FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

OMB APPROVAL
OMB Number: 3235-0287
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

| 1. Name and Address of Reporting Person [*] Tseng Saria | | | | | MON | 2. Issuer Name and Ticker or Trading Symbol <u>MONOLITHIC POWER SYSTEMS INC</u> [MPWR] | | | | | | | | | heck al | i appl Directo | licable) or | | 6 Owner |
|--|--|--|--|---|--|--|--|---|------|---|--|-------------------------|---------------|--|---|---|---|---------------------------------------|---------|
| (Last) (First) (Middle) 6409 GUADALUPE MINES ROAD | | | | | 3. Date of Earliest Transaction (Month/Day/Year) 02/25/2010 | | | | | | | | | X | Officer (give title below) VP & General | | bel | Other (specify below) I Counsel | |
| (Street) SAN JOSE CA 95120 (City) (State) (Zip) | | | | | 4. If Amendment, Date of Original Filed (Month/Day/Year) 02/25/2010 | | | | | | | | | ne) X I | vidual or Joint/Group Filing (Check Applicable Form filed by One Reporting Person 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. Transacti Date (Month/Day | | | | y/Year) | Execution Date, | | | 3. Transaction Code (Instr.4. Securities Disposed Of and 5)8) | | | | | | 4 Secur Benef Owne Follo | | cially | 6. Ownersh Form: Direc (D) or Indirect (I) (Instr. 4) | | |
| | | | | | | | | | Code | v | Amount | | (A) or (D) | Price | э т | Reported Transaction(s) Instr. 3 and 4) | | | |
| Common Stock 02/25/20 | | | | | 010 |)10 | | | A | | 30,000 | 30,000 ⁽¹⁾ A | | \$(| \$0 4 | | 5,138 | 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) | ivative Conversion Date Execution urity or Exercise (Month/Day/Year) if any | | | emed 4. ion Date, Transa Code (l /Day/Year) 8) | | | | 6. Date Exercisable and Expiration Date (Month/Day/Year) Date Expiration Exercisable Date | | | 7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4) Amoun or Number of Title Shares | | ount | 8. Price of Derivative Security (Instr. 5) | | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction (Instr. 4) | Ownersh Form: Direct (E or Indire (I) (Instr 4) | Beneficial Ownership | |

Explanation of Responses:

1. Subject to accelerated vesting in certain circumstances, 1/16 of the Performance Units shall vest quarterly following the Vesting Commencement Date, provided that the Grantee continues to be a Service Provider from the Grant Date through each applicable vesting date.

Saria Tseng

04/06/2010

** Signature of Reporting Person

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.

Date