

**FORM 4****UNITED STATES SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

**OMB APPROVAL**

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

**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*<br><u>Neely Rick</u><br><br>(Last) (First) (Middle)<br><u>6409 GUADALUPE MINES ROAD</u><br><br>(Street)<br><u>SAN JOSE CA 95120</u><br><br>(City) (State) (Zip) |  |  | 2. Issuer Name and Ticker or Trading Symbol<br><u>MONOLITHIC POWER SYSTEMS INC</u><br><u>[ MPWR ]</u> |  |  | 5. Relationship of Reporting Person(s) to Issuer<br>(Check all applicable)<br>Director 10% Owner<br>Officer (give title below) Other (specify below)<br>X <u>Chief Financial Officer</u> |  |  |
|  |  |  | 3. Date of Earliest Transaction (Month/Day/Year)<br><u>08/03/2007</u>                                 |  |  |  |  |  |
|  |  |  | 4. If Amendment, Date of Original Filed (Month/Day/Year)  |  |  | 6. Individual or Joint/Group Filing (Check Applicable Line)<br>X Form filed by One Reporting Person<br>Form filed by More than One Reporting Person                                      |  |  |

**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                    | 08/03/2007                           |  | M                              |   | 3,500   | A          | \$8.41  | 3,500   | D  |   |
| Common Stock                    | 08/03/2007                           |  | s <sup>(1)</sup>               |   | 3,500   | D          | \$18.75 | 0   | D  |   |
| Common Stock <sup>(2)</sup>     | 08/03/2007                           |  | A                              |   | 9,500   | A          | \$0     | 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 | (A)  | (D)    | Date Exercisable   | Expiration Date | Title   | Amount or Number of Shares |  |  |   |  |
| Non-Qualified Stock Option (right to buy)  | \$8.41   | 08/03/2007                           |  | M                              |   |  | 3,500  | 09/06/2006 <sup>(3)</sup>                                | 09/22/2015      | Common Stock  | 3,500                      | \$18.75                                    | 148,940  | D   |  |
| Non-Qualified Stock Option (right to buy)  | \$18.77  | 08/03/2007                           |  | A                              |   |  | 30,000 | 08/03/2009 <sup>(4)</sup>                                | 08/03/2014      | Common Stock  | 30,000                     | \$18.77                                    | 30,000   | D   |  |

**Explanation of Responses:**

1. In accordance with the reporting person's 10b5-1 trading plan.
2. 50% of the Performance Units are subject to vest on the first anniversary of the Grant Date and 50% of the Performance Units are subject to vest on the second anniversary of the Grant Date, provide that the Grantee continues to be a service provider on such dates.
3. 25% of the shares subject to the option vest on 9/6/06; balance vests monthly over 36 months.
4. Fifty percent (50%) of the Shares subject to the Option shall vest twenty-four (24) months after the Grant Date, and 1/48 of the Shares subject to the Option shall vest monthly thereafter on the same day of the month as the Grant Date, subject to the Optionee continuing to be a Service Provider on such dates.

Rick Neely08/07/2007

\*\* 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.

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.