

October 31, 2006

Michael J. Ahearn, CEO
First Solar, Inc.
4050 East Cotton Center Boulevard
Building 6, Suite 68
Phoenix, Arizona 85040

Re: First Solar, Inc.
Form S-1, Amendment No. 4
File No. 333-135574
Filed October 25, 2006

Dear Mr. Ahearn:

We have reviewed your filing 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 supplemental information so we may better understand your disclosure. After reviewing this information, we may or may not 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 on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Unless otherwise noted, prior comment refers to our letter dated October 23, 2006.

Favorable system performance, page 2

1. Please tell us why you believe that this summary is a balanced presentation of your business given your disclosure of lower conversion efficiency on page 57.

If we are unable to further increase the number of sellable Watts per module, page 10

2. For investors to evaluate the magnitude of this risk, please provide an indication of the degree of sales price decline and the degree of increase in Watts per module required for you to avoid default. In this regard, it is unclear why it is appropriate to highlight sales from large long-term supply contracts in the prospectus summary while not disclosing the material risk of declining margins and default until the middle of your risk factors; please relocate the discussion of the future potential sales from the prospectus summary to a more appropriate section of your document where you can provide clear disclosure in context of the basis for and limitations of the projected sales.

Recycling program, page 61

3. Please tell us why you removed the reference to the 20-year period. From the existing disclosure that does not include an indication of duration, please tell us how you believe investors can evaluate the impact of the program.

Executive Compensation, page 70

4. We note your response to prior comment 5. When you respond to the remaining unresolved prior comments, please specify which comment you are addressing.

Principal and Selling Stockholders, page 81

5. Please clarify which shareholders are part of the group that comprises the 40% threshold mentioned on page 17. Also, if these shareholders are “affiliates” as mentioned on page 17, please tell us why it is appropriate to present them on separate lines in the beneficial ownership table.

Underwriting Fee, page 95

6. With a view toward disclosure, tell us the purpose of the “structuring fee” and the basis upon which it is calculated. Also, please:
- tell us where the fee is included in Item 13;
 - disclose the amount of out-of-pocket expenses that the underwriters will reimburse.

Financial Statements

Note 4. Economic Development Funding, page F-14

7. We note that you recorded a receivable relating to taxable investment incentives (“Investitionszuschuesse”) of \$3.7 million due from the State of Brandenburg and a receivable relating to tax-exempt reimbursements for certain capital costs under the German Investment Grant Act of 2005. For each of the receivables, separately address the following:
- Clearly describe to us the material terms of the programs under which you receive these incentives and reimbursements.
 - Tell us and revise the note to clarify whether the realization of the incentives are dependent upon your taxable income.
 - If so, please explain how you considered the guidance in paragraphs 116 and 117 of SFAS 109 and related literature in accounting for the credits and your reasons for concluding that the guidance was not applicable.
 - Cite the accounting literature on which you based your accounting.
8. Tell us how you concluded that the incentives and reimbursements had been earned as of the date you recorded each receivable. In your response, please address each of the conditions affecting realization. We note, for example, that realization of the taxable investment incentives are conditional on availability of State of Brandenburg funds, a requirement to operate in the state for a number of years and your employment of a certain number of employees. Likewise, we note that the tax-exempt reimbursements must be claimed on your income-tax return and that you have not claimed such reimbursements to date. Further, you are required to maintain the related assets in the state for a minimum of five years.

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9. We reference the "proceeds from economic development funding" included as cash flow from financing activities on page F-6. Tell us the consideration given to classifying these amounts as a component of investing activities.

Exhibits

10. Please file the agreement with Mr. Williams mentioned on page 79.

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As appropriate, please amend your registration statement in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment 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 amendment and responses to our comments.

You may contact Kevin Kuhar at (202) 551-3662 or Angela Crane at (202) 551-3554 if you have questions regarding comments on the financial statements and related matters. Please contact Alan Morris at (202) 551-3601 or me at (202) 551-3617 with any other questions.

Sincerely,

Russell Mancuso
Branch Chief

cc. John T. Gaffney (Cravath Swaine)
VIA TELEFAX (212) 474-3700