



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 3030

June 7, 2010

Jeffrey G. Winzeler
Chief Financial Officer
Solar Power, Inc.
1115 Orlando Avenue
Roseville, California 95661-5247

Re: Solar Power, Inc.
Form 10-K for the fiscal year ended December 31, 2009
Filed May 17, 2010
Form 10-Q for the quarterly period ended March 31, 2010
File No. 000-50142

Dear Mr. Winzeler:

We have reviewed your filings and have the following comments. We have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your documents. Where indicated, we think you should revise future filings 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 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, 2009

Item 9A(T), Controls and Procedures, page 37

1. We note your disclosure that the company has material weaknesses. Please tell us in greater detail the nature of the material weaknesses, when the material weaknesses were identified, by whom they were identified and when the material weaknesses first began.

Consolidated Financial Statements, page F-1

Note 2. Summary of Significant Accounting Policies, page F-8

Inventories, page F-8

2. We note that beginning January 1, 2009 you changed the method of valuing your inventories from the weighted-average cost method to the FIFO method. Please tell us how you considered paragraphs 250-10-45-2(b), 45-5 and 50-1 of FASB ASC and Item 601(B)(18) of Regulation S-K.

Revenue Recognition, page F-9

3. Please tell us how you evaluated the exhibit requirements of Item 601(B)(10) with respect to your agreements with Solar Tax Partners I, LLC, Solar Tax Partners II, LLC, HEK Partners, LLC and Greystone Renewable Energy Equity Fund such as the Engineering, Procurement and Construction Contract, Operations and Maintenance Agreement, Promissory Note and the Guaranty. We note the disclosures on pages 26, 27, 37, 53, F-9, F-23 and F-27.
4. Please tell us about the nature of any related party relationships between the company and Solar Tax Partners I, LLC, Solar Tax Partners II, LLC, HEK Partners, LLC and Greystone Renewable Energy Equity Fund. We note the disclosures on pages 51, 53 and F-27.

5. We note that you determined that it was appropriate to use the zero profit margin approach to applying the percentage-of-completion method of revenue recognition for a \$19,557,000 contract for which you had recorded \$14,582,000 of revenues and costs related to this contract in the year ended December 31, 2009. Please tell us about your analysis in determining to use this method of revenue recognition for this contract, including how you evaluated paragraphs 605-35-25-25-60(c), 25-61 and 25-67 of FASB ASC. Tell us the name of the customer, the significant terms of the agreement, including billing and payment terms.
6. Please tell us the gross and net amounts of receivables recorded under this contract as of December 31, 2009 and March 31, 2010 and the nature and amount of any payments received under the contract. Please also reconcile the amount of the contract of \$19,557,000 and the amount of costs and revenue recognized of \$14,582,000 with the amount of deferred revenue of \$4,563,000.
7. We note that you determined that it was appropriate to use the completed contract method of revenue recognition for a \$6,680,000 contract for which you had recorded \$5,557,000 of costs in costs and estimated earnings in excess of billings as of December 31, 2009. Please tell us about your analysis in determining to use the completed contract method on this contract. Tell us the name of the customer, the significant terms of the agreement, including billing and payment terms and when you anticipate completing the contract.
8. Please also provide similar information for the \$12 million contract with \$9,461,000 of deferred costs as of March 31, 2010 that you disclose on page 7 of your March 31, 2010 Form 10-Q. If this contract is the same contract referred to in the above comment, please tell us why the contract value changed.

Performance Guaranty, page F-11

9. Please tell us the significant terms of your energy output guarantee and discuss why you are accounting for this guaranty as part of your warranty obligation. Tell us whether this guaranty is in addition to the guaranty discussed on page F-23.

Note 12. Commitments and Contingencies, page F-23

10. Please provide us with a detailed analysis of the accounting for the guaranty. Tell us the significant terms of the agreement and the names of the other parties to the agreement and your relationship. Discuss your consideration of each of the terms outlined in your disclosure in your accounting for the guaranty and the impact of this agreement on your related agreements.

Note 14. Fair Value of Financial Instruments, page F-25

11. Please tell us about the methods and significant assumptions used to value the guarantee using Level 3 inputs. Also tell us about how you weighted the various methods in determining the fair value of \$142,000.
12. Please tell us how you considered the disclosure requirements of section 820-10-50 of FASB ASC in determining the disclosures you provided.

Form 10-Q for the Quarterly Period Ended March 31, 2010

Item 4T. Controls and Procedures, page 27

13. In your Form 10-K for the fiscal year ended December 31, 2009, you disclose on page 37 that management concluded that your disclosure controls and procedures were ineffective as of December 31, 2009 due to material weaknesses. We note your disclosure that as of March 31, 2010, your management concluded that your disclosure controls and procedures are effective. We also note your disclosure that there have been no changes in your internal controls over financial reporting during the three months ended March 31, 2010. Please tell us the specific steps that the company has taken, if any, to remediate the material weakness and tell us whether the company believes that the material weakness still exists as of March 31, 2010.
14. Further, please explain why you refer to certain enhancements to your internal controls over financial reporting. Please note that under Item 308(c) of Regulation S-K your disclosure should address any change that occurred during the quarter that materially affected, or is reasonably likely to materially affect, your internal control over financial reporting.
15. Also, with respect to your disclosure regarding your officers' conclusions about the effectiveness of the Company's disclosure controls and procedures, while you are not required to include the definition of disclosure controls and procedures in your conclusion, when you do so in future filings, all of the language that appears following the word "effective" in your conclusion must be consistent with and not modify the language that appears in the definition of "disclosure controls and procedures" set forth in Rule 13a-15(e) of the Exchange Act. Alternatively, in future filings you may remove that definition.

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 letter that keys your responses to our comments and provides any requested information. Detailed letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your 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 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 Kate Tillan, Assistant Chief Accountant, at (202) 551-3604 or me at (202) 551-3671 if you have any questions.

Sincerely,

Martin James
Senior Assistant Chief Accountant

Jeffrey G. Winzeler
Solar Power, Inc.
June 7, 2010
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