



DIVISION OF
CORPORATION FINANCE
Mail Stop 3030

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

May 18, 2010

VIA U.S. Mail and Facsimile

Jens Meyerhoff
Chief Financial Officer
350 West Washington Street, Suite 600
Tempe, Arizona 85281

Re: First Solar, Inc.
Form 10-K for the fiscal year ended December 26, 2009
Filed February 22, 2010
Form 10-Q for the quarter ended March 27, 2010
File No. 001-33156

Dear Mr. Meyerhoff:

We have reviewed your filing and have the following comments. We have limited our review to only your financial statements and related disclosures and will make no further review of your documents. Where indicated, we think you should revise your 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 26, 2009

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 35

Financial Operations Overview, page 37

1. You indicate that components segment sales and cost of sales include sales of modules used by the systems segment in solar projects. Please tell us how you determine the amount of revenues to be recognized by the components segment for modules used by the systems segment in projects developed and sold by the systems segment.
2. As a related matter, we also see that your systems segment generally utilizes percentage of completion or real estate accounting models for revenue recognition. Accordingly, please further clarify for us how you determine the timing of revenue recognized by the components segment for modules used by the systems segment. Also, clarify how modules used by the systems segment are accounted for (including balance sheet caption) prior to revenue recognition by the components segment.

Critical Accounting Estimates, page 42

Goodwill, page 43

3. In future filings please disclose the reporting units evaluated for goodwill impairment testing purposes and clarify how those reporting units were identified. In the last sentence of the disclosure you indicate that the fair value of your goodwill substantially exceeded its carrying value. Please tell us, with a view toward future disclosure, whether the assertion is applicable to each individual reporting unit. If not, please identify any reporting unit at risk of failing step one of the impairment testing model.
4. We see that you operate the systems segment with the objective of breaking even and that the components segment compensates the systems segment as necessary to achieve that objective. Given your operating model, please tell us how you apply the specific guidance from FASB Codification Topic 350-20 in evaluating goodwill assigned to reporting units under the systems segment for impairment.

Results of Operations, page 44

5. Please tell us, with a view toward future disclosure, the amounts of module revenues and cost of revenues recognized by the components segment for modules used by and sold through the systems segment.

6. Under "Cost of sales," you indicate that cost of sales includes amortization of project assets acquired through the OptiSolar acquisition. We see on page 68 that you define project assets as costs capitalized prior to the sale of a solar plant to a third party. Given your definition, please tell us why project asset costs are "amortized." In response to this comment, please further clarify the nature of the assets and related accounting.

Item 8. Consolidated Financial Statements

Note 2. Summary of Significant Accounting Policies, page 67

Revenue Recognition, page 70

7. Please revise future filings to disclose how you estimate the price rebate recorded as a reduction of the selling price of solar modules. Please also provide an indication of the typical rebate percentage granted to customers during the years presented.
8. In future filings please expand your revenue policy for the systems business to also clarify the accounting for the costs and estimated earnings in excess of billings recorded on the percentage of completion method. In that regard, we see that a change in operating assets amounting to \$36 million was attributed to costs in excess in the first quarter of 2010. Also, clarify the distinction between cost in excess and deferred project costs, which you have defined as being associated with solar projects where you have a definitive sales agreement.
9. We note the discussion of revenue arrangements that include multiple deliverables. Please tell us the nature of transactions that result in the recognition of multiple elements. Also, tell us the nature of each significant element and how you determine the fair value of those elements.

Note 3. Acquisitions, page 73

OptiSolar, page 73

10. In future filings please also disclose the primary reasons for the business combination, the amounts of revenue and earnings of the acquiree since the acquisition date included in the consolidated income statement for the reporting period, and the amount of acquisition-related costs, including the amount recognized as an expense, and the line item or items in the income statement in which those expenses are recognized. Refer to FASB ASC 805-10-50.

11. We note the disclosure from page 39 that you integrated the acquisition of the solar power project development business of OptiSolar, Inc. into your systems business. However, on page 74 you state that you allocated \$251.3 million of the goodwill associated with this acquisition to your components reporting segment. Please reconcile these two disclosures and tell us why it is appropriate to allocate the full amount of goodwill to the components segment when the operations of the business are recorded in the systems segment.
12. As a related matter, please tell us whether the assets acquired included modules purchased from your components business. If applicable tell us how those modules were accounted for in the acquisition.

Note 4. Goodwill and Intangible Assets, page 74

13. You disclose on page 68 that project assets include development and construction costs related to solar projects not yet sold. Tell us why disclosure about project assets is presented in a footnote titled “Goodwill and Intangible Assets.” In that regard, it is unclear how project development and construction costs capitalized relate to either goodwill or intangible assets.

Note 7. Consolidated Balance Sheet Details, page 81

Inventories, page 81

14. We see that you recorded certain inventory as “noncurrent” at December 26, 2009. Please tell us the nature of the raw materials classified as noncurrent and why classification as “noncurrent” is appropriate. In that regard, your response should also describe objectively verifiable evidence of recoverability of the inventory.

Project Assets – Current and Noncurrent, page 82

15. Please tell us how you analyze project assets to determine whether the assets have been impaired, including how you assess a project for commercial viability. In this regard, we see that the majority of the project assets are recorded as non-current.
16. In future filings please provide greater detail within MD&A of the underlying projects for which you have capitalized project assets, including the nature and status of each project, a summary of values assigned by project, the nature and timing of remaining efforts for completion, including the estimated completion date.

Other Current Liabilities, page 83

17. Please clarify for us the transactions generating the deferred revenue and the actual expected method of revenue recognition.

Note 9. Fair Value Measurement, page 87

18. In future filings please disclose the specific valuation models used to value derivative assets and liabilities.

Note 18. Income Taxes, page 100

19. We refer to the table of deferred income taxes on page 101. As deferred taxes generally result from book/tax basis differences, in future filings please clarify the nature of the deferred tax liability labeled "basis difference."

Note 22. Segment and Geographical Information, page 105

20. Please tell us how corporate and shared expenses are allocated between components and other.
21. We note that the components segment reimburses the systems segment when systems segment gross profit is less than its operating expenses. Please tell us why the intersegment transfers should not be separately presented in the tabular disclosure, in a manner similar to that for intersegment revenue.
22. As a related matter, you disclose in the Form 10-Q for March 27, 2010 that the reimbursement mechanism is intended to fund temporary shortfalls of gross margin in relation to operating expenses. Please tell us what happens if the systems segment incurs a loss that is not deemed temporary, such as a loss resulting from an impairment loss on a project.
23. We see that the components segment recognizes revenue from sales of modules used in systems segment projects when systems segment projects are sold and meet the criteria for revenue recognition. Please tell us why the tabular disclosure should not separately present the allocation of revenues and cost of revenues between the two segments arising from solar project sales pursuant to FASB ASC 280-10-50-22b.
24. We see that you operate in two segments and that systems segment did not meet the quantitative criteria for disclosure as a reporting segment. However, we see that you separately discuss both segments within MD&A and that the OptiSolar solar power project acquisition was included in the systems segment. Please tell us how you determined that the systems segment did not meet the quantitative

criteria in FASB ASC 280-10-50-12. In addition, if the segment is not quantitatively material, tell us whether you believe that information about the segment would be useful to readers of the financial statements. If so, the segment may be considered reportable, and separately disclosed.

Form 10-Q for the quarter ended March 27, 2010

Item 1. Financial Statements

Consolidated Balance Sheet Details, page 12

25. Under "Accounts receivable, unbilled," in future filings please disclose the general prerequisites for billing and clarify whether any of the disclosed amount is expected to be collected after one year. Refer to Rule 5-02.3(c) 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.

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.

Jens Meyerhoff
First Solar, Inc.
May 18, 2010
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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 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, Accounting Branch Chief, at (202) 551-3676 with any other questions.

Sincerely,

Gary Todd
Accounting Reviewer