

SUNPOWER

May 15, 2009

VIA FACSIMILE AND U.S. MAIL

Mr. Kevin L. Vaughn
Accounting Branch Chief
Securities and Exchange Commission
100 First Street, N.E.
Mail Stop 6010
Washington, D.C. 20549

Re: Response to your letter dated April 23, 2009,
SunPower Corporation – File No. 1-34166

Dear Mr. Vaughn:

As requested in your letter to Tom Werner dated April 23, 2009, this letter summarizes SunPower Corporation's (the "Company") response to each of your seven comments. We have spoken with Mr. Ruairi Rean in your office, and he graciously granted us an extension of time until today to respond to your letter. Also as you requested, the Company acknowledges the following:

- The Company is responsible for the adequacy and accuracy of its disclosure in the filing;
- Staff comments or changes to disclosure in response to staff comments do not foreclose the Securities and Exchange Commission (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.

The following are your comments and our responses to each:

Form 10-K for the year ended December 28, 2008

Note 1. The Company and Summary of Significant Accounting Policies, page 61

Revenue Recognition, page 64

1. We note that certain of your contracts include system output performance guarantees and that you have concluded that these guarantees qualify as separate units of accounting under EITF 00-21. Please tell us and revise this note in future filings to disclose how you determine the fair value of the system output

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performance guarantee for purposes of allocating the total revenue to the various elements under EITF 00-21.

Response:

To date, the performance guarantees we have provided have constituted an immaterial portion of our revenues and a small percentage of the revenue related to a system. The disclosure in our previously filed financial statements within the Form 10-K as of and for the year ended December 28, 2008 was developed based upon our expectation that we would sell performance guarantees that would require separate accounting under EITF 00-21. However, in reviewing the history of our performance guarantees based upon your comment, we have concluded that none of the performance guarantees that we have offered to date qualify as separate deliverables under 00-21. The Company offers a standard 25-year warranty that is provided to all customers of solar modules. For certain customers of our systems, the contract also includes a performance guarantee provision which ranges from 2 to 5 years. With this provision, the Company agrees to pay predetermined stipulated damages (defined as performance guarantee payments) in the event the system does not perform to the stated specifications. The existence of the performance guarantees that we have contracted to date does not result in any additional services or efforts by the Company. The performance guarantee provision simply quantifies our customer's financial remedy in the event of system under-performance and avoids any potential drawn out settlement negotiations between the parties if the system does not meet the minimum stated specifications. Based on our historical experience with more than 450 commercially deployed solar systems, we believe there is a low probability of not meeting the stated specifications and that performance guarantee payments, if any, will be nominal. The amount of accrued costs attributed to contracts that contain such provision for performance guarantees payments is approximately \$1.3 million.

In our future filings, the Company will revise the disclosure in its Notes to the Financial Statements to clarify that the performance guarantees it has offered are not separate units of accounting.

Note 9. Commitments and Contingencies, page 81

Product Warranties, page 82

- 2. We note that you provide product warranties for extended periods, usually 20 years, and that you record an estimated warranty liability based on "historical experience of similar products as well as various other assumptions that are considered reasonable under the circumstances." Separately, we note your disclosure on page 13 that your solar panels have not and cannot be tested in an environment simulating the 20-year warranty period. Please tell us and revise your disclosures here and in your Summary of Significant Accounting Policies on page 64 in future filings to address the following:**
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- **In light of the lack of historical experience, explain in greater detail how you estimate the amount of potential warranty liability. In this regard, we note the risk factor on page 13 refers to “accelerated testing of [your] solar cells.” If true, revise here to clearly indicate that your estimate of the warranty liability is based in part on the accelerated testing you perform.**
- **Clearly disclose the significant “various other assumptions that are considered reasonable under the circumstances.”**
- **If you elect to continue to state that you consider assumptions that are “considered reasonable under the circumstances,” revise to clearly state, if true, that such “reasonable” determination is based on management judgment.**

Response:

The process of estimating our warranty liability takes into consideration multiple components including:

- We have five years of warranty claims history which provides us with base data on the various failure rates of our modules and components. We continually assess the root cause of failures and assess the impact on potential warranty claims;
- We perform accelerated lifecycle testing that expose our modules and components to extreme stress and climate conditions in both environmental simulation chambers and in actual field deployments. While our risk factors highlight the risk that we cannot precisely simulate 25 years of field conditions, our accelerated testing is designed to highlight potential failures that would occur over this period;
- We maintain field monitoring on installed systems which provide data on the various failure rates of our modules and components;
- We obtain reliability data from our key module and component vendors; and
- We compare our warranty reserve ratio to others in our industry for reasonableness.

Although we cannot fully replicate all environmental variables in our accelerated testing lab environment, we believe we have adequate data from the above sources to reasonably estimate our warranty liability. Specifically, our methodology for estimating the warranty reserve is to extrapolate warranty costs over the 25-year warranty period based on actual experience to date over the past 5 years. Based on the results of our accelerated testing, we have no reason to believe that there would be significant change in the warranty claim rate in future periods.

In our future filings, the Company will revise and disclose the following in the Notes to the Financial Statements.

The Company generally warrants or guarantees the performance of the solar panels that it manufactures at certain levels of power output for 25 years. In addition, the Company passes through to customers long-term warranties from the original equipment manufacturers ("OEMs") of certain system components. Warranties of 25 years from solar panels suppliers are standard in the solar industry, while inverters typically carry warranty periods ranging from 5 to 10 years. In addition, the Company generally warrants its workmanship on installed systems for a period of 1, 2, 5 or 10 years. The Company maintains reserves to cover potential liability that could result from these warranties. The Company's potential liability is generally in the form of product replacement or repair. Warranty reserves are based on the Company's best estimate of such liabilities and are recognized as a cost of revenue. The Company continuously monitors product returns for warranty failures and maintains a reserve for the related warranty expenses based on various factors including, historical warranty claims, results of accelerated lab testing, field monitoring, vendor reliability estimates, and data on industry averages for similar products. Historically, warranty costs have been within management's expectations.

Exhibits 31.1 and 31.2, Certifications

- 3. 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.**

Response:

In future filings, the Company will not include the title of the certifying individual at the beginning of the certifications presented in Exhibits 31.1 and 31.2.

Form 10-Q for the quarterly period ended September 28, 2008

Item 4. Controls and Procedures, page 53

Changes in Internal Control over Financial Reporting, page 53

- 4. We note your disclosure in the first paragraph that "there were no material changes in [y]our internal control over financial reporting...". Separately, we note your disclosure in the next paragraph regarding a new system you implemented in the 3rd quarter "which resulted in a material update to [y]our system of internal control over financial reporting". You state that after the system was implemented, you**
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had to “further revise [y]our internal control processes and procedures in order to correct and supplement [y]our processing capabilities within the new system”. Please clarify whether the outcome of implementing this system resulted in a material change in your internal control over financial reporting.

Response:

We maintain a system of internal control over financial reporting that is designed to provide reasonable assurance that our books and records accurately reflect our transactions and that our established policies and procedures are followed.

In the third quarter of fiscal 2008, we deployed a new global enterprise resource planning (“ERP”) system. However, since our key controls over financial reporting are principally manual in nature, our new ERP system did not cause any significant changes in either the design or operation of our controls. Accordingly, we concluded that we did not have a material change in our internal control over financial reporting as a result of deploying the new ERP system.

Proxy Statement on Schedule 14A filed March 23, 2009

Executive Officers, page 19

5. It does not appear that you have described the experience of two of your named executive officers, Thomas L. Dinwoodie and Emmanuel T. Hernandez, as required by Item 401(b) of Regulation S-K. Please provide us with such information and provide such disclosure in your future filings or tell us why you do not believe such information is required for these two executives.

Response:

Messrs. Dinwoodie and Hernandez were named executive officers of the Company, for purposes of Item 401(b) of Regulation S-K, but neither Mr. Dinwoodie nor Mr. Hernandez was serving as an executive officer of the Company when the Company filed its Proxy Statement on Schedule 14A on March 23, 2009. Because neither was an executive officer when the Company filed its Proxy Statement, Item 401(b) of Regulation S-K does not require the Company to summarize their experience. Please note that Mr. Dinwoodie had assumed a non-executive officer role within the Company in January 2008. However, he was still a named executive officer under Item 402(a)(3)(iv) of Regulation S-K. Similarly, Mr. Hernandez had resigned as CFO and assumed a different role within the Company in November 2008. However, he was still a named executive officer under Item 402(a)(3)(ii) of Regulation S-K.

Compensation Discussion and Analysis, page 21

6. We note your disclosure under the caption "Performance Based Cash Bonus Awards," as incorporated by reference from page 23 of the Schedule 14A Proxy Statement filed March 23, 2009, that bonuses are based upon annual revenue and profits before tax targets and personal milestones. In future filings, please clearly disclose all previously established targets and milestones and discuss how the compensation awarded reflects those targets and milestones. To the extent you believe that disclosure of such information, on a historical basis, would result in competitive harm such that the information could be excluded under Instruction 4 to Item 402(b) of Regulation S-K, please provide us with a detailed explanation supporting your conclusion. To the extent that it is appropriate to omit specific targets or performance milestones, you are required to provide appropriate disclosure pursuant to Instruction 4 to Item 402(b) of Regulation S-K. Refer also to Question 118.04 of the Regulation S-K Compliance and Disclosure Interpretations available on our website at <http://www.sec.gov/divisions/corpfin/guidance/regs-kinterp.htm>. In discussing how difficult or likely it will be to achieve the target levels or other factors, you should provide as much detail as necessary without disclosing information that poses a reasonable risk of competitive harm.

Response:

In future filings, the Company will clearly disclose all previously established targets and milestones and discuss how the compensation awarded reflects those targets and milestones. If the Company determines it is appropriate to omit specific targets or performance milestones, it will provide appropriate disclosure pursuant to Instruction 4 of Item 402(b) of Regulation S-K, and the Company will provide as much detail as necessary without disclosing information that poses a reasonable risk of competitive harm.

7. We refer to your disclosure under the caption "Time-Based and Performance-Based Equity Awards" on page 24 of the proxy statement that you have incorporated by reference into your Annual Report on Form 10-K. We note that equity awards were determined based upon several factors including corporate and individual performance targets. In your future filings, as applicable, please include an expanded discussion of how your Compensation Committee made its equity award determinations with respect to each named executive officer. Refer to subparagraphs (b)(1)(iii) and (v) of Item 402 of Regulation S-K. For example, please discuss and analyze performance targets and their significance in determining equity awards and how and why those awards varied among the named executive officers.

Response:

In future filings, the Company will include an expanded discussion of how its Compensation Committee made its equity award determinations with respect to each named executive officer,

including a discussion and analysis of performance targets and their significance in determining equity awards and how and why those awards varied among the named executive officers.

Regards,

/s/ Dennis V. Arriola
Dennis V. Arriola
Senior Vice President and
Chief Financial Officer

cc: Mr. Thomas H. Werner
Mr. Bruce Ledesma Esq.
SunPower Corporation