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 (Last) (First) (Middle) 79 GREAT OAKS BLVD | | | | | | 2. Issuer Name and Ticker or Trading Symbol MONOLITHIC POWER SYSTEMS INC [MPWR] 3. Date of Earliest Transaction (Month/Day/Year) 05/03/2018 | | | | | | | | | all app Direct Office below | olicable) etor er (give title | 10 O be | Person(s) to Issuer 10% Owner Other (specify below) Counsel | | |
|--|--|--|--|--|-----------------------|--|--|--|---|---|---|---------------|---|---|--------------------------------------|---|--|---|---|--|
| (Street) SAN JOS (City) | • | | | | | | 4. If Amendment, Date of Original Filed (Month/Day/Year) | | | | | | | | Form | ual 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. Transaction Date (Month/Day/Yo | | | | | ear) | 2A. Deemed Execution Date, if any (Month/Day/Year | | · | 3. Transaction Code (Instr. 8) | | 4. Securities Acquired (A) Disposed Of (D) (Instr. 3, 4 | | | and 5) Secu | | ficially d | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | | 7. Nature of Indirect Beneficial Ownership (Instr. 4) | |
| | | | | | | | | | | e V | Amount | (A) or (D) | Price | | Repor Trans | | (111501.4) | | (111501.4) | |
| Common Stock 05/03/20 | | | | | | 8 | | | S ⁽¹⁾ | 1) | 3,600 | D | \$118.4 | 18.4314 | | 302,076 | | | | |
| Common Stock 05/04/20 | | | | | 8 | | | | S ⁽¹⁾ | 1) | 2,136 | D | \$122.6 | 22.6625 | | 299,940 | | | | |
| | 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) | Execution Date, if any (Month/Day/Year) (Month/Day/Year) Fransaction Code (Instr. Secution Acquired) Fransacti | | oosed D) tr. 3, | Ex (M | Date Exe tpiration fonth/Day ate exercisable | /Year) Securities Underlying Derivative Security (Inst 3 and 4) Amou | | nt of ties lying tive ty (Instr. 4) Amount or Number | of derivative Securities Security (Instr. 5) Owned Following Reported | | Securities Beneficially Owned Following Reported Transaction | Owners Form: Direct or Indi (I) (Inst | D) ect | 11. Nature of Indirect Beneficial Ownership (Instr. 4) | | | | |

Explanation of Responses:

1. The reported sales were to cover taxes upon the vesting of restricted stock units, as required by the Company's equity incentive plans.

<u>/s/ Saria Tseng</u> <u>05/07/2018</u>

** 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.