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 [*] Blegen Theodore | | | | | | 2. Issuer Name and Ticker or Trading Symbol MONOLITHIC POWER SYSTEMS INC [MPWR] | | | | | | | | | ck all app Direc | blicable) stor | | Owner | |
|---|---|--|----------------|--|--|---|------|---|-------------------------------------|--|--------------------|---|---------------------------|-------------------------|--|---|--|--|--|
| (Last) (First) (Middle 4040 LAKE WASHINGTON BLVD. NE, | | | , | 07/2 | 3. Date of Earliest Tran 07/22/2019 | | | | insaction (Month/Day/Year) | | | | X | belo | , | Diffe belov FO | r (specify w) | | |
| (Street) KIRKLAND WA 98033 (City) (State) (Zip) | | | | 3 | - 4. lf # | 4. If Amendment, Date of Original Filed (Month/Day/Year) | | | | | | | | 6. Ine Line) X | Form Form | dual or Joint/Group Filing (Check Applicable Form filed by One Reporting Person Form filed by More than One Reporting Person | | | |
| | | Tab | le I - | Non-Deri | vative | Sec | urit | ies A | cquired | , Di | sposed | of, or E | Benefi | ciall | y Own | ed | | | |
| 1. Title of Security (Instr. 3) 2. Transaction Date (Month/Day/Y | | | | Year) if | Execu f any | eemed tion Date, n/Day/Year) | | 3. Transaction Code (Instr. 8) | | 4. Securities Acquired (A) Disposed Of (D) (Instr. 3, 5) | | 4 and Secu | | ficially d | 6. Ownership Form: Direct (D) or Indirect (I) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) | | | |
| | | | | | | | | Code | v | Amount | (A) or (D) Pri | | e | Repo Trans | | (Instr. 4) | (instr. 4) | | |
| Common Stock 07/22/201 | | | | |)19 | 9 | | | S ⁽¹⁾ | | 1,041 | D | \$14 | 16.22 | 2 8 | 39,112 | D | | |
| Common Stock 07/23/201 | | | | |)19 | 19 | | | М | | 9,600 | A | 9 | \$0.0 | | 98,712 | | | |
| | | Ta | able | II - Deriva (e.g., p | | | | | | | osed of convert | | | | Owned | | | - | |
| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | Exec if any | Deemed ution Date, y th/Day/Year) | 4. Transac Code (In 8) | | | | 6. Date E: Expiratio (Month/D | n Da | | 7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4) Amou | | 3 of Di Se (In | Price erivative ecurity nstr. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s (Instr. 4) | Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) | |
| | | | | | Code | v | (A) | (D) | Date Exercisat | | Expiration Date | Title | or Numb of Share | er | | | | | |
| Restricted Stock Units | (2) | 07/23/2019 | | | M ⁽²⁾ | | | 9,600 | (2) | Τ | (2) | Common Stock | 9,60 | 00 | \$0.0 | 28,800 | D | | |

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.

2. On October 25, 2018, the reporting person was granted a target number of 9,600 performance units and can earn up to a maximum of 48,000 performance units subject to satisfaction of five stock price targets ranging from \$140 to \$172 over the performance periods from October 25, 2018 to December 31, 2023, as determined by the Compensation Committee of the Company. All performance units are subject to time based vesting and require service through January 1, 2024 or an earlier change in control. Once vested, performance units convert into shares of common stock on a 1-for-1 basis and one-third of the resulting shares have no sales restrictions and are sellable on January 1, 2024, one-third of the shares have sales restrictions until January 1, 2024, one-third of the shares have sales restrictions until January 1, 2024, one-third of the shares have sales restrictions until January 1, 2024, one-third of the shares have sales restrictions until January 1, 2024, one-third of the shares have sales restrictions until January 1, 2024, one-third of the shares have sales restrictions until January 1, 2024, one-third of the shares have sales restrictions until January 1, 2026. On July 23, 2019, the second price target had been met and approved by the Compensation Committee, which resulted in 9,600 units being credited, subject to time based vesting above.

| By: Saria Tseng For: Bernie | 07/23/2019 |
|-----------------------------|------------|
| Blegen | 0//25/2019 |

** 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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