FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

| OMB APPROVAL | | | | | | | | |
|--------------------------|-----|--|--|--|--|--|--|--|
| OMB Number: 3235-028 | | | | | | | | |
| Estimated average burden | | | | | | | | |
| hours per response: | 0.5 | | | | | | | |

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

| Name and Address of Reporting Person Rao Meera | | | | | 2. Issuer Name and Ticker or Trading Symbol MONOLITHIC POWER SYSTEMS INC [MPWR] | | | | | | | | | Relationship of Reporting Person(s) to Issuer (Check all applicable) Director | | | | |
|---|---|--|---|--|---|-------------------------------|--------|------------------|----------------------------|-------|---|---|---------------------------------------|---|------------------------------------|---|--|--|
| (Last) (First) (Middle) 79 GREAT OAKS BLVD | | | | İ | 3. Date of Earliest Transaction (Month/Day/Year) 11/06/2015 | | | | | | | | | X | belo | , | below FO | (specify) |
| (Street) SAN JOS | E CA | . 9 | 5119 | 4. If Amendment, Date of Original Filed (Month/Day/Year) | | | | | | | | r) | 6. Indiv Line) X | Form filed by One Reporting Person Form filed by More than One Report | | | son | |
| (City) | (Sta | | ip) | eriva | tive S | | uritio | | ·auired | | enosed o | f or B | enefi | villeis | Pers | | | |
| 1. Title of Security (Instr. 3) | | | 2. Trans | 2. Transaction | | 2A. Deemed Execution Date, | | te, | 3. Transact Code (In | tion | 4. Securities Acquired (A Disposed Of (D) (Instr. 3, 5) | | |) or 5. An 4 and Secu Bene Owne | | nount of rities ficially | 6. Ownership Form: Direct (D) or Indirect (I) | 7. Nature of Indirect Beneficial Ownership |
| | | | | | | | | | Code | v | Amount | (A) or (D) | Price | • | | | (Instr. 4) | (Instr. 4) |
| Common Stock | | | | /06/2015 | | | | | S ⁽¹⁾ | | 2,431 | D | \$63 | .9121 | | 80,915 | D | |
| Common Stock 11/0 | | | | 9/2015 | 15 | | | S ⁽¹⁾ | | 1,263 | D | \$63 | \$63.8979 | | 79,652 | D | | |
| Common Stock 11/0 | | | 11/09 | 9/2015 | 15 | | | S ⁽¹⁾ | | 60 | D | \$6 | \$63.9 | | 79,592 | D | | |
| | | Та | ble II - Der (e.g | | | | | | | | osed of, convertib | | | | wned | | | |
| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | 3A. Deemed Execution Da if any (Month/Day/\) | te, T | 4. Transaction Code (Instr 8) | | | | Expiration I (Month/Day | | Date | 7. Title and Amount of Securities Underlying Derivative Security (Inst 3 and 4) | | Sec (Ins | rice ivative urity tr. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction (Instr. 4) | Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) |
| | | | | c | | v | (A) | (D) | Date Exercisable | | Expiration Date | Title | Amour or Number of Shares | er | | | | |

Explanation of Responses:

1. Shares sold to pay tax obligations resulting from the vesting of restricted stock units.

By: Saria Tseng For: Meera Rao 11/10/2015

** 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.