

Wenger Howard
Form 4
February 15, 2011

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

OMB APPROVAL

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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 *
Wenger Howard

(Last) (First) (Middle)

C/O SUNPOWER CORPORATION, 3939 NORTH FIRST STREET

(Street)

SAN JOSE, CA 95134

(City) (State) (Zip)

2. Issuer Name and Ticker or Trading Symbol
SUNPOWER CORP [SPWRA]

3. Date of Earliest Transaction (Month/Day/Year)
02/11/2011

4. If Amendment, Date Original Filed(Month/Day/Year)

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)

Director 10% Owner
 Officer (give title below) Other (specify below)
President, U&PP

6. Individual or Joint/Group Filing(Check Applicable Line)
 Form filed by One Reporting Person
 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 | | | |
| | | | | Code | V | Amount | | |
| Class A Common Stock | 02/11/2011 | | M | 4,999 | A | \$ 0 | 46,199 | D |
| Class A Common Stock | 02/11/2011 | | F(1) | 1,834 | D | \$ 16.04 | 44,365 | D |

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

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number.

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) | 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) | 7. Title and Amount of Underlying Securities (Instr. 3 and 4) | 8. Price or Value of Underlying Securities (Instr. 3 and 4) |
|--|--|--------------------------------------|--|--------------------------------|---|--|---|---|
| Restricted Stock Units (RSUs) | (2) | 02/11/2011 | | M | 4,999 | (3) (3) | Class A Common Stock | 4,999 |

Reporting Owners

| Reporting Owner Name / Address | Relationships | | | |
|--|---------------|-----------|-----------------|-------|
| | Director | 10% Owner | Officer | Other |
| Wenger Howard C/O SUNPOWER CORPORATION 3939 NORTH FIRST STREET SAN JOSE, CA 95134 | | | President, U&PP | |

Signatures

Karla Rogers, as attorney-in-fact for Howard Wenger
 Date: 02/15/2011

__Signature of Reporting Person

Date

Explanation of Responses:

- * 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).
- (1) Disposition of shares exempt under Rule 16b-3 as payment of tax liability to Company by delivery or withholding securities incident to vesting of restricted stock shares.
- (2) Each RSU represents a contingent right to receive one share of the Issuer's Class A Common Stock upon vesting.
- (3) The RSUs shall vest in three equal installments on each of February 11, 2010, February 11, 2011 and February 11, 2012.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.