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 Addr	ess of Reporting Per <mark>Maurice</mark>	son*	2. Issuer Name and Ticker or Trading Symbol <u>MONOLITHIC POWER SYSTEMS INC</u> [MPWR]		ationship of Reporting Pers (all applicable) Director	10% Owner
(Last) 6409 GUADAL	(First) JUPE MINES ROA	(Middle)	3. Date of Earliest Transaction (Month/Day/Year) 08/03/2011	X	Officer (give title below) Sr. V.P.of Sales and M	Other (specify below) Marketing
(Street) SAN JOSE (City)	CA (State)	95120 (Zip)	4. If Amendment, Date of Original Filed (Month/Day/Year)	6. Indi Line) X	vidual or Joint/Group Filing Form filed by One Repoi Form filed by More than Person	rting Person

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. Securitie Disposed C and 5)			5. Amount of Securities Beneficially Owned	6. Ownership Form: Direct (D) or Indirect (I)	7. Nature of Indirect Beneficial Ownership		
			Code	v	Amount	(A) or (D)	Price	Following Reported Transaction(s) (Instr. 3 and 4)	(Instr. 4)	(Instr. 4)		
Common Stock	08/03/2011		S ⁽¹⁾		233	D	\$14.17	114,275	D			
Common Stock								80,004	I	by Family Trust ⁽²⁾		
Common Stock								18,371	I	byC Sciammas 04 TRST ⁽³⁾		
Common Stock								18,371	I	byM Sciammas 04 Trst ⁽⁴⁾		

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	 3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transact Code (In 8)		of Deriv Secu Acqu (A) of Dispo of (D)	ecurities (Month/Day/Year) coquired A) or Disposed f (D) Instr. 3, 4		Amour Securit Underl Derivat Securit	7. Title and 8. Pr Amount of of Securities Deri Underlying Secu Derivative (Inst Security (Instr. 3 and 4)		Beneficially	Ownership Form: Direct (D)	Beneficial Ownership	
			Code	v	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares				

Explanation of Responses:

1. Shares sold to pay tax obligations resulting from the vesting of restricted stock units.

2. Shares held by Sciammas Family Living Trust, Maurice Sciammas and Christina Sciammas, Trustees

3. Shares held by Christina Sciammas 2004 Trust, Christina Sciammas and Maurice Sciammas, Trustees

4. Shares held by Maurice Sciammas 2004 Trust, Maurice Sciammas and Christina Sciammas, Trustees

By: Saria Tseng For: Maurice 08/03/2011

** 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.