cash," "Accounts receivable," "Customer financing receivable," "Prepaid expenses and other current assets," "Property and equipment, net," "Customer financing receivable, non-current," "Restricted cash, non-current," "Other long-term assets," "Accounts payable," "Accrued other current liabilities," "Deferred revenue and customer deposits," "Current portion of non-recourse debt from related parties," "Derivative liabilities, net of current portion," "Deferred revenue and customer deposits, net of current portion," "Long-term portion of non-recourse debt," and "Other long-term liabilities" financial statement line items in the Condensed Consolidated Balance Sheets (see Note 12 - Power Purchase Agreement Programs).

Balance Sheet Components - Accrued Warranty (Details) - USD ($) $ in Thousands	Jun. 30, 2019	Dec. 31, 2018
Organization, Consolidation and Presentation of Financial Statements [Abstract]		
Product warranty	$ 9,808	$ 10,935
Operations and maintenance services agreements	2,585	8,301
Standard and Extended Product Warranty Accrual	$ 12,393	$ 19,236

Balance Sheet Components - Standard Product Warranty Liability (Details) $ in Thousands	6 Months Ended Jun. 30, 2019 USD ($)
Movement in Standard Product Warranty Accrual [Roll Forward]	
Accrued warranty balance	$ 10,935
Accrued warranty, net	3,202
Warranty expenditures during period	(4,329)
Accrued warranty balance	$ 9,808

Balance Sheet Components - Accrued Other Current Liabilities (Details) - USD ($) $ in Thousands	Jun. 30, 2019	Dec. 31, 2018
Organization, Consolidation and Presentation of Financial Statements [Abstract]		
Liabilities recorded for mandatory redeemable noncontrolling interest	$ 36,994	$ 0
Compensation and benefits	18,180	16,742
Current portion of derivative liabilities	4,848	3,232
Managed services liabilities	4,922	5,091
Accrued installation	6,595	6,859
Sales tax liabilities	1,525	1,700
Interest payable	6,136	4,675
Other	30,522	31,236
Accrued other current liabilities	[1] $ 109,722	$ 69,535

[1] We have variable interest entities which represent a portion of the consolidated balances are recorded within the "Cash and cash equivalents," "Restricted cash," "Accounts receivable," "Customer financing receivable," "Prepaid expenses and other current assets," "Property and equipment, net," "Customer financing receivable, non-current," "Restricted cash, non-current," "Other long-term assets," "Accounts payable," "Accrued other current liabilities," "Deferred revenue and customer deposits," "Current portion of non-recourse debt from related parties," "Derivative liabilities, net of current portion," "Deferred revenue and customer deposits, net of current portion," "Long-term portion of non-recourse debt," and "Other long-term liabilities" financial statement line items in the Condensed Consolidated Balance Sheets (see Note 12 - Power Purchase Agreement Programs).

Balance Sheet Components - Other Long-Term Liabilities (Details) - USD ($) $ in Thousands	Jun. 30, 2019	Dec. 31, 2018
Organization, Consolidation and Presentation of Financial Statements [Abstract]		
Delaware grant	$ 10,469	$ 10,469
Managed services liabilities	29,498	30,362
Other	18,450	15,106
Other long-term liabilities	[1] $ 58,417	$ 55,937

[1] We have variable interest entities which represent a portion of the consolidated balances are recorded within the "Cash and cash equivalents," "Restricted cash," "Accounts receivable," "Customer financing receivable," "Prepaid expenses and other current assets," "Property and equipment, net," "Customer financing receivable, non-current," "Restricted cash, non-current," "Other long-term assets," "Accounts payable," "Accrued other current liabilities," "Deferred revenue and customer deposits," "Current portion of non-recourse debt from related parties," "Derivative liabilities, net of current portion," "Deferred revenue and customer deposits, net of current portion," "Long-term portion of non-recourse debt," and "Other long-term liabilities" financial statement line items in the Condensed Consolidated Balance Sheets (see Note 12 - Power Purchase Agreement Programs).

Balance Sheet Components - Other Long-Term Liabilities (Additional Information) (Details) - USD ($) $ in Thousands	Jun. 30, 2019	Dec. 31, 2018
Organization, Consolidation and Presentation of Financial Statements [Abstract]		
Managed services liabilities	$ 29,498	$ 30,362

Outstanding Loans and Security Agreements - Schedule of Debt (Details) - USD ($) $ in Thousands	Jun. 30, 2019	Dec. 31, 2018	Jun. 30, 2017
Debt Instrument [Line Items]			
Unpaid principal balance	$ 701,278	$ 786,495	
Current portion of debt	26,224	29,848	
Long-term portion of debt	641,983	711,433	
Total	668,207	741,281	
Unused Borrowing Capacity	$ 1,220	1,220	
Senior secured notes | Senior Secured Notes due March 2025, Non-Recourse			
Debt Instrument [Line Items]			
Unpaid principal balance		79,698	
Current portion of debt		11,994	
Long-term portion of debt		66,572	
Total		78,566	
Interest rate percentage	5.22%		
Senior secured notes | Senior Secured Notes due March 2030, Non-Recourse			
Debt Instrument [Line Items]			
Unpaid principal balance	$ 82,269	83,457	
Current portion of debt	2,803	2,469	
Long-term portion of debt	78,420	79,868	
Total	81,223	82,337	
Term loan | Term Loan due September 2028, Non-Recourse			
Debt Instrument [Line Items]			
Unpaid principal balance	39,317	40,538	
Current portion of debt	2,889	2,200	
Long-term portion of debt	32,643	34,119	
Total	$ 35,532	36,319	
Interest rate percentage	7.50%		
Term loan | Senior Secured Notes due October 2020, Non-Recourse			
Debt Instrument [Line Items]			
Unpaid principal balance	$ 24,262	24,723	
Current portion of debt	957	827	
Long-term portion of debt	22,704	23,089	
Total	$ 23,661	23,916	
Interest rate percentage	5.25%		
Term loan | Term Loan due December 2021, Non-Recourse			
Debt Instrument [Line Items]			
Unpaid principal balance	$ 123,664	125,456	
Current portion of debt	3,894	3,672	
Long-term portion of debt	118,058	119,712	
Total	$ 121,952	123,384	

Interest rate percentage	2.50%		
Term loan | Term Loan due November 2020, Recourse			
Debt Instrument [Line Items]			
Unpaid principal balance	$ 2,429	3,286	
Current portion of debt	1,681	1,686	
Long-term portion of debt	695	1,528	
Total	$ 2,376	3,214	
Interest rate percentage	4.00%		
Senior Secured Notes due March 2030, Non-Recourse			
Debt Instrument [Line Items]			
Interest rate percentage	6.07%		
Non-recourse debt			
Debt Instrument [Line Items]			
Unpaid principal balance	$ 269,512	353,872	
Current portion of debt	10,543	21,162	
Long-term portion of debt	251,825	323,360	
Total	262,368	344,522	
Unused Borrowing Capacity	1,220	1,220	
Convertible promissory notes | Convertible Promissory Notes Interest Rate 5% Due December 2020, Recourse			
Debt Instrument [Line Items]			
Unpaid principal balance	33,104	33,104	
Current portion of debt	0	0	
Long-term portion of debt	35,576	34,706	
Total	$ 35,576	34,706	
Interest rate percentage	5.00%		
Convertible promissory notes | Convertible Promissory Notes Interest Rate 6% Due December 2020, Recourse			
Debt Instrument [Line Items]			
Unpaid principal balance	$ 296,233	296,233	
Current portion of debt	0	0	
Long-term portion of debt	271,503	263,284	
Total	$ 271,503	263,284	
Interest rate percentage	6.00%		
Notes | Notes due July 2024, Recourse			
Debt Instrument [Line Items]			
Unpaid principal balance	$ 100,000	100,000	
Current portion of debt	14,000	7,000	
Long-term portion of debt	82,384	88,555	
Total	$ 96,384	95,555	
Interest rate percentage	10.00%		10.00%
Recourse debt			
Debt Instrument [Line Items]			
Unpaid principal balance	$ 431,766	432,623	

Current portion of debt	15,681	8,686
Long-term portion of debt	390,158	388,073
Total	405,839	396,759
Letters of Credit | Letter of Credit due December 2021, Non-Recourse		
Debt Instrument [Line Items]		
Unused Borrowing Capacity	1,220	1,220
Variable Interest Entity, Primary Beneficiary		
Debt Instrument [Line Items]		
Current portion of debt	10,544	21,162
Long-term portion of debt	$ 251,826	$ 323,360

Outstanding Loans and Security Agreements - Recourse Debt Facilities (Additional Information) (Details)	1 Months Ended Jul. 31, 2018 USD ($) shares	6 Months Ended Jun. 30, 2019 USD ($) day $ / shares shares	19 Months Ended Jun. 30, 2016 USD ($)	Dec. 31, 2018 USD ($)	Jan. 18, 2018	Aug. 31, 2017 shares	Jun. 30, 2017 USD ($)	Dec. 31, 2016 USD ($)	Sep. 30, 2016 USD ($)	Sep. 10, 2016 USD ($) $ / shares	Jan. 29, 2016 USD ($)	Dec. 15, 2015 USD ($) $ / shares	Dec. 31, 2014	May 31, 2013 USD ($)
Debt Instrument [Line Items]														
Long-term debt carrying value		$ 668,207,000		$ 741,281,000										
Unpaid principal balance		701,278,000		786,495,000										
Long-term portion of debt		641,983,000		711,433,000										
Indebtedness in excess of		$ 300,000												
Issuance of common stock upon exercise of warrants (in shares) | shares		312,575												
Credit facility | Term Loan due November 2020, Recourse														
Debt Instrument [Line Items]														
Debt face amount								$ 5,000,000.0						$ 5,000,000.0
Term loan | Term Loan due December 2021, Non-Recourse														
Debt Instrument [Line Items]														
Long-term debt carrying value		$ 121,952,000		123,384,000										
Interest rate percentage		2.50%												
Unpaid principal balance		$ 123,664,000		125,456,000										
Long-term portion of debt		$ 118,058,000		$ 119,712,000										
Term loan | Term Loan due November 2020, Recourse														
Debt Instrument [Line Items]														
Debt face amount														$ 12,000,000.0
Weighted average interest rate (as a percentage)		6.50%		5.90%										
Long-term debt carrying value		$ 2,376,000		$ 3,214,000										
Interest rate percentage		4.00%												
Unpaid principal balance		$ 2,429,000		3,286,000										
Long-term portion of debt		695,000		1,528,000										
Indebtedness in excess of		$ 100,000												
Convertible promissory notes | Convertible Promissory Notes due December 2019 and 2020, Recourse														
Debt Instrument [Line Items]														
Interest rate percentage		5.00%												
Unpaid principal balance	$ 221,600,000													
Convertible promissory notes | Convertible Promissory Notes Interest Rate 5% Due December 2020, Recourse														
Debt Instrument [Line Items]														
Long-term debt carrying value		$ 35,576,000		34,706,000										
Interest rate percentage		5.00%												
Unpaid principal balance		$ 33,104,000		33,104,000										
Long-term portion of debt		$ 35,576,000		34,706,000										
Convertible promissory notes | Convertible Promissory Notes Interest Rate 8% Due December 2018														
Debt Instrument [Line Items]														
Debt term			3 years											
Convertible promissory notes | Convertible Promissory Notes due December 2020, Recourse														

Debt Instrument [Line Items]								
Debt face amount					$ 75,000,000	$ 25,000,000	$ 160,000,000	
Interest rate percentage	6.00%							
Convertible stock price (in dollars per share) | $ / shares	$ 11.25				$ 20.61		$ 11.25	
Convertible promissory notes | Convertible Promissory Notes Interest Rate 6% Due December 2020, Recourse								
Debt Instrument [Line Items]								
Long-term debt carrying value	$ 271,503,000	263,284,000						
Interest rate percentage	6.00%							
Convertible stock price (in dollars per share) | $ / shares	$ 11.25							
Unpaid principal balance	$ 296,233,000	296,233,000						
Long-term portion of debt	271,503,000	263,284,000						
Notes | Notes due July 2024, Recourse								
Debt Instrument [Line Items]								
Debt face amount				$ 100,000,000.0				
Long-term debt carrying value	$ 96,384,000	95,555,000						
Interest rate percentage	10.00%			10.00%				
Unpaid principal balance	$ 100,000,000	100,000,000						
Long-term portion of debt	82,384,000	88,555,000						
Affiliated entity								
Debt Instrument [Line Items]								
Long-term debt carrying value	63,266,000	64,053,000						
Unpaid principal balance	67,051,000	68,272,000						
Long-term portion of debt	$ 60,377,000	61,853,000						
Affiliated entity | Convertible promissory notes | Convertible Promissory Notes due December 2019 and 2020, Recourse								
Debt Instrument [Line Items]								
Debt face amount		$ 193,200,000.0						
Interest rate percentage			8.00%					8.00%
Convertible stock price (in dollars per share) | $ / shares	$ 38.64							
Affiliated entity | Convertible promissory notes | Convertible Promissory Notes due December 2020, Recourse								
Debt Instrument [Line Items]								
Debt face amount						$ 260,000,000		
Interest rate percentage				6.00%		5.00%		
Percentage of debt outstanding to maintain as collateral	200.00%							
Holders of debt, percentage subject to cross-acceleration provision	25.00%							
Indebtedness in excess of	$ 15,000,000.0							
Affiliated entity | Convertible promissory notes | Convertible Promissory Notes Interest Rate 6% Due December 2020, Recourse								
Debt Instrument [Line Items]								
Long-term debt carrying value	27,734,000	27,734,000						
Unpaid principal balance	27,734,000	27,734,000						
Long-term portion of debt	$ 27,734,000	$ 27,734,000						
Affiliated entity | Convertible redeemable common stock warrants | CPPIB								

Debt Instrument [Line Items]			
Number of securities called by warrants (in shares) | shares			312,888
Maximum | Convertible redeemable common stock warrants | J.P. Morgan			
Debt Instrument [Line Items]			
Number of securities called by warrants (in shares) | shares		146,666	
Maximum | Convertible redeemable common stock warrants | CPPIB			
Debt Instrument [Line Items]			
Number of securities called by warrants (in shares) | shares		166,222	
Class B common stock			
Debt Instrument [Line Items]			
Debt conversion, shares issued (in shares) | shares	5,734,440		
On or after July 27, 2020 | Affiliated entity | Convertible promissory notes | Convertible Promissory Notes due December 2020, Recourse			
Debt Instrument [Line Items]			
Last reported sale price of common stock (at least) (in dollars per share) | $ / shares		$ 22.50	
Trading days (at least) | day		20	
Period of consecutive trading days | day		30	
Trading days immediately preceding redemption date | day		3	

Outstanding Loans and Security Agreements - Non-recourse Debt Facilities (Additional Information) (Details) - USD ($)	1 Months Ended		3 Months Ended	6 Months Ended	12 Months Ended					
	Sep. 30, 2013	Mar. 31, 2013	Jun. 30, 2019	Jun. 30, 2019	Dec. 31, 2018	Jun. 30, 2017	Feb. 28, 2017	Jun. 30, 2015	Jul. 31, 2014	Dec. 31, 2012
Debt Instrument [Line Items]										
Unused borrowing capacity			$ 1,220,000	$ 1,220,000	$ 1,220,000					
Notes | Notes due July 2024, Recourse										
Debt Instrument [Line Items]										
Interest rate percentage			10.00%	10.00%		10.00%				
Debt face amount						$ 100,000,000.0				
Senior secured notes | Senior Secured Notes due March 2025, Non-Recourse										
Debt Instrument [Line Items]										
Interest rate percentage			5.22%	5.22%						
Term loan | Term Loan due September 2028, Non-Recourse										
Debt Instrument [Line Items]										
Interest rate percentage			7.50%	7.50%						
Term loan | Term Loan due October 2020, Non-Recourse										
Debt Instrument [Line Items]										
Interest rate percentage			5.25%	5.25%						
Term loan | Term Loan due December 2021, Non-Recourse										
Debt Instrument [Line Items]										
Interest rate percentage			2.50%	2.50%						
PPA II										
Debt Instrument [Line Items]										
Repayments of debt				$ 144,813,000	65,114,000					
PPA II | Senior secured notes | Senior Secured Notes due March 2025, Non-Recourse										
Debt Instrument [Line Items]										
Interest rate percentage		5.22%								
Total amount of loan proceeds		$ 144,800,000								
Repayments of debt		28,800,000								
Debt proceeds used for debt service reserves and issuance costs		21,700,000								
Debt used to fund remaining system purchases		$ 94,300,000								
Debt minimum debt service reserves required			$ 0	0	11,200,000					
Outstanding unpaid debt retired			76,600,000							
PPA IIIa										
Debt Instrument [Line Items]										

Repayments of debt			5,651,000	4,431,000			
PPA IIIa | Term loan | Term Loan due September 2028, Non-Recourse							
Debt Instrument [Line Items]							
Interest rate percentage							7.50%
Debt minimum debt service reserves required		3,800,000	3,800,000	3,700,000			
Debt face amount							$ 46,800,000.0
PPA IIIb							
Debt Instrument [Line Items]							
Repayments of debt			4,414,000	3,953,000			
PPA IIIb | Term loan | Term Loan due October 2020, Non-Recourse							
Debt Instrument [Line Items]							
Debt minimum debt service reserves required		1,700,000	1,700,000	1,700,000			
Debt face amount	$ 32,500,000.0						
PPA IIIb | Term loan | Term Loan due October 2020, Non-Recourse | LIBOR							
Debt Instrument [Line Items]							
LIBOR margin (as a percentage)	5.20%						
PPA IV							
Debt Instrument [Line Items]							
Repayments of debt			16,731,000	15,543,000			
PPA IV | Senior secured notes | Senior Secured Notes due March 2030, Non-Recourse							
Debt Instrument [Line Items]							
Interest rate percentage						6.07%	
Debt minimum debt service reserves required		7,700,000	7,700,000	7,500,000			
Debt face amount						$ 99,000,000.0	
PPA V							
Debt Instrument [Line Items]							
Repayments of debt			$ 7,572,000	5,780,000			
PPA V | Term loan | Term Loan due December 2021, Non-Recourse							
Debt Instrument [Line Items]							
Debt face amount					$ 131,200,000		
Commitment fee percentage			0.50%				
PPA V | Term loan | Term Loan due December 2021, Years One Through Three, Non-Recourse | LIBOR							
Debt Instrument [Line Items]							
LIBOR margin (as a percentage)			2.25%				

PPA V | Term loan | Term Loan due December 2021, After Year Three, Non-Recourse | LIBOR					
Debt Instrument [Line Items]					
LIBOR margin (as a percentage)		2.50%			
Letters of Credit | PPA V					
Debt Instrument [Line Items]					
Maximum borrowing capacity				$ 6,200,000.0	$ 6,400,000.0
Amount outstanding	5,000,000	$ 5,000,000	5,000,000		
Unused borrowing capacity	$ 1,200,000	$ 1,200,000	$ 1,200,000		

Outstanding Loans and Security Agreements - Schedule of Repayments (Details) - USD ($) $ in Thousands	3 Months Ended		
	Jun. 30, 2019	Jun. 30, 2018	Dec. 31, 2018
Long-term Debt, Fiscal Year Maturity [Abstract]			
Remainder of 2019	$ 12,365		
2020	379,242		
2021	140,334		
2022	26,046		
2023	29,450		
Thereafter	113,841		
Total	701,278		$ 786,495
Interest expense	$ 18,300	$ 25,200	

Derivative Financial Instruments - Fair Value Derivatives (Details) - Derivatives designated as hedging instruments - Interest rate swap agreements - USD ($) $ in Thousands	Jun. 30, 2019	Dec. 31, 2018
Derivative [Line Items]		
Interest rate swap agreements	$ 12	$ 82
Derivative liability	9,159	3,630
Prepaid expenses and other current assets		
Derivative [Line Items]		
Interest rate swap agreements	0	42
Other long-term assets		
Derivative [Line Items]		
Interest rate swap agreements	12	40
Accrued other current liabilities		
Derivative [Line Items]		
Derivative liability	706	4
Derivative liabilities		
Derivative [Line Items]		
Derivative liability	$ 8,453	$ 3,626

Derivative Financial Instruments - Interest Rate Swaps (Additional Information) (Details) $ in Thousands	3 Months Ended		6 Months Ended			
	Jun. 30, 2019	Jun. 30, 2018	Jun. 30, 2019	Jun. 30, 2018	Dec. 31, 2018	Jul. 31, 2015
	USD ($)	USD ($)	USD ($)	USD ($)	USD ($)	agreement
Interest rate swap						
Credit Derivatives [Line Items]						
Gain (loss) on derivative	$ 48	$ 71	$ 95	$ 163		
Cash flow hedging | Interest rate swap | PPA Company IIIb						
Credit Derivatives [Line Items]						
Notional amount	24,300		24,300		$ 24,700	
Gain (loss) on derivative	(23)	54				
Cash flow hedging | Interest rate swap | PPA Company V						
Credit Derivatives [Line Items]						
Notional amount	185,800		185,800		$ 186,600	
Number of swap agreements entered into | agreement						0
Gain (loss) on derivative	$ 36	$ 55	$ 12	$ 109		
Cash flow hedging | Interest rate swap maturing In 2016 | PPA Company V						
Credit Derivatives [Line Items]						
Number of swap agreements entered into | agreement						0
Cash flow hedging | Interest rate swap maturing September 30, 2031 | PPA Company V						
Credit Derivatives [Line Items]						
Number of swap agreements entered into | agreement						0
Cash flow hedging | Interest rate swap maturing December 21, 2021 | PPA Company V						
Credit Derivatives [Line Items]						
Number of swap agreements entered into | agreement						0

Derivative Financial Instruments - Changes in Fair Value of Derivative Contracts (Details) - USD ($) $ in Thousands	3 Months Ended		6 Months Ended	
	Jun. 30, 2019	Jun. 30, 2018	Jun. 30, 2019	Jun. 30, 2018
AOCI Including Portion Attributable to Noncontrolling Interest, Net of Tax [Roll Forward]				
Net loss (gain) recognized in other comprehensive income (loss)	$ (3,493)	$ 1,086	$ (5,667)	$ 3,944
Interest rate swap agreements				
AOCI Including Portion Attributable to Noncontrolling Interest, Net of Tax [Roll Forward]				
Gain reclassified from other comprehensive income (loss) to earnings	(48)	(71)	(95)	(163)
Accumulated Net Gain (Loss) from Cash Flow Hedges Including Portion Attributable to Noncontrolling Interest				
AOCI Including Portion Attributable to Noncontrolling Interest, Net of Tax [Roll Forward]				
Beginning balance	5,692	2,909	3,548	5,853
Loss (gain) recognized in other comprehensive income (loss)	3,460	(982)	5,590	(3,622)
Amounts reclassified from other comprehensive income (loss) to earnings	42	(85)	103	(297)
Net loss (gain) recognized in other comprehensive income (loss)	3,502	(1,067)	5,693	(3,919)
Ending balance	$ 9,146	$ 1,771	$ 9,146	$ 1,771

Derivative Financial Instruments - Natural Gas Derivatives (Additional Information) (Details) - Not designated as hedging instrument - Natural gas forward contract - USD ($) $ in Millions	3 Months Ended		6 Months Ended	
	Jun. 30, 2019	Jun. 30, 2018	Jun. 30, 2019	Jun. 30, 2018
Derivative Instruments, Gain (Loss) [Line Items]				
Gain (loss) on derivative	$ (1.1)	$ 0.8	$ (0.7)	$ (0.1)
Gain on the settlement of contracts	$ 1.1	$ 1.2	$ 1.6	$ 2.3

Derivative Financial Instruments - 6% Convertible Promissory Notes (Additional Information) (Details) - 6% Convertible Promissory Notes - Convertible promissory notes - USD ($)	3 Months Ended		6 Months Ended				
	Jun. 30, 2019	Jun. 30, 2018	Jun. 30, 2019	Jun. 30, 2018	Sep. 10, 2016	Jan. 29, 2016	Dec. 15, 2015
Debt Instrument [Line Items]							
Interest rate percentage	6.00%		6.00%				
Debt face amount					$ 75,000,000	$ 25,000,000	$ 160,000,000
Convertible stock price (in dollars per share)	$ 11.25		$ 11.25		$ 20.61		$ 11.25
Convertible debt, stock price trigger			75.00%				
Gain (loss) on embedded derivative	$ 0	$ (23,500,000)	$ 0	$ (31,000,000)			
Embedded derivative liability	$ 177,200,000		$ 177,200,000		$ 177,200,000		

Common Stock Warrants (Details) - Class B common stock - $ / shares	Jun. 30, 2019	Dec. 31, 2018
Preferred stock warrants		
Class of Warrant or Right [Line Items]		
Warrants outstanding (in shares)	481,181	481,182
Warrant exercise price (in dollars per share)	$ 27.78	$ 27.78
Common stock warrants		
Class of Warrant or Right [Line Items]		
Warrants outstanding (in shares)	12,940	312,939
Warrant exercise price (in dollars per share)	$ 38.64	$ 38.64

Income Taxes (Details) - USD ($) $ in Thousands	3 Months Ended		6 Months Ended	
	Jun. 30, 2019	Jun. 30, 2018	Jun. 30, 2019	Jun. 30, 2018
Income Tax Disclosure [Abstract]				
Income tax provision	$ 258	$ 128	$ 466	$ 461
Net loss before income taxes	$ 66,973	$ 50,060	$ 155,038	$ 72,075
Effective income tax rate	(0.40%)	(0.30%)	(0.30%)	(0.60%)

Net Loss per Share Attributable to Common Stockholders - (Additional Information) (Details)	1 Months Ended
	Jul. 31, 2018
	shares
IPO	
Subsidiary, Sale of Stock [Line Items]	
Shares sold in offering (in shares)	20,700,000

Stock-Based Compensation and Employee Benefit Plan - Stock Plan (Additional Information) (Details) - $ / shares	Jun. 30, 2019	Dec. 31, 2018
Share-based Compensation Arrangement by Share-based Payment Award [Line Items]		
Weighted average exercise price, outstanding options (in dollars per share)	$ 25.47	$ 25.93
2002 Stock Plan		
Share-based Compensation Arrangement by Share-based Payment Award [Line Items]		
Weighted average exercise price, outstanding options (in dollars per share)	$ 22.74	
2002 Stock Plan | Class B common stock		
Share-based Compensation Arrangement by Share-based Payment Award [Line Items]		
Number of outstanding options (in shares)	2,033,654	

Net Loss per Share Attributable to Common Stockholders - Schedule of Basic and Diluted Net Loss per Share (Details) - USD ($) $ / shares in Units, shares in Thousands, $ in Thousands	3 Months Ended		6 Months Ended	
	Jun. 30, 2019	Jun. 30, 2018	Jun. 30, 2019	Jun. 30, 2018
Numerator:				
Net loss attributable to Class A and Class B common stockholders	$ (62,216)	$ (45,677)	$ (146,657)	$ (63,393)
Denominator:				
Weighted average shares used to compute net loss per share attributable to Class A and Class B common stockholders, basic and diluted (in shares)	113,622	10,536	112,737	10,470
Net loss per share attributable to common stockholders, basic and diluted (in dollars per share)	$ (0.55)	$ (4.34)	$ (1.30)	$ (6.05)

Stock-Based Compensation and Employee Benefit Plan - Equity Incentive Plan (Additional Information) (Details) - $ / shares	Jun. 30, 2019	Dec. 31, 2018
Share-based Compensation Arrangement by Share-based Payment Award [Line Items]		
Weighted average exercise price, outstanding options (in dollars per share)	$ 25.47	$ 25.93
2012 Equity Incentive Plan		
Share-based Compensation Arrangement by Share-based Payment Award [Line Items]		
Weighted average exercise price, outstanding options (in dollars per share)	$ 27.14	
2012 Equity Incentive Plan | Class B common stock		
Share-based Compensation Arrangement by Share-based Payment Award [Line Items]		
Number of outstanding options (in shares)	10,728,356	
2018 Equity Incentive Plan		
Share-based Compensation Arrangement by Share-based Payment Award [Line Items]		
Weighted average exercise price, outstanding options (in dollars per share)	$ 19.71	
2018 Equity Incentive Plan | Class A common stock		
Share-based Compensation Arrangement by Share-based Payment Award [Line Items]		
Number of outstanding options (in shares)	2,150,999	
Stock option | 2018 Equity Incentive Plan		
Share-based Compensation Arrangement by Share-based Payment Award [Line Items]		
Shares available for grant (in shares)	19,787,061	
RSUs | 2012 Equity Incentive Plan | Class B common stock		
Share-based Compensation Arrangement by Share-based Payment Award [Line Items]		
Shares reserved for future issuance (in shares)	11,908,017	
RSUs | 2018 Equity Incentive Plan | Class A common stock		
Share-based Compensation Arrangement by Share-based Payment Award [Line Items]		
Number of outstanding options (in shares)	4,022,886	

Net Loss per Share Attributable to Common Stockholders - Schedule of Antidilutive Securities (Details) - shares shares in Thousands	3 Months Ended		6 Months Ended	
	Jun. 30, 2019	Jun. 30, 2018	Jun. 30, 2019	Jun. 30, 2018
Antidilutive Securities Excluded from Computation of Earnings Per Share [Line Items]				
Antidilutive securities	33,733	88,465	33,064	88,465
Convertible and non-convertible redeemable preferred stock and convertible notes				
Antidilutive Securities Excluded from Computation of Earnings Per Share [Line Items]				
Antidilutive securities	27,253	85,945	27,253	85,945
Stock options to purchase common stock				
Antidilutive Securities Excluded from Computation of Earnings Per Share [Line Items]				
Antidilutive securities	6,480	2,148	5,811	2,148
Convertible redeemable preferred stock warrants				
Antidilutive Securities Excluded from Computation of Earnings Per Share [Line Items]				
Antidilutive securities	0	60	0	60
Convertible redeemable common stock warrants				
Antidilutive Securities Excluded from Computation of Earnings Per Share [Line Items]				
Antidilutive securities	0	312	0	312

Stock-Based Compensation and Employee Benefit Plan - Employee Stock Purchase Plan (Details)	Jun. 30, 2019 shares
2018 ESPP | Employee Stock | Class A common stock	
Share-based Compensation Arrangement by Share-based Payment Award [Line Items]	
Shares reserved for future issuance (in shares)	4,052,804

Stock-Based Compensation and Employee Benefit Plan - Stock Option Activity (Details) - USD ($) $ / shares in Units, $ in Thousands	6 Months Ended Jun. 30, 2019	12 Months Ended Dec. 31, 2018
Outstanding Options/RSUs, Number of Shares		
Outstanding (in shares)	14,558,420	
Granted (in shares)	981,105	
Exercised (in shares)	(328,026)	
Cancelled (in shares)	(298,490)	
Outstanding (in shares)	14,913,009	14,558,420
Outstanding Options Weighted Average Exercise Price		
Outstanding (in dollars per share)	$ 25.93	
Granted (in dollars per share)	11.44	
Exercised (in dollars per share)	4.28	
Cancelled (in dollars per share)	25.37	
Outstanding (in dollars per share)	$ 25.47	$ 25.93
Outstanding, remaining contractual life	6 years 6 months 11 days	6 years 9 months 11 days
Outstanding, aggregate intrinsic value	$ 2,557	$ 3,084
Share-based Compensation Arrangement by Share-based Payment Award, Options, Additional Disclosures [Abstract]		
Vested and expected to vest (in shares)	14,541,060	
Exercisable (in shares)	8,716,781	
Vested and expected to vest, weighted average exercise price (in dollars per share)	$ 25.64	
Exercisable, weighted average exercise price (in dollars per share)	$ 28.77	
Vested and expected to vest, remaining contractual life	6 years 5 months 19 days	
Exercisable, remaining contractual life	4 years 11 months 16 days	
Vested and expected to vest, aggregate intrinsic value	$ 2,523	
Exercisable, aggregate intrinsic value	$ 1,764	

Stock-Based Compensation and Employee Benefit Plan - Restricted Stock Unit Activity (Details) - Restricted Stock	6 Months Ended Jun. 30, 2019 $ / shares shares
Unvested Restricted Stock Unit Activity	
Unvested balance (in shares) | shares	16,784,800
Granted (in shares) | shares	2,966,254
Vested (in shares) | shares	(3,504,098)
Forfeited (in shares) | shares	(316,053)
Unvested balance (in shares) | shares	15,930,903
Weighted Average Grant Date Fair Value	
Unvested balance (in dollars per share) | $ / shares	$ 18.74
Granted (in dollars per share) | $ / shares	12.36
Vested (in dollars per share) | $ / shares	20.51
Forfeited (in dollars per share) | $ / shares	17.38
Unvested balance (in dollars per share) | $ / shares	$ 17.19

Stock-Based Compensation and Employee Benefit Plan - Weighted-Average Assumptions (Details)	3 Months Ended		6 Months Ended	
	Jun. 30, 2019	Jun. 30, 2018	Jun. 30, 2019	Jun. 30, 2018
Share-based Compensation Arrangement by Share-based Payment Award [Line Items]				
Risk-free interest rate (minimum)	2.40%	2.70%	2.40%	2.50%
Risk-free interest rate (maximum)	2.50%	2.80%	2.60%	2.80%
Expected volatility	47.50%	54.60%		
Expected dividend yield	0.00%	0.00%	0.00%	0.00%
Expected volatility (maximum)			50.20%	55.10%
Expected volatility (minimum)			47.50%	54.60%
Minimum				
Share-based Compensation Arrangement by Share-based Payment Award [Line Items]				
Expected term (years)	6 years 4 months 21 days	6 years 2 months 16 days	6 years 4 months 7 days	6 years 2 months 5 days
Maximum				
Share-based Compensation Arrangement by Share-based Payment Award [Line Items]				
Expected term (years)	6 years 8 months 1 day	6 years 8 months 9 days	6 years 8 months 1 day	6 years 8 months 9 days

Stock-Based Compensation and Employee Benefit Plan - Stock-based Compensation Expense (Details) - USD ($) $ in Thousands	3 Months Ended		6 Months Ended	
	Jun. 30, 2019	Jun. 30, 2018	Jun. 30, 2019	Jun. 30, 2018
Share-based Compensation Arrangement by Share-based Payment Award, Compensation Cost [Line Items]				
Share-based compensation expense	$ 51,218	$ 7,818	$ 115,100	$ 15,773
Cost of revenue				
Share-based Compensation Arrangement by Share-based Payment Award, Compensation Cost [Line Items]				
Share-based compensation expense	10,392	1,971	24,764	3,869
Research and development				
Share-based Compensation Arrangement by Share-based Payment Award, Compensation Cost [Line Items]				
Share-based compensation expense	12,218	1,739	26,448	3,376
Sales and marketing				
Share-based Compensation Arrangement by Share-based Payment Award, Compensation Cost [Line Items]				
Share-based compensation expense	8,935	1,214	20,447	2,166
General and administrative				
Share-based Compensation Arrangement by Share-based Payment Award, Compensation Cost [Line Items]				
Share-based compensation expense	$ 19,673	$ 2,894	$ 43,441	$ 6,362

Stock-Based Compensation and Employee Benefit Plan - Stock-based Compensation (Additional Information) (Details) - USD ($)	3 Months Ended			6 Months Ended	
	Jun. 30, 2019	Mar. 31, 2019	Jun. 30, 2018	Jun. 30, 2019	Jun. 30, 2018
Share-based Arrangements with Employees and Nonemployees [Abstract]					
Capitalized stock-based compensation costs		$ 0			$ 0
Share-based compensation expense	$ 51,218,000		$ 7,818,000	$ 115,100,000	15,773,000
Unrecognized compensation cost related to unvested stock options	56,800,000			$ 56,800,000	
Expense expected to be recognized over a weighted-average period				2 years 7 months 13 days	
Excess tax benefits				$ 0	$ 0
Restricted Stock					
Share-based Arrangements with Employees and Nonemployees [Abstract]					
Unrecognized stock-based compensation cost	108,200,000			$ 108,200,000	
Expense expected to be recognized over remaining weighted-average period				1 year 1 month 10 days	
Employee Stock Option					
Share-based Arrangements with Employees and Nonemployees [Abstract]					
Unrecognized stock-based compensation cost	$ 6,300,000			$ 6,300,000	
Expense expected to be recognized over remaining weighted-average period				10 months 28 days	

Power Purchase Agreement Programs - Additional Information (Details)	Jun. 14, 2019 USD ($) MW	1 Months Ended Jul. 31, 2019 USD ($)	3 Months Ended Jun. 30, 2019 USD ($) variable_interest_entity	Jun. 30, 2018 USD ($)	6 Months Ended Dec. 31, 2019 MW	Jun. 30, 2019 USD ($) variable_interest_entity MW	Jun. 30, 2018 USD ($)	12 Months Ended Dec. 31, 2018 USD ($)
Variable Interest Entity [Line Items]								
Standard warranty period (years)						1 year		
Number of variable interest entities | variable_interest_entity			6			6		
Redeemable noncontrolling interest			$ 505,000			$ 505,000		$ 57,261,000
Sale of Energy Savers | MW						9.7		
Revenue			233,782,000	$ 168,881,000		$ 434,489,000	$ 338,242,000	
Energy Server repurchased | MW						10		
Cost of revenue			(192,109,000)	(136,110,000)		$ (377,061,000)	(261,805,000)	
Energy servers installed | MW						9		
Debt payoff make-whole penalty						$ 5,934,000	0	
Interest expense			$ 18,300,000	25,200,000				
Revenue from related parties						93,204,000	30,925,000	
Payments to acquire equity method investments	$ 57,500,000							
Possible indemnification amount						97,200,000		
Possible indemnification, tax expense (benefit) amount						(7,500,000)		
Purchase Agreement, Possible Indemnification, Cash Collateral						(20,000,000)		
Tariff Damages Collateral						57,200,000		
Forced outage event, purchase price of REC						45		
Distributions to noncontrolling and redeemable noncontrolling interests						(7,753,000)	(11,582,000)	
Decrease in inventories						(27,542,000)	46,172,000	
Decrease in property plant and equipment						19,800,000		
Increase in deferred revenue and customer current liabilities						(25,411,000)	(31,817,000)	
Increase in accrued other current liabilities						7,213,000	(12,815,000)	
Commitment to redeem noncontrolling interest						$ 18,690,000	0	
Minimum								
Variable Interest Entity [Line Items]								
Term of power purchase agreements (years)			10 years			10 years		
Maximum								
Variable Interest Entity [Line Items]								
Term of power purchase agreements (years)			21 years			21 years		
PPA II								

Variable Interest Entity [Line Items]			
Number of megawatts available for purchase | MW	18		
Number of megawatts decommissioned | MW	19		
Number of megawatts available for repurchase | MW	11		
Number of replacement megawatts | MW	9		
Additional funding needed to complete upgrade			$ 92,000,000
Variable Interest Entity, Primary Beneficiary | PPA II			
Variable Interest Entity [Line Items]			
Energy Server repurchased | MW			10
Adjustment for hypothetical liquidation at book value			$ 300,000
Repayments of debt and interest			77,700,000
Repayments of debt			(11,300,000)
Debt payoff make-whole penalty			5,900,000
Debt issuance costs written-off			1,000,000
Interest expense			100,000
Increase in cash and cash equivalents			4,600,000
Revenue from related parties			115,600,000
Repayments of long-term debt			(72,300,000)
Increase in restricted cash			(20,000,000)
Distributions to noncontrolling and redeemable noncontrolling interests			(18,700,000)
Decrease in inventories			(27,000,000)
Decrease in property plant and equipment			(33,700,000)
Increase in long-term restricted cash			8,700,000
Decrease in current portion of non-recourse debt			(12,200,000)
Increase in deferred revenue and customer current liabilities			23,800,000
Increase in accrued other current liabilities			400,000
Increase in accrued installation cost			1,100,000
Payoff of accrued interest			(700,000)
Decrease in noncontrolling interest			(18,400,000)
Commitment to redeem noncontrolling interest			37,000,000
Sale Of Energy Servers			
Variable Interest Entity [Line Items]			
Revenue		$ 87,800,000	
Installation Services Of Energy Servers			
Variable Interest Entity [Line Items]			
Revenue		3,900,000	
Write Off Of Energy Servers			

Variable Interest Entity [Line Items]					
Cost of revenue	(25,600,000)				
Product					
Variable Interest Entity [Line Items]					
Revenue	179,899,000	108,654,000	321,633,000	229,961,000	
Cost of revenue	(131,952,000)	$ (70,802,000)	(255,952,000)	$ (151,157,000)	
Repurchase Of Energy Servers					
Variable Interest Entity [Line Items]					
Cost of revenue	(26,300,000)				
Energy Servers, Change In Useful Lives					
Variable Interest Entity [Line Items]					
Cost of revenue	$ (8,100,000)				
Scenario, Forecast					
Variable Interest Entity [Line Items]					
Sale of Energy Savers | MW PPA II			8		
Variable Interest Entity [Line Items]					
Repayments of debt			(144,813,000)		$ (65,114,000)
Distributions to noncontrolling and redeemable noncontrolling interests			(18,700,000)		
Non-recourse debt | Variable Interest Entity, Primary Beneficiary | PPA II					
Variable Interest Entity [Line Items]					
Repayments of long-term debt			$ (63,700,000)		
Subsequent Event					
Variable Interest Entity [Line Items]					
Purchase Agreement, Possible Indemnification, Cash Collateral	$ (20,000,000)				

Power Purchase Agreement Programs - Schedule of VIEs (Details) $ in Thousands	6 Months Ended		12 Months Ended
	Jun. 30, 2019 USD ($) MWh	Jun. 30, 2018 USD ($)	Dec. 31, 2018 USD ($)
Variable Interest Entity [Line Items]			
Distributions to Equity Investor	$ 566	$ 566	
PPA II			
Variable Interest Entity [Line Items]			
Maximum size of installation (in megawatts) | MWh	30		
Installed size (in megawatts) | MWh	20		
Term of power purchase agreements (years)	21 years		
Income (loss) and tax benefits allocation to Equity Investor	99.00%		
Cash allocation to Equity Investor	99.00%		
Income (loss), tax and cash allocations to Equity Investor after the flip date	5.00%		
Company cash contributions	$ 22,442		
Company non-cash contributions	0		
Equity Investor cash contributions	139,993		
Debt financing	144,813		
Distributions to Equity Investor	138,602		$ 116,942
Debt repayment—principal	$ 144,813		65,114
PPA IIIa			
Variable Interest Entity [Line Items]			
Maximum size of installation (in megawatts) | MWh	10		
Installed size (in megawatts) | MWh	10		
Term of power purchase agreements (years)	15 years		
Income (loss) and tax benefits allocation to Equity Investor	99.00%		
Cash allocation to Equity Investor	99.00%		
Income (loss), tax and cash allocations to Equity Investor after the flip date	5.00%		
Company cash contributions	$ 32,223		
Company non-cash contributions	8,655		
Equity Investor cash contributions	36,967		
Debt financing	44,968		
Distributions to Equity Investor	4,430		4,063
Debt repayment—principal	$ 5,651		4,431
PPA IIIb			
Variable Interest Entity [Line Items]			
Maximum size of installation (in megawatts) | MWh	6		
Installed size (in megawatts) | MWh	5		
Term of power purchase agreements (years)	15 years		
Income (loss) and tax benefits allocation to Equity Investor	99.00%		

Cash allocation to Equity Investor	99.00%	
Income (loss), tax and cash allocations to Equity Investor after the flip date	5.00%	
Company cash contributions	$ 22,658	
Company non-cash contributions	2,082	
Equity Investor cash contributions	20,152	
Debt financing	28,676	
Distributions to Equity Investor	2,007	1,807
Debt repayment—principal	$ 4,414	3,953
PPA IV		
Variable Interest Entity [Line Items]		
Maximum size of installation (in megawatts) | MWh	21	
Installed size (in megawatts) | MWh	19	
Term of power purchase agreements (years)	15 years	
Income (loss) and tax benefits allocation to Equity Investor	90.00%	
Cash allocation to Equity Investor	90.00%	
Company cash contributions	$ 11,669	
Company non-cash contributions	0	
Equity Investor cash contributions	84,782	
Debt financing	99,000	
Distributions to Equity Investor	6,420	4,568
Debt repayment—principal	$ 16,731	15,543
PPA V		
Variable Interest Entity [Line Items]		
Maximum size of installation (in megawatts) | MWh	40	
Installed size (in megawatts) | MWh	37	
Term of power purchase agreements (years)	15 years	
Income (loss) and tax benefits allocation to Equity Investor	99.00%	
Cash allocation to Equity Investor	90.00%	
Company cash contributions	$ 27,932	
Company non-cash contributions	0	
Equity Investor cash contributions	227,344	
Debt financing	131,237	
Distributions to Equity Investor	69,099	66,745
Debt repayment—principal	$ 7,572	$ 5,780

Power Purchase Agreement Programs - Schedule of PPA Entities' Assets and Liabilities (Details) - USD ($) $ in Thousands		Jun. 30, 2019	Dec. 31, 2018
Current assets:			
Cash and cash equivalents	[1]	$ 308,009	$ 220,728
Restricted cash, current	[1]	23,706	28,657
Accounts receivable	[1]	38,296	84,887
Customer financing receivable	[1]	5,817	5,594
Total current assets		592,284	672,581
Property, plant and equipment, net	[1]	406,610	481,414
Non-current portion of investment in sales-type financing leases	[1]	64,146	67,082
Restricted cash, non-current	[1]	39,351	31,100
Other long-term assets	[1]	60,975	34,792
Total assets		1,222,579	1,389,668
Current liabilities:			
Accounts payable	[1]	61,427	66,889
Accrued other current liabilities	[1]	109,722	69,535
Deferred Revenue And Customer Deposits, Current	[1]	129,321	94,158
Current portion of debt		26,224	29,848
Total current liabilities		339,087	279,666
Derivative liabilities	[1]	13,079	10,128
Deferred revenue and customer deposits	[1]	181,221	241,794
Long-term portion of debt		641,983	711,433
Other long-term liabilities	[1]	58,417	55,937
Total liabilities		1,233,787	1,298,958
Variable Interest Entity, Primary Beneficiary			
Current assets:			
Cash and cash equivalents		18,043	5,295
Restricted cash, current		1,848	2,917
Accounts receivable		6,533	7,516
Customer financing receivable		5,817	5,594
Prepaid expenses and other current assets		1,585	4,909
Total current assets		33,826	26,231
Property, plant and equipment, net		321,886	399,060
Non-current portion of investment in sales-type financing leases		64,146	67,082
Restricted cash, non-current		36,736	27,854
Other long-term assets		30,329	2,692
Total assets		486,923	522,919
Current liabilities:			

Accounts payable	443	724
Accrued other current liabilities	39,028	1,442
Deferred Revenue And Customer Deposits, Current	786	786
Current portion of debt	10,544	21,162
Total current liabilities	50,801	24,114
Derivative liabilities	8,453	3,626
Deferred revenue and customer deposits	8,306	8,696
Long-term portion of debt	251,826	323,360
Other long-term liabilities	2,078	1,798
Total liabilities	$ 321,464	$ 361,594

[1] We have variable interest entities which represent a portion of the consolidated balances are recorded within the "Cash and cash equivalents," "Restricted cash," "Accounts receivable," "Customer financing receivable," "Prepaid expenses and other current assets," "Property and equipment, net," "Customer financing receivable, non-current," "Restricted cash, non-current," "Other long-term assets," "Accounts payable," "Accrued other current liabilities," "Deferred revenue and customer deposits," "Current portion of non-recourse debt from related parties," "Derivative liabilities, net of current portion," "Deferred revenue and customer deposits, net of current portion," "Long-term portion of non-recourse debt," and "Other long-term liabilities" financial statement line items in the Condensed Consolidated Balance Sheets (see Note 12 - Power Purchase Agreement Programs).

Power Purchase Agreement Programs - Schedule of Consolidated Assets and Liabilities (Details) - USD ($) $ in Thousands	Jun. 30, 2019	Dec. 31, 2018
Variable Interest Entity [Line Items]		
Current assets	$ 592,284	$ 672,581
Long-term assets	630,295	717,087
Total assets	1,222,579	1,389,668
Current liabilities	312,863	249,818
Current portion of debt	26,224	29,848
Long-term liabilities	252,717	307,859
Long-term portion of debt	641,983	711,433
Total liabilities	1,233,787	1,298,958
Variable Interest Entity, Primary Beneficiary		
Variable Interest Entity [Line Items]		
Current assets	33,826	26,231
Long-term assets	453,097	496,688
Total assets	486,923	522,919
Current liabilities	40,257	2,952
Current portion of debt	10,544	21,162
Long-term liabilities	18,837	14,120
Long-term portion of debt	251,826	323,360
Total liabilities	321,464	361,594
Bloom		
Variable Interest Entity [Line Items]		
Current assets	558,458	646,350
Long-term assets	177,198	220,399
Total assets	735,656	866,749
Current liabilities	272,606	246,866
Current portion of debt	15,680	8,686
Long-term liabilities	233,880	293,739
Long-term portion of debt	390,157	388,073
Total liabilities	$ 912,323	$ 937,364

Commitments and Contingencies - Additional Information (Details)	6 Months Ended						
	Jun. 30, 2019 USD ($) employee	Jun. 30, 2018 USD ($) employee	Dec. 31, 2018 USD ($)	Sep. 30, 2017 USD ($)	Feb. 28, 2017 USD ($)	Jun. 30, 2015 USD ($)	Mar. 31, 2012 USD ($) employee
Operating Leased Assets [Line Items]							
Operating leases, rent expense	$ 3,800,000	$ 2,900,000					
Sale leaseback rent expense	0	0					
Grants receivable							$ 16,500,000
Number of employees to be hired per incentive grant agreement | employee							900
Minimum cumulative employee compensation, recapture period one				$ 108,000,000			
Minimum cumulative employee compensation, recapture period three							$ 324,000,000
Cumulative compensation expense incurred	105,600,000	$ 80,400,000					
Proceeds from government grants	12,000,000						
Grant agreement, maximum possible repayment amount, recapture period two							5,000,000
Grant agreement, maximum possible repayment amount, recapture period three							$ 2,500,000
Grant agreement, recapture provision repayments	1,500,000						
Delaware grant obligation	$ 10,469,000		$ 10,469,000				
SGIP, percentage of incentive issued in the first year	50.00%						
SGIP, subsequent payment period	5 years						
Delaware							
Operating Leased Assets [Line Items]							
Number of full time employees | employee	317	328					
PPA V							
Operating Leased Assets [Line Items]							

PPA expenses	$ 3,500,000	$ 900,000			
Term loan | PPA V | Term Loan due December 2021, Non-Recourse					
Operating Leased Assets [Line Items]					
Debt face amount					$ 131,200,000
Letters of Credit | PPA V					
Operating Leased Assets [Line Items]					
Maximum borrowing capacity				$ 6,200,000.0	$ 6,400,000.0
Amount outstanding	$ 5,000,000		$ 5,000,000		

Commitments and Contingencies - Minimum Lease Payments (Details) $ in Thousands	Jun. 30, 2019 USD ($)
Future Minimum Lease Payments Under Operating Leases	
Remainder of 2019	$ 8,410
2020	16,342
2021	13,683
2022	12,979
2023	12,532
Thereafter	48,297
Total operating leases, future minimum payments due	$ 112,243

Related Party Transactions - Schedule of Related Party Transactions (Details) - USD ($) $ in Thousands	3 Months Ended		6 Months Ended	
	Jun. 30, 2019	Jun. 30, 2018	Jun. 30, 2019	Jun. 30, 2018
Related Party Transactions [Abstract]				
Total revenue from related parties			$ 93,204	$ 30,925
Consulting expenses paid to related parties (included in general and administrative expense)			102	102
Interest expense on debt to related parties	$ 1,606	$ 2,672	$ 3,218	$ 5,299

Related Party Transactions - Additional Information (Details) - USD ($)	3 Months Ended		6 Months Ended		12 Months Ended
	Jun. 30, 2019	Jun. 30, 2018	Jun. 30, 2019	Jun. 30, 2018	Dec. 31, 2018
Related Party Transaction [Line Items]					
Revenue from related parties			$ 93,204,000	$ 30,925,000	
Revenue	$ 233,782,000	$ 168,881,000	434,489,000	338,242,000	
Interest paid			23,867,000	16,540,000	
Interest expense on debt to related parties	1,606,000	2,672,000	3,218,000	5,299,000	
Softbank Corp. | Equity method investee					
Related Party Transaction [Line Items]					
Accounts receivable	9,800		9,800		$ 3,300,000
Revenue from related parties	1,700,000			30,900,000	
Diamond State Generation Partners, LLC | Equity method investee					
Related Party Transaction [Line Items]					
Revenue from related parties			91,600,000		
Consulting Agreement | General Colin L. Powell | Director					
Related Party Transaction [Line Items]					
Related party amount of transaction			125,000		
PPA II					
Related Party Transaction [Line Items]					
Repayments of debt			144,813,000		65,114,000
PPA IIIa					
Related Party Transaction [Line Items]					
Repayments of debt			5,651,000		$ 4,431,000
PPA IIIa | Term loan | Term Loan due September 2028, Non-Recourse | Affiliated entity					
Related Party Transaction [Line Items]					
Repayments of debt	400,000		1,200,000		
Interest paid	700,000		1,500,000		
Service					
Related Party Transaction [Line Items]					
Revenue	23,659,000	19,975,000	46,949,000	39,882,000	
Service | Softbank Corp. | Equity method investee					
Related Party Transaction [Line Items]					
Revenue from related parties	800,000	200,000	1,568,000	300,000	
Product					

Related Party Transaction [Line Items]				
Revenue	179,899,000	108,654,000	321,633,000	229,961,000
Product | Softbank Corp. | Equity method investee				
Related Party Transaction [Line Items]				
Revenue from related parties				28,300,000
Product | Diamond State Generation Partners, LLC | Equity method investee				
Related Party Transaction [Line Items]				
Revenue from related parties	87,700,000			
Installation				
Related Party Transaction [Line Items]				
Revenue	17,285,000	26,245,000	$ 39,543,000	40,363,000
Installation | Softbank Corp. | Equity method investee				
Related Party Transaction [Line Items]				
Revenue from related parties		$ 1,500,000		$ 2,300,000
Installation | Diamond State Generation Partners, LLC | Equity method investee				
Related Party Transaction [Line Items]				
Revenue from related parties	$ 3,900,000			

Related Party Transactions - Debt to Related Parties (Details) - USD ($) $ in Thousands	Jun. 30, 2019	Dec. 31, 2018
Related Party Transaction [Line Items]		
Unpaid principal balance	$ 701,278	$ 786,495
Current portion of debt	26,224	29,848
Long-term portion of debt	641,983	711,433
Total	668,207	741,281
Affiliated entity		
Related Party Transaction [Line Items]		
Unpaid principal balance	67,051	68,272
Current portion of debt	2,889	2,200
Long-term portion of debt	60,377	61,853
Total	$ 63,266	64,053
Convertible Promissory Notes Interest Rate 6% Due December 2020, Recourse | Convertible promissory notes		
Related Party Transaction [Line Items]		
Interest rate percentage	6.00%	
Unpaid principal balance	$ 296,233	296,233
Current portion of debt	0	0
Long-term portion of debt	271,503	263,284
Total	271,503	263,284
Convertible Promissory Notes Interest Rate 6% Due December 2020, Recourse | Convertible promissory notes | Affiliated entity		
Related Party Transaction [Line Items]		
Unpaid principal balance	27,734	27,734
Current portion of debt	0	0
Long-term portion of debt	27,734	27,734
Total	$ 27,734	27,734
Term Loan due September 2028, Non-Recourse | Term loan		
Related Party Transaction [Line Items]		
Interest rate percentage	7.50%	
Unpaid principal balance	$ 39,317	40,538
Current portion of debt	2,889	2,200
Long-term portion of debt	32,643	34,119
Total	35,532	36,319
Term Loan due September 2028, Non-Recourse | Term loan | Affiliated entity		
Related Party Transaction [Line Items]		
Unpaid principal balance	39,317	40,538
Current portion of debt	2,889	2,200
Long-term portion of debt	32,643	34,119
Total	$ 35,532	$ 36,319

Label	Element	Value
Noncontrolling Interest [Member]		
Cumulative Effect of New Accounting Principle in Period of Adoption	us-gaap_CumulativeEffectOfNewAccountingPrincipleInPeriodOfAdoption	$ (130,000)
Retained Earnings [Member]		
Cumulative Effect of New Accounting Principle in Period of Adoption	us-gaap_CumulativeEffectOfNewAccountingPrincipleInPeriodOfAdoption	130,000
Parent [Member]		
Cumulative Effect of New Accounting Principle in Period of Adoption	us-gaap_CumulativeEffectOfNewAccountingPrincipleInPeriodOfAdoption	$ 130,000