FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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 [*] <u>Moyer James C</u>				2. Issuer Name and Ticker or Trading Symbol <u>MONOLITHIC POWER SYSTEMS INC</u> [MPWR]											tionship of Reportin all applicable) Director Officer (give title		Ū	109	6 Owner	
(Last) 79 GREA	(Last) (First) (Middle) 79 GREAT OAKS BLVD					3. Date of Earliest Transaction (Month/Day/Year) 04/10/2017									below)		ue	Other (specify below)		
(Street) SAN JOSE CA 95119 (City) (State) (Zip)				4. If Amendment, Date of Original Filed (Month/Day/Year) 6. Individual or Joint/Group Filing (Check Applicable Line) X Form filed by One Reporting Person Form filed by More than One Reporting Person											Person					
Table			e I - Non-Deriv 2. Transaction Date (Month/Day/Year)	Ative Securiti 2A. Deemed Execution Date, if any (Month/Day/Year		ate,	S Acq 3. Transa Code 8)	action	, 4. S	Disposed of, or Bene 4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and			A) or	d 5) Securities Beneficia Owned		ntof s ally	Form: (D) or Indire		7. Nature of Indirect Beneficial Ownership	
							Code	v	Am	Amount (A) or (D)		Price		Re Tra	Following Reported Transaction(s) (Instr. 3 and 4)		(Instr. 4)		(Instr. 4)	
Common Stock			04/10/2017			S ⁽¹⁾		15	5,000	D	5 \$91.4491		836,758		D					
Common Stock														71,823		I		by Moyer FamilyTrust		
		Та	ble II - Derivat (e.g., pเ											y Ow	ned					
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)			An Se Un De Se	7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)		8. Price of Derivativ Security (Instr. 5)		9. Number o derivative Securities Beneficially Owned Following Reported Transaction (Instr. 4)		10. Ownersh Form: Direct (E or Indire (I) (Instr. 4)	Beneficial Ownership ct (Instr. 4)	
				Code	v	(A)		Date Exercis	sable	Expiratio Date	n Tit	tle	Amount or Number of Shares							

Explanation of Responses:

1. In accordance with the reporting person's 10b5-1 trading plan.

2. The price is the weighted average sale price for the transactions reported on this line. The prices for the transactions reported on this line range from \$90.77 to \$92.02. The reporting person undertakes to provide, upon request by the staff of the Securities and Exchange Commission, the issuer, or a security holder of the issuer, full information regarding the number of shares sold at each separate price.

By: Saria Tseng For: James	04/12/2017
Moyer	<u>04/12/2017</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.

OMB APPROVAL