

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* <u>Xiao Deming</u> _____ (Last) (First) (Middle) 4040 LAKE WASHINGTON BLVD. NE, SUITE 201 _____ (Street) KIRKLAND WA 98033 _____ (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>MONOLITHIC POWER SYSTEMS INC</u> [MPWR]	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner X Officer (give title below) Other (specify below) <u>Pres. of MPS Asia Operations</u>
	3. Date of Earliest Transaction (Month/Day/Year) 04/23/2019	
4. If Amendment, Date of Original Filed (Month/Day/Year)		

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	04/23/2019 ⁽¹⁾		M ⁽¹⁾		9,600 ⁽¹⁾	A	\$0.0	359,151	D	
Common Stock	07/01/2019		S ⁽²⁾		4,305	D	\$139.5561	342,394	D	
Common Stock								1,101	I	by Spouse

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
Restricted Stock Units	(1)	04/23/2019		M ⁽¹⁾		9,600	(1)	(1)	(1)	Common Stock	9,600	\$0.0	38,400	D	

Explanation of Responses:

- 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, 2025 and one-third have sales restrictions until January 1, 2026. On April 23, 2019, the first 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.
- The reported sales were to cover taxes upon the vesting of restricted stock units, as required by the Company's equity incentive plans.

By: Saria Tseng For: Deming 07/03/2019
Xiao

** 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.