

Xiao Deming  
Form 4/A  
November 08, 2011

**FORM 4** UNITED STATES SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

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 OF SECURITIES**

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

|   |         |          |  |   |
|---|---------|----------|--|---|
| 1. Name and Address of Reporting Person * |         |          | 2. Issuer Name and Ticker or Trading Symbol          | 5. Relationship of Reporting Person(s) to Issuer  |
| Xiao Deming                               |         |          | MONOLITHIC POWER SYSTEMS INC [MPWR]                  | (Check all applicable)  |
| (Last)                                    | (First) | (Middle) | 3. Date of Earliest Transaction (Month/Day/Year)     | <input type="checkbox"/> Director <input type="checkbox"/> 10% Owner  |
| 6409 GUADALUPE MINES ROAD                 |         |          | 11/03/2011   | <input checked="" type="checkbox"/> Officer (give title below) <input type="checkbox"/> Other (specify below) |
| (Street)                                  |         |          | 4. If Amendment, Date Original Filed(Month/Day/Year) | Pres. of MPS Asia Operations  |
| SAN JOSE, CA 95120                        |         |          | 11/07/2011   | 6. Individual or Joint/Group Filing(Check Applicable Line)  |
| (City)                                    | (State) | (Zip)    |  | <input checked="" type="checkbox"/> Form filed by One Reporting Person  |
|   |         |          |  | <input type="checkbox"/> Form filed by More than One Reporting 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. 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 Ownership (Instr. 4) |
|---------------------------------|--------------------------------------|--|--------------------------------|---|---|--|-----------------------------------|
|                                 |                                      |  |                                | (A) or (D)  | Price   |  |                                   |
| Common Stock                    | 11/03/2011                           |  | S <sup>(1)</sup>               | V   | 187 \$ 12.17  | D  |                                   |

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

**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 control number.**

SEC 1474 (9-02)

**Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)**

