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 25, 2010

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 5.02. Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

On January 25, 2010, SunPower Corporation, a Delaware corporation (the "Company"), announced that Howard Wenger will serve as President, Utility & Power Plants for the Company's utilities and power plants business group. Mr. Wenger previously served as the Company's President, Global Business Units. The change in Mr. Wenger's role coincides with the Company's appointment of James Pape who will serve as President, Residential & Commercial for the Company's residential and commercial business group.

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.

Date: January 25, 2010

SUNPOWER CORPORATION

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