## 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 <sup>*</sup> <u>Moyer James C</u>				2. Issuer Name and Ticker or Trading Symbol <u>MONOLITHIC POWER SYSTEMS INC</u> [MPWR]									(Che	eck all app X Direc	ship of Reporting I pplicable) ector ficer (give title		Person(s) to Issuer 10% Owner Other (specif		vner
(Last) (First) (N 79 GREAT OAKS BLVD			/liddle)	3. Date of Earliest 10/01/2013			est Transaction (Month/Day/Year)							belo	.0	itie		ow)	pecity
(Street) SAN JOSE CA 9.			5119 "ip)	4. If Amendment, Date of Original Filed (Month/Day/Year)						Line	<ul> <li>B. Individual or Joint/Group Filing (Check Applicable Line)</li> <li>X Form filed by One Reporting Person</li> <li>Form filed by More than One Reporting Person</li> </ul>								
Table I - No       1. Title of Security (Instr. 3)       2. Trans       Date (Month/				ative Securities 2A. Deemed Execution Date, if any (Month/Day/Year)		s Acquired, 3. Transaction Code (Instr. 8)		4. 1 1 Dis	Disposed of, or Bene 4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 a			1d 5) Secur Benef Owne		nt of es ally	6. Ownership Form: Direct (D) or Indirect (I)		7. Nature of Indirect Beneficial Ownership		
						Code	v	An	Amount (A) or Price (D)		Price		Following Reported Transaction(s) (Instr. 3 and 4)		(Instr. 4)		(Inst	r. 4)	
Common Stock			10/01/2013			S <sup>(1)</sup>		8	3,500	D	D \$30.7819		) 308,783				by Moyer FamilyTrust		
Common Stock			10/02/2013			S <sup>(1)</sup>		8	3,500	D	D \$30.8084		<sup>3)</sup> 300,283		I		by Moyer FamilyTrust		
Common Stock													1,000	<u> </u>		D			
		Та	ble II - Derivat (e.g., pı							osed of, convertil				Owned					
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. Transaci Code (In 8)		5. Nu of Deriv Secur Acqu (A) or Dispo of (D) (Instr and 5	ative rities ired osed	Expir	ation I	ercisable and Date y/Year)		7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4) Amount or Number of		8. Price of Derivative Security Instr. 5)	9. Number o derivative 9. Securities Beneficially Owned Following Reported Transaction (Instr. 4)		10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)		11. Nature of Indirect Beneficial Ownership Instr. 4)

Explanation of Responses:

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

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 \$30.56 to \$30.92. 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.
 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 \$30.77 to \$30.99. 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	10/02/2012
Moyer	10/02/2013

\*\* 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.