

SCHEDULE 13G

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

SCHEDULE 13G

Under the Securities Exchange Act of 1934

(Amendment No.:)*

SUNPOWER CORP

(Name of Issuer)

COMMON STOCK

(Title of Class of Securities)

867652109

(CUSIP NUMBER)

February 28, 2006

(Date of Event Which Requires Filing of this Statement)

*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 (the "Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

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CUSIP No. 867652109 13G

1. NAME OF REPORTING PERSON
S.S. or I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

Merrill Lynch & Co., Inc.
(on behalf of Merrill Lynch Investment Managers (MLIM))**

2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* Joint Filing

(a) []
(b) []

3. SEC USE ONLY

4. CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

NUMBER OF SHARES BENEFICALLY OWNED BY EACH REPORTING PERSON WITH

5. SOLE VOTING POWER

NONE

6. SHARED VOTING POWER

1,233,800

7. SOLE DISPOSITIVE POWER

NONE

8. SHARED DISPOSITIVE POWER

1,233,800

9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

1,233,800 (ownership disclaimed pursuant to Section 13d-4 of the 1934 Act)

10. CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES*

11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

13.85%

12. TYPE OF REPORTING PERSON*

HC, CO

*SEE INSTRUCTION BEFORE FILING OUT!

**SEE EXHIBIT A

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14. CHECK THE APPROPRIATE BOX TO DESIGNATE THE RULE PURSUANT TO WHICH THIS SCHEDULE IS FILED:

Rule 13d-1 (b)

Rule 13d-1 (c)

Rule 13d-1 (d)

SCHEDULE 13G

ITEM 1 (a) Name of Issuer:

SUNPOWER CORP (the "Company")

ITEM 1 (b) Address of Issuer's Principal Executive Offices:

430 Indio Way
Sunnyvale, CA 94085

ITEM 2 (a) Name of Persons Filing:

Merrill Lynch & Co., Inc.
(On behalf of Merrill Lynch Investment Managers ("MLIM"))

ITEM 2 (b) Address of Principal Business Office or, if none, Residence:

Merrill Lynch & Co., Inc.
(on behalf of Merrill Lynch Investment Managers ("MLIM"))
World Financial Center, North Tower

250 Vesey Street
New York, NY 10381

ITEM 2 (c) Citizenship:

See Item 4 of Cover Pages

ITEM 2 (d) Title of Class Securities:

Common Stock

ITEM 2 (e) CUSIP NUMBER:

See Cover Page

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ITEM 3

If this statement is filed pursuant to Rules 13d-1(b), or 13d-2(b) or 13d-2(c), check whether the person filing is a:

- (a) Broker or Dealer registered under Section 15 of the Act,
- (b) Bank as defined in Section 3(a) (6) of the Act,
- (c) Insurance Company as defined in Section 3(a) (19) of the Act,
- (d) Investment Company registered under Section 8 of the Investment Company Act of 1940,
- (e) Investment Adviser in accordance with Rule 13d-1(b) (1) (ii) (E),
- (f) Employee Benefit Plan or Endowment Fund in accordance with Rule 13d-1(b) (ii) (F),
- (g) Parent Holding Company or Control Person in accordance with Rule 13d-1(b) (ii) (G); see Item 7,
- (h) A savings association as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813),
- (i) A church plan that is excluded from the definition of an investment company under Section 3(c) (14) of the Investment Company Act of 1940,
- (j) Group, in accordance with Rule 13d-1(b) (1) (ii) (J).

ITEM 4 Ownership

(a) Amount Beneficially Owned:

See Item 9 of Cover Pages.

(b) Percent of Class:

See Item 11 of Cover Pages

(c) Number of shares as to which such person has:

(i) sole power to vote or to direct the vote:

See Item 5 of Cover pages

(ii) shared power to vote or to direct the vote:

See Item 6 of Cover pages

(iii) sole power to dispose or to direct the disposition of:

See Item 7 of Cover pages

(iv) shared power to dispose or to direct the disposition of:

See Item 8 of Cover pages

ITEM 5 Ownership of Five Percent or Less of a Class.

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following: []

ITEM 6 Ownership of More than Five Percent on Behalf of Another Person.

Merrill Lynch & Co., Inc. ("ML&Co.") is a parent holding company. Merrill Lynch Investment Managers ("MLIM") is an operating division of ML&Co.'s indirectly owned asset management subsidiaries. Certain of these subsidiaries hold certain shares of the security which is the subject of this report. (See Item 7).

ITEM 7 Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company or Control Person.

Merrill Lynch & Co., Inc. ("ML&Co.") is a parent holding company. Merrill Lynch Investment Managers ("MLIM") is an operating division of ML&Co. consisting of ML&Co.'s indirectly-owned asset management subsidiaries. The following asset management subsidiaries hold certain shares of the common stock, which is the subject of this 13G filing:

FEDERATED EQUITY MANAGEMENT COMPANY OF PA
GARTMORE MUTUAL FUND CAPITAL TRUST
IQ INVESTMENT ADVISERS, LLC
MERRILL LYNCH INVESTMENT MANAGERS LTD
FUND ASSET MANAGEMENT, L.P
MERRILL LYNCH INVESTMENT MANAGERS, L.P
PACIFIC LIFE INSURANCE COMPANY

ITEM 8 Identification and Classification of Members of the Group.

Not Applicable

ITEM 9 Notice of Dissolution of Group.

Not Applicable

ITEM 10 Certification

By signing below each of the undersigned certifies that, to the best Of their knowledge and belief, the securities referred to above were acquired and are held in the ordinary course of business and were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of such securities and were not acquired and are not held in connection with or as a participant in any transaction having such purpose or effect.

Signature.

After reasonable inquiry and to the best of my knowledge and belief, each of the undersigned certifies that the information set forth in this statement is true, complete and correct.

Date: March 8, 2006

Merrill Lynch & Co, Inc.
(on behalf of Merrill Lynch Investment Managers ("MLIM"))

/s/ Jeffrey Hiller

Name: Jeffrey Hiller
Title: Attorney-In-Fact*

*Signed pursuant to a power of attorney, dated September 14, 2004, included as Exhibit B to this Schedule 13G filed with the Securities and Exchange Commission by Merrill Lynch & Co, Inc. (on behalf of Merrill Lynch Investment Managers ("MLIM"))

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EXHIBIT A

Merrill Lynch Investment Managers ("MLIM") of ML&Co. is comprised of the following legal entities: Merrill Lynch Investment Managers, L.P., ("MLIMLP") doing business as Merrill Lynch Investment Managers; Fund Asset Management, L.P. ("FAM") doing business as Fund Asset Management; Merrill Lynch Investment Managers, LLC ("MLIMLLC"); Merrill Lynch Asset Management U.K. Limited ("MLAM UK"); Merrill Lynch (Suisse) Investment Management S.A. (MLS); Merrill Lynch Investment Managers International Limited ("MLIMI"); Merrill Lynch Investment Managers Limited; Merrill Lynch Investment Managers (Asia Pacific) Limited; Merrill Lynch Investment Managers (Asia) Limited; Merrill Lynch Investment Managers Limited (Australia); Merrill Lynch Investment Managers (Isle of Man) Limited; Munich London Investment Management Limited; Munich London Investment Management (Jersey) Limited; Merrill Lynch Investment Managers Co. Ltd; DSP Merrill Lynch Fund Managers Ltd; Merrill Lynch Global Asset Management Limited; Merrill Lynch Fund Managers Limited; Merrill Lynch Fund Managers (Channel Islands) Limited; Merrill Lynch Investment Managers (Channel Islands) Limited; and Merrill Lynch Pensions Limited. Each of MLIMLP, FAM, MLAM UK, MLS and MLIMI is an investment adviser registered under Section 203 of the Investment Advisers Act of 1940, which acts as investment adviser to various investment companies registered under Section 8 of the Investment Company Act of 1940. Each other firm constituting part of MLIM is an investment adviser operating under the laws of a jurisdiction other than the United States. The investment advisers that comprise MLIM exercise voting and investment powers over portfolio securities independently from other direct and indirect subsidiaries of ML&Co.

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EXHIBIT B

POWER OF ATTORNEY

The undersigned, Merrill Lynch & Co., Inc. (the "Corporation"), a corporation duly organized under the laws of the State of Delaware, with its principal place of business at 4 World Financial Center, New York, New York, 10080, does hereby make, constitute and appoint Andrew J. Donohue, Jeffrey Hiller, Alice Pellegrino and Brad Lucido acting severally, each of whose address is Merrill Lynch Investment Managers, L.P., 800 Scudders Mill Road, Plainsboro, NJ, 08536, as its true and lawful attorneys-in-fact, for it and in its name, place and stead (i) to execute on behalf of the Corporation and cause to be filed and/or delivered, as required under Section 13(d) of the Securities

Exchange Act of 1934 (the "Act") and the regulations thereunder, any number, as appropriate, of original, copies, or electronic filings of the Securities and Exchange Commission Schedule 13D or Schedule 13G Beneficial Ownership Reports (together with any amendments and joint filing agreements under Rule 13d-1(f)(1) of the Act, as may be required thereto) to be filed and/or delivered with respect to any equity security (as defined in Rule 13d-1(d) under the Act) beneficially owned by the undersigned and which must be reported by the undersigned pursuant to Section 13(d) of the Act and the regulations thereunder, and generally to take such other actions and perform such other things necessary to effectuate the foregoing as fully in all respects as if the undersigned could do if personally present. This Power of Attorney shall remain in effect until revoked, in writing, by the undersigned.

IN WITNESS WHEREOF, the undersigned has executed this Power of Attorney this 14th day of September, 2004.

MERRILL LYNCH & CO., INC.

By:

/s/ Rosemary T. Berkery
Name: Rosemary T. Berkery
Title: Executive Vice President and General Counsel