

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

October 13, 2011

Via Email

Mr. Mr. Stephen C. Kircher Chief Executive Officer Solar Power, Inc. 2240 Douglas Blvd, Suite 200 Roseville, California 95661

Re: Solar Power, Inc.

Form 10-K for the Year Ended December 31, 2010

Filed March 14, 2011

Form 10-Q for the Quarter Ended June 30, 2011

Filed August 15, 2011 File No. 000-50142

Dear Mr. Kircher:

We have reviewed your response dated October 4, 2011 and have the following additional 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. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by providing the requested information or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

Form 10-K for the Year Ended December 31, 2010

<u>Index to Financial Statements, page F-1</u>

Note 13. Asset Held for Sale, page F-22

1. We note your response to prior comment 6. Please explain to us in more detail how you met the criteria to report this solar facility as an asset held for sale as of June 30, 2011.

Mr. Stephen C. Kircher Solar Power, Inc. October 13, 2011 Page 2

Within your response, please explain to us in more detail the nature of the active program that you initiated to locate a buyer and the other actions required to complete the plan to sell the asset. Also, discuss why believe that the sale of the asset is probable of occurring as of June 30, 2011.

- 2. We note you response to prior comment 7. Please provide to us your impairment analysis during the six months ended June 30, 2011. Within your discussion, please explain to us how the inputs were determined within the analysis.
- 3. Further to the above, please explain to us what you mean by your statement that "the company expects that future analysis of these components could in result in further impairment of the carrying value of this asset based upon diminishing cash flows attributed to the remaining life of the Power Purchase Agreement." Please explain to us how your impairment analysis as of June 30, 2011 considered this factor. Discuss if your plans have changed for this asset classified as held for sale.

Form 10-Q for the Quarter Ended June 30, 2011

Note 18. Related Parties, page 19

4. We note your responses to prior comments 9 and 10. If material to an understanding of your liquidity and capital resources going forward, please revise your future filings to disclose that you have granted extended payment terms up to 180 days to LDK Solar Co., Ltd related to the purchase of your raw materials. Also, if material to an understanding of your results of operations, liquidity and capital resources, please revise future filings to more clearly explain the underlying reasons for the receivable for reimbursement of operating expenses for your China manufacturing and Hong Kong subsidiaries.

You may contact Tara Harkins, Staff Accountant, at (202) 551-3639 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,

/s/ Kevin L. Vaughn

Kevin L. Vaughn Accounting Branch Chief