

MORE ENERGY. FOR LIFE™

August 20, 2013

VIA EDGAR AND U.S. MAIL

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

> Re: SunPower Corporation Form 10-K for the fiscal year ended December 30, 2012 Filed February 25, 2013 Form 8-K filed May 2, 2013 File No. 001-34166

Dear Mr. Vaughn:

As requested in your letter to me dated July 23, 2013, this letter summarizes SunPower Corporation's (the "Company" or "we") response to each of your four comments. Lisa Bodensteiner, Executive Vice President and General Counsel, spoke with Lynn Dicker, Staff Accountant, on July 30, 2013 to communicate our request for additional time to respond, and Ms. Dicker advised we should provide this response no later than August 20, 2013.

The following are your comments and our responses to each:

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

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

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, 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.

Response: In future filings we will include disclosure of the GAAP amounts recognized as revenue for our construction and development contracts. To further provide investors with a better understanding of our operations we will additionally include disclosure of the GAAP amounts recognized as revenue for our solar power products. Such categories disclosed are generally in alignment with our significant revenue recognition policies. Further, we will continue to evaluate the significance of the components of our "Other revenue" and will separately disclose should they become a significant part of our business activities in a future period. Beginning in our Quarterly Report on Form 10-Q for the period ended September 29, 2013, we will provide disclosure comparable to the below example within our "Segment Information" disclosure for the relevant periods covered by the report:

Revenue recognized during the six months ended June 30, 2013 and July 1, 2012, and the twelve months ended December 30, 2012 and January 1, 2012 for each of the below categories was as follows:

	Six Months Ended			Twelve Months Ended				
(In thousands)	June 30, 2013		July 1, 2012		December 30, 2012		January 1, 2012	
Solar power products	\$	424,283	\$	553,785	\$	985,436	\$	1,349,023
Solar power systems ¹		704,525		485,998		1,318,269		1,010,572
Other revenue ²		83,141		50,245		113,796		14,781
	\$	1,211,949	\$	1,090,028	\$	2,417,501	\$	2,374,376

- ¹ Solar power systems represents revenue recognized in connection with our construction and development contracts.
- ² Other revenue includes revenue related to our solar power services and solutions, such as post-installation systems monitoring and maintenance in connection with construction contracts, and our residential lease program.

In addition, beginning in our Quarterly Report on Form 10-Q for the period ended September 29, 2013, we will provide disclosure comparable to the below example within "Management's Discussion and Analysis of Financial Condition and Results of Operations" for the relevant periods covered by the report:

Solar power products

We sell solar panels and balance of system components primarily to dealers, system integrators and distributors. Revenue related to such solar power products decreased \$129.5 million, or 23%, in the six months ended June 30, 2013 as compared to the six months ended July 1, 2012 and decreased \$363.6 million, or 27%, in fiscal 2012 as compared to fiscal 2011. The decrease in both periods is primarily attributable to lower sales in the EMEA region as a result of declines in European government incentives enacted during fiscal 2011, which negatively impacted demand and pricing within the region.

Solar power systems

We design, manufacture and sell high-performance solar power systems. Revenue related to construction contracts which do not involve real estate are recognized using the percentage-of-completion method. Revenue related to our development projects, which generally include the sale or lease of related real estate, are recognized using specific guidance for real estate sales. Revenue related to our solar power systems increased \$218.5 million, or 45%, in the six months ended June 30, 2013 as compared to the six months ended July 1, 2012 and increased \$307.7 million, or 30%, in fiscal 2012 as compared to fiscal 2011. The increase over both periods is due to the commencement of revenue recognition on additional large utility-scale solar power systems involving real estate, including the 250 MW California Valley Solar Ranch and the 579 MW Solar Star Projects, formerly known as Antelope Valley Solar Projects. These increases were partially offset by the substantial completion of construction contracts not involving real estate during the period.

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.

Response: In future filings we will provide a summary of our significant construction and development projects and include additional disclosure to enhance an investors understanding of our current and future construction and development project activities. Beginning in our Quarterly Report on Form 10-Q for the period ended September 29, 2013, we will provide disclosure comparable to the below example within "Management's Discussion and Analysis of Financial Condition and Results of Operations":

The below table presents significant construction and development projects sold or under contract as of June 30, 2013:

Project	Location	Size (MW) ¹	Third Party Owner / Purchaser	Power Purchase Agreement(s)	Expected Completion of Revenue Recognition
Solar Star Projects	California	579	MidAmerican Energy Holdings Company	Southern California Edison	2015
California Valley Solar Ranch	California	250	NRG Solar, Inc.	PG&E	2014

¹ When referring to our solar power systems, the unit of electricity in watts for megawatts ("MW") is alternating current.

As of June 30, 2013, over \$2 billion of remaining revenue is expected to be recognized on projects reflected in the above table through the expected completion date noted. Projects will be removed from the above table in the period in which substantially all of the revenue has been recognized.

Projects with Executed Power Purchase Agreements - Not Sold / Under Contract

The below table presents significant construction and development projects with executed power purchase agreements, but not sold or under contract as of June 30, 2013:

Project	Location	Size (MW) ¹	Power Purchase Agreement(s)	Expected Completion of Revenue Recognition
Henrietta Solar Project	California	100	PG&E	2016
Quinto Solar Project	California	110	Southern California	2015

¹ When referring to our solar power systems, the unit of electricity in watts for megawatts ("MW") is alternating current.

Our project pipeline extends beyond the projects represented in the above tables. Significant projects with development and milestone activities in progress will be excluded from the above table until they have an executed power purchase agreement.

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.

Response: During the first quarter of fiscal 2012, the Company effected a reorganization that combined our Utility and Power Plant ("UPP") group and our Residential and Commercial ("R&C") group into one organization. The revised structure, led by our President of Regions, is centered around our three geographic regions: (i) Americas, (ii) EMEA, and (iii) APAC. The President of Regions, operating as the segment manager for each region, is accountable for managing the performance of each of the three regions and maintains regular contact with our CEO (our Chief Operating Decision Maker, "CODM") to discuss operating activities and forecasts. Our CODM's other direct reports are functional in nature and include heads of finance, operations, and administration, among others.

Our CODM regularly receives and reviews financial information in the form of forecasted quarterly and annual data, which is periodically revised and presented throughout the quarter (the "CODM package"). The CODM package is primarily focused upon summarized financial information presented on a non-GAAP basis which incorporates adjustments consistent with those

disclosed in Note 18 to the fiscal 2012 Annual Report on Form 10-K as well as with those disclosed in the Current Report on Form 8-K dated May 2, 2013, among other similar Current Reports on Form 8-K. Data for revenue and gross margin is available at the operating segment level, while financial information beyond gross margin is presented on a consolidated basis. This information is consistently included in the CODM package and is reviewed by our CODM when determining resource allocation and assessing segment performance. Asset and cash flow information is not provided at the operating segment level.

Prior to the above mentioned reorganization, revenue and gross margin details were provided for both the UPP and R&C groups (previously determined to be our operating segments). Subsequent to the reorganization, the CODM package includes revenue and gross margin data for each of the three regions. The impact of our construction and development projects are incorporated within each of the regions accordingly and are not regularly individually delineated.

In determining our segments, we evaluated the information included in the CODM package, the regionally focused reorganization effected in December 2011, as well as the following:

- The President of Regions manages all three regions and is held responsible for results at the regional and consolidated levels.
- Key financial targets underlying the variable compensation plans of the CODM and his direct reports, including the President of Regions, are at the consolidated level.
- The availability and size of government mandates and economic incentives varies on a regional and local basis. These mandates and incentives materially impact our business and their status is a key consideration in our CODM's decision making process.
- Financial forecasts and assumptions provided by management in investor presentations are routinely at the consolidated level. Additional
 megawatt guidance has been provided for each of the three regions.
- GAAP results for each period are regularly presented to the board of directors in a format consistent with our regional and consolidated financial reporting disclosures, which include a reconciliation to non-GAAP revenue and gross margin as reviewed by our CODM.

In addition to the primary data detailed above, supplemental slides included in appendices contain information associated with one or more components or subcomponents of the Company. The information included in the supplemental slides has evolved during the course of fiscal 2012 and has continued to evolve in fiscal 2013. These supplemental slides have included information such as the following:

- Revenue and gross margin for two to three components within each of the regions and certain subcomponents within those components.
- Revenue and gross margin for the former Tenesol entities acquired by the Company in January 2012, in particular in the periods immediately subsequent to the acquisition and integration.
- Consolidated manufacturing operations detail including impact on gross margin and on related key figures such as inventory balances and capital
 expenditures.
- Operating expenses by function, including the Regions organization as a single unit.

Although information more detailed than the operating segment level may be available at various times to the CODM, in practice the CODM focuses on the information included in the primary portion of the CODM package which is solely regional or consolidated in nature. The information included in the supplemental slides primarily serves to facilitate responses to any questions posed by the CODM as a result of his review of the primary portion. The information included in the supplemental slides has not remained constant from period to period and supplemental information relevant for one reporting period may be removed in subsequent periods. The recurring presentation of the information regularly included in the CODM package is the three regions which have been identified as operating segments. As a result, the CODM allocates resources and measures performance on a regional basis.

As mentioned above, the impact of our construction and development projects are incorporated within each of the regions accordingly and are not regularly individually delineated. Our CODM primarily evaluates the systems construction and development projects in the context of our geographical regions.

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.

Response: In future reports furnished to the Commission we will expand our disclosures to provide greater clarity into the non-GAAP adjustments for revenue and gross margin and 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 margin, as appropriate.

Regards,

/s/ Charles D. Boynton

Charles D. Boynton
Executive Vice President and
Chief Financial Officer