

# SECURITIES AND EXCHANGE COMMISSION

## FORM 4

Statement of changes in beneficial ownership of securities

Filing Date: **2010-06-01** | Period of Report: **2010-06-01**  
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([HTML Version](#) on [secdatabase.com](http://secdatabase.com))

### REPORTING OWNER

#### Neely Rick

CIK: **1338196**

Type: **4** | Act: **34** | File No.: **000-51026** | Film No.: **10871011**

Mailing Address

6409 GUADALUPE MINES  
ROAD  
SAN JOSE CA 95120

### ISSUER

#### MONOLITHIC POWER SYSTEMS INC

CIK: **1280452** | IRS No.: **770466789** | State of Incorporation: **CA** | Fiscal Year End: **1231**  
SIC: **3674** Semiconductors & related devices

Mailing Address

6409 GUADALUPE MINES  
ROAD  
SAN JOSE CA 95120

Business Address

6409 GUADALUPE MINES  
ROAD  
SAN JOSE CA 95120  
(408) 826-0600

# FORM 4

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

### OMB APPROVAL

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### STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

1. Name and Address of Reporting Person <b>Neely Rick</b>			2. Issuer Name and Ticker or Trading Symbol <b>MONOLITHIC POWER SYSTEMS INC</b> <b>[MPWR]</b>			5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input type="checkbox"/> Director <input type="checkbox"/> 10% Owner <input checked="" type="checkbox"/> Officer (give title below) <input type="checkbox"/> Other (specify below) <b>Sr. VP and CFO</b>		
(Last)	(First)	(Middle)	3. Date of Earliest Transaction (Month/Day/Year) <b>06/01/2010</b>					
6409 GUADALUPE MINES ROAD			4. If Amendment, Date Original Filed(Month/Day/Year)			6. Individual or Joint/Group Filing (Check applicable line) <input checked="" type="checkbox"/> Form Filed by One Reporting Person <input type="checkbox"/> Form Filed by More than One Reporting Person		
(Street) <b>SAN JOSE, CA 95120</b>								
(City)	(State)	(Zip)						

**Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned**

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock	06/01/2010		M	(1)	4,000	A	\$11.85	35,875	D	
Common Stock	06/01/2010		S	(1)	4,000	D	\$19.2046(2)	31,875	D	

**Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)**

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5)		6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)	8. Price of Derivative Security (Instr. 5)	9. Number of Derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form of Derivative Security: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)	
				Code	V	(A)	(D)	Date Exercisable	Expiration Date						Title
Non-Qualified Stock Option (right to buy)	\$11.85	06/01/2010		M	(1)	4,000		10/26/2008	10/26/2013	Common Stock	4,000	\$ 0	51,557	D	

**Explanation of Responses:**

1. In accordance with the reporting person's 10b5-1 trading plan.
2. The price is the weighted average sale price for the transactions reported on this line. The prices for the transactions reported on this line range from \$18.75 to \$19.50. The reporting person undertakes to provide, upon request by the staff of the Securities and Exchange Commission, the issuer, or a security holder of the issuer, full information regarding the number of shares sold at each separate price.

**Signatures**

Rick Neely

\*\* Signature of Reporting Person

06/01/2010

Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

\* If the form is filed by more than one reporting person, see Instruction 4 (b)(v).

\*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

**Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.**