

FORM 4**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
 or Section 30(h) of the Investment Company Act of 1940

1. Name and Address of Reporting Person* <u>Neely Rick</u> <hr/> (Last) (First) (Middle) <u>6409 GUADALUPE MINES ROAD</u> <hr/> (Street) <u>SAN JOSE CA 95120</u> <hr/> (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>MONOLITHIC POWER SYSTEMS INC</u> <u>[MPWR]</u> 3. Date of Earliest Transaction (Month/Day/Year) <u>09/04/2007</u> 4. If Amendment, Date of Original Filed (Month/Day/Year)	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) <u>Chief Financial Officer</u> 6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person Form filed by More than One Reporting Person
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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	09/04/2007		M		3,500	A	\$8.41	13,000	D	
Common Stock	09/04/2007		S ⁽¹⁾		3,500	D	\$20.75	9,500	D	
Common Stock	09/04/2007		M		2,900	A	\$8.41	12,400	D	
Common Stock	09/04/2007		S ⁽¹⁾		2,900	D	\$20.8301	9,500	D	
Common Stock	09/04/2007		M		600	A	\$8.41	10,100	D	
Common Stock	09/04/2007		S ⁽¹⁾		600	D	\$20.82	9,500	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: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	V		Date Exercisable	Expiration Date					
Non-Qualified Stock Option (right to buy)	\$8.41	09/04/2007		M		3,500	09/06/2006 ⁽²⁾	09/22/2015	Common Stock	3,500	\$0	145,440	D
Non-Qualified Stock Option (right to buy)	\$8.41	09/04/2007		M		2,900	09/06/2006 ⁽²⁾	09/22/2015	Common Stock	2,900	\$0	142,540	D
Non-Qualified Stock Option (right to buy)	\$8.41	09/04/2007		M		600	09/06/2006 ⁽²⁾	09/22/2015	Common Stock	600	\$0	141,940	D

Explanation of Responses:

1. In accordance with the reporting person's 10b5-1 trading plan.

2. 25% of the shares subject to the option vest on 9/6/06; balance vests monthly over 36 months.

By: Saria Tseng For: Rick
Neely

09/05/2007

** Signature of Reporting Person 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.

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