FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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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 [®] SMITH- PILKINGTON KAREN A						2. Issuer Name and Ticker or Trading Symbol MONOLITHIC POWER SYSTEMS INC [MPWR]									neck all a X Dir	applicable) rector		Person(s) to Issuer 10% Owner	
(Last) (First) (Middle) 79 GREAT OAKS BLVD					3. Date of Earliest Transaction (Month/Day/Year) 02/07/2013											ficer (give title low)		Other (specify below)	
(Street) SAN JOS (City)			5119 Zip)		4. If Ai	mend	lment,	Date o	of Original	Filed	l (Month/D	0ay/Ye	ar)	6. Lin	e) X Fo Fo	al or Joint/Grou orm filed by On orm filed by Mo orson	e Rep	oorting Pers	son
		, ,		lon-Deriv	ative S	ecu	rities	s Aco	uired. [Disc	osed o	f. or	Bene	ficia	llv Ow	ned			
1. Title of Security (Instr. 3) 2. Transa Date (Month/D:				tion 2A. Deemed Execution Date,			3. Transaction Code (Instr. 8) 4. Securities Acquir. Disposed Of (D) (Ins and 5)			cquire)) (Inst	d (A) d	or 5. A Sec Ben Owr Fol	mount of urities neficially	Forr (D) d Indi	wnership m: Direct or rect (I) tr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)			
								Code	v	Amount		A) or D)	Price	Tra	ansaction(s) nstr. 3 and 4)				
Common Stock 02/07/2				2013	013		A ⁽¹⁾		227		Α	\$ <mark>0</mark> .	0	10,762		D			
	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)	Execut if any			e (Instr. Gamma (A) (D) e (V) (A) (D) e (V) (A) (D)		ative rities ired osed . 3, 4	6. Date Exercisable and Expiration Date (Month/Day/Year)			7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4) Amount or Number of Title Shares		str. ount	8. Price of Derivati\ Security (Instr. 5)	Beneficially	/ [/ [(4	10. Ownership Form: Direct (D) or Indirect I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)

Explanation of Responses:

1. Equitable stock dividend adjustment approved by the Board of Director as a result of dividend Payment to shareholders on December 28, 2012. Stock dividends will release according to the same vesting schedule as the original grants.

By: Meera Rao For: Karen	02/11/2013
Smith Bogart	02/11/2013

Date

** Signature of Reporting Person

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.