

Mail Stop 6010

April 30, 2007

Via Facsimile and U.S. Mail

Mr. Emmanuel Hernandez
Chief Financial Officer
SunPower Corporation
3939 North First Street
San Jose, CA 95134

Re: SunPower Corporation
Form 10-K for the fiscal year ended December 31, 2006
Filed March 2, 2007
File No. 0-51593

Dear Mr. Hernandez:

We have reviewed your filing and have the following comments. We have limited our review to only your financial statements and related disclosures and will make no further review of your documents. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 10-K for the fiscal year ended December 31, 2006

Note 1. The Company and Summary of Significant Accounting Policies, page 95

Fiscal Year, page 96

1. We note that although your fiscal years end on the Sunday nearest December 31, you present consolidated balance sheets and income statements as of and for the periods ended December 31, 2006, 2005 and 2004 for “presentation purposes.” In future filings, please date the financial statements as of the actual end of your fiscal periods.

Exhibits 31.1 and 31.2

2. We note that the identification of the certifying individual at the beginning of the certification required by Exchange Act Rule 13a-14(a) also includes the title of the certifying individual. In future filings, the identification of the certifying individual at the beginning of the certification should be revised so as not to include the individual’s title.

Form 8-K dated April 26, 2007

3. We note that you present your non-GAAP measures in the form of a non-GAAP statement of operations. This format may be confusing to investors as it reflects several non-GAAP measures which have not been described to investors. Please note that Instruction 2 to Item 2.02 of Form 8-K requires that when furnishing information under this item you must provide all the disclosures required by paragraph (e)(1)(i) of Item 10 of Regulation S-K for each non-GAAP measure presented and explain why you believe each measure provides useful information to investors.
 - To eliminate investor confusion, please remove the non-GAAP statement of operations from all future filings and instead disclose only the specific non-GAAP measures used by management that you wish to highlight for investors, with the appropriate reconciliations and disclosures. In this regard, please provide us with a sample of your proposed revised non-GAAP disclosures.
 - Please note that in the event that your Form 8-K is incorporated by reference into a 33 Act registration statement, we may have additional questions relating to the appropriateness of this information being included in a document filed with, and not just furnished to, the Commission. At that time, we may request an amendment to the Form 8-K.

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As appropriate, please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a cover letter with your response that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities and Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In connection with responding to our comments, please provide, in writing, a 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.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

You may contact David Burton, Staff Accountant, at (202) 551-3626 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,

Kevin L. Vaughn
Branch Chief