July 12, 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

Form 8-K dated April 27, 2007

File No. 0-51593

Dear Mr. Hernandez:

We have reviewed your filing and have the following comment. 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 this comment. 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 comment or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Mr. Emmanuel Hernandez SunPower Corporation July 12, 2007 Page 2

Form 8-K dated April 27, 2007

1. Please refer to prior comment 3. The revised discussion of your non-GAAP measures provided in your response does not appear to fully address our previous comment. For each non-GAAP measure presented, you are required to provide the disclosures specified in Item 10(e)(1)(i) of Regulation S-K. Accordingly, for each non-GAAP measure, you must provide a statement disclosing the reasons why management believes presentation of each of the individual non-GAAP measures provides useful information to investors regarding your results of operations and, to the extent material, a statement disclosing the additional purposes, if any, for which you use each of the non-GAAP financial measures. In the discussion of why the measure is useful to investors, you must discuss why investors would find it valuable in the context in which it is presented, given the excluded items. The statements should be specific to each non-GAAP financial measure presented, the company, the nature of your business and industry, and the manner in which management assesses the non-GAAP financial measure and applies it to management decisions. Please revise future filings to comply with Item 10(e)(1)(i) of Regulation S-K. Provide us with a sample of your proposed revised disclosure. In this regard, please also refer to SEC Release 33-8176 and also Question 8 of the FAQ Regarding the Use of Non-GAAP Financial Measures, dated June 13, 2003.

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As appropriate, please respond to this comment 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 response to our comment 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 response to our comment.

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