

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

April 3, 2014

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

Re: SunPower Corporation

Form 10-K for the year ended December 29, 2013

Filed February 18, 2014 File No. 001-34166

Dear Mr. Boynton:

We have reviewed your filings 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 29, 2013

Item 8. Financial Statements and Supplementary Data, page 73

Consolidated Statements of Operations, page 78

1. We note the net loss attributable to noncontrolling interests of approximately \$62 million for fiscal 2013. We further note that these relate to investments from third-party investors in entities fully consolidated by you totaling \$100 million. Provide us with more details regarding the \$62 million loss, including a discussion of the reasons for the large losses that are attributed to the third-party investors relative to the initial investment.

Mr. Charles Boynton SunPower Corporation April 3, 2014 Page 2

Consolidated Statements of Cash Flows, page 81

2. We note the \$34.85 million financing activity "assumption of project loan by customer." Additionally we note from your disclosures on page 112 that this is related to the sale of an Israeli project. You also state that "in instances where the debt is issued as a form of pre-established customer financing, subsequent debt assumption is reflected as a financing outflow and operating inflow." Please explain to us how your statement of cash flows presentation is in accordance with Topic 230 of the FASB Accounting Standards Codification since this appears to be a non-cash transaction.

Note 8. Commitments and Contingencies, page 102

Indemnifications, page 104

3. We note that in February 2013 you received a \$75 million indemnification request from a customer relating to a Cash Grant award which was approved by the Treasury Department for an amount less than originally amounted and that you believe the request to be meritless. Considering that you provide indemnification to customers and investors for reductions in benefits received under \$48(c) solar commercial investment tax credit and Treasury Grant payments under Section 1603 of the American Recovery and Reinvestment Act please explain to us why you believe this request is meritless.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

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/ Lynn Dicker for

Kevin L. Vaughn Accounting Branch Chief