



DIVISION OF
CORPORATION FINANCE
Mail Stop 3030

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

May 8, 2009

Via Facsimile and U.S. Mail

Jens Meyerhoff
Chief Financial Officer
First Solar, Inc.
350 West Washington Street, Suite 600
Tempe, Arizona 85281

Re: First Solar, Inc.
Annual Report on Form 10-K for fiscal year ended December 27, 2008
Filed February 25, 2009
Form 8-K dated April 3, 2009
File No. 1-33156

Dear Mr. Meyerhoff:

We have reviewed your response dated April 30, 2009 and related filings and have the following comments. Where indicated, we think you should revise your document 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 8-K dated April 3, 2009

Item 8.01

1. Regarding the acquisition of the solar power project development business of OptiSolar Inc., please tell us how you considered whether you are required to present financial statements of OptiSolar Inc. and pro forma financial information showing the effects of the acquisition within 75 days of the acquisition, as required by Rule 3-05 and Article 11 of Regulation S-X.

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 cover letter with your response that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your responses to our comments.

You may contact Kristin Lochhead at (202) 551-3664 or me at (202) 551-3605 if you have questions regarding comments on the financial statements and related matters. In this regard, please do not hesitate to contact Brian Cascio at (202) 551-3676 with any other questions. Please contact Alan Morris at (202) 551-3601 or Tim Buchmiller at (202) 551-3635 with any other questions.

Sincerely,

Gary Todd
Reviewing Accountant