

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

July 23, 2013

VIA E-mail
Mr. Charles Boynton
Chief Financial Officer
SunPower Corporation
77 Rio Robles
San Jose, CA 95134

Re: SunPower Corporation

Form 10-K for the Year Ended December 30, 2012

Filed February 25, 2013 Form 8-K Filed May 2, 2013

File No. 001-34166

Dear Mr. Boynton:

We have reviewed your response letter dated July 8, 2013 and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

Form 10-K for the Fiscal Year Ended December 30, 2012

<u>Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 52</u>

Financial Operations Overview, page 53

1. Please refer to your response to prior comments 3 and 5. We note your existing disclosures regarding your construction and development contracts appears limited to disclosure of the reconciliation from the GAAP amounts to the non-GAAP amounts contained in your earnings release. We also note that the structure and economic characteristics of these projects appear to differ significantly from your other revenue streams. In order to provide investors with a better understanding of your operations,

Mr. Charles Boynton SunPower Corporation July 23, 2013 Page 2

please revise future filings to provide clear disclosure of the gross GAAP amounts recognized as revenue under these arrangements. Provide us with a sample of your proposed disclosure that shows the amounts for the years ended December 30, 2012 and 2011 and year to date fiscal 2013.

2. Further to the above, in order to enhance an investors understanding of your existing operations and your future prospects, please revise future filings to provide a summary of your existing construction and development projects. Include information that is relevant to understanding the projects under development, including but not limited to the size of the project, status of the project, details of any power purchase agreements and expected project completion date.

Note 18. Segment Information, page 140

3. With reference to your change in segments in the first quarter of 2012, please provide us with additional details about your segment presentation. Provide us with a summary of the information that your chief operating decision maker utilizes in assessing your performance and in allocating resources. In this regard, given the apparent growing importance of your construction and development projects and given how the economics of these transactions appears to differ significantly from your traditional business, explain how these projects are reflected in the information presented to your chief operating decision maker. Tell us how your chief operating decision maker manages and evaluates the systems construction and development projects.

Form 8-K dated May 2, 2013

4. We note your response to prior comment 5. In future filings please expand your disclosures to provide greater clarity into the non-GAAP adjustments for revenue and gross margin, similar to your response. In addition, please also revise future filings as appropriate to include greater discussion of any significant or unusual underlying activities impacting the non-GAAP adjustments, including items that may have resulted in disparate non-GAAP adjustments being recorded to revenue and gross margins.

You may contact Lynn Dicker, Staff Accountant, at (202) 551-3616 or me at (202) 551-3643 if you have questions regarding these comments. In this regard, do not hesitate to contact Martin James, Senior Assistant Chief Accountant, at (202) 551-3671.

Sincerely,

/s/ Kevin L. Vaughn

Kevin L. Vaughn Accounting Branch Chief