UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of report (Date of earliest event reported): January 9, 2009

SunPower Corporation

(Exact Name of Registrant as Specified in Charter)

Delaware (State or Other Jurisdiction of Incorporation)

001-34166 (Commission File No.) 94-3008969 (IRS Employer Identification No.)

3939 North First Street, San Jose, California 95134 (Address of Principal Executive Offices) (Zip Code)

Registrant's telephone number, including area code: (408) 240-5500

N/A (Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (*see* General Instruction A.2. below):

Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 1.01. Entry into a Material Definitive Agreement

On January 9, 2009, SunPower Corporation ("SunPower") entered into a polysilicon supply agreement (the "Agreement") with Hemlock Semiconductor Corporation ("Hemlock"). The Agreement provides the general terms and conditions pursuant to which SunPower will purchase, on a firm commitment basis, fixed annual quantities of polysilicon at specified prices from 2011 through 2020. SunPower expects to supply the polysilicon to third parties that will manufacture ingots and wafers using such polysilicon for SunPower. The aggregate quantity of polysilicon to be purchased over the term of the Agreement is expected to support approximately 3.5 gigawatts of solar cell manufacturing production based on SunPower's expected silicon utilization during such period.

Under the Agreement, SunPower is required to make prepayments to Hemlock of \$14 million in 2009, \$102 million in 2010, \$102 million in 2011, and \$73 million in 2012. Such prepayments will be used to fund the expansion of Hemlock's polysilicon manufacturing capacity and will be credited against future deliveries of polysilicon to SunPower. The prepayments requirement, together with the balance of SunPower's firm commitment payment obligations under the Agreement, represent a material financial obligation of SunPower. Based on current projections SunPower believes it will have sufficient liquidity, including cash on hand and expected future cash flows, to service the Agreement's payment obligations.

This report contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Forward-looking statements are statements that do not represent historical facts. SunPower uses words and phrases such as "will," "expects," "expected," "projections," "believes," and similar expressions to identify forward-looking statements. Forward-looking statements in this report include, but are not limited to, SunPower's plans and expectations regarding: (a) obligations under the Agreement; (b) Hemlock's use of prepayments; (c) SunPower's liquidity and expected future cash flows. These forward-looking statements are based on information available to SunPower as of the date of this report and management's current expectations, forecasts and assumptions, and involve a number of risks and uncertainties that could cause actual results to differ materially from those anticipated by these forward-looking statements. Such risks and uncertainties include a variety of factors, some of which are beyond SunPower's control. In particular, risks and uncertainties that could cause actual results to differ include: (i) SunPower's ability to obtain and maintain an adequate supply of polysilicon, ingots, wafers and other materials, components and products to manufacture its component products and design and construct its systems, as well as the price it pays for such materials, components and products; (ii) business and economic conditions and growth trends in the solar power industry; (iii) the continuation of governmental and related economic incentives promoting the use of solar power; (iv) the continued availability of third-party financing arrangements for SunPower's customers; (v) construction difficulties or potential delays in the project implementation process, including transmission access and upgrades; (vi) unanticipated delays or difficulties securing necessary permits, licenses or other governmental approvals; (vii) the risk of continuation of supply of products and components from suppliers; (viii) unanticipated problems with deploying the system on the sites; (ix) SunPower's ability to ramp new production lines and realize expected manufacturing efficiencies; (x) unforeseen manufacturing equipment delays at SunPower's fabrication facilities and panel factories; (xi) SunPower's ability to utilize thinner wafers, reduce kerf loss and otherwise achieve anticipated improvements in polysilicon usage efficiency; (xii) production difficulties that could arise; (xiii) the success of SunPower's ongoing research and development efforts; (xiv) SunPower's ability to compete with other companies and competing technologies; (xv) liquidated damages or customer refunds for late installations arising on large scale solar projects; (xvi) unanticipated changes in the mix of balance of systems sales; and (xvii) other risks described in SunPower's Quarterly Report on Form 10-Q for the quarter ended September 28, 2008, and other filings with the Securities and Exchange Commission. These forward-looking statements should not be relied upon as representing SunPower's views as of any subsequent date, and SunPower is under no obligation to, and expressly disclaims any responsibility to, update or alter its forward-looking statements, whether as a result of new information, future events or otherwise.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

SUNPOWER CORPORATION

Date: January 15, 2009

By: /s/ Dennis V. Arriola

Name: Dennis V. Arriola Title: Senior Vice President and Chief Financial Officer