

September 29, 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. 2  
File No. 333-135574  
Filed September 18, 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 August 24, 2006.

Summary, page 1

1. We note your response to prior comment 1. However, as revised, your document uses apparently defined terms - as evidenced by capitalized common nouns - without explaining their meaning. Therefore, investors are left to wonder what you mean by the defined terms. Please revise the forepart of your document to avoid use of defined terms and provide your disclosure using concrete, everyday words.

2. We note your response to prior comment 2. However, lengthy disclosure of strengths and strategies that repeats disclosure subsequently in the document simply with elimination of selected sentences is inconsistent with the concept of a prospectus summary as required by plain English rules. Therefore, we reissue comment 7 from our July 27, 2006 letter. Please also see Updated Staff Legal Bulletin No. 7 (June 7, 1999) samples comments 11, 28 and 29.
3. Please provide the disclosure requested in prior comment 3 about the composition of your sales where you elect to highlight your sales on page 1, rather than at the end of a bullet point about subsidies on page 3.
4. We note your response to prior comment 7. However, in response to comment 69 in our July 27, 2006 letter, you stated that your “long-term sales contracts are framework agreements which convert into binding agreements through a four-quarter rolling forecast process.” Because you elect to highlight these contracts in the summary, the summary should make clear that they are framework agreements that are not yet binding.

Use of Proceeds, page 21

5. Please identify the related party referred to in the second paragraph.

Management’s Discussion and Analysis of Financial Condition and Results of Operations, page 27

6. Refer to prior comment 9 and your response. Although you may also disclose later dated figures, you still must provide the fiscal year-end table of contractual obligations required by Regulation S-K Item 303(a)(5).

Debt and Credit Sources, page 44

7. Please tell us which entry in your exhibit index represents the agreement mentioned in the second bullet point of prior comment 14.

Executive Compensation, page 70

8. We will evaluate your response to prior comment 22 when you provide the noted information.

Fiscal Year-End Option Values, page 71

9. With a view toward disclosure, please tell us how you determined the fair market value of the underlying common stock as mentioned in footnote 1.

Principal and Selling Stockholders, page 74

10. Please expand your response to prior comment 24 to tell us the percentage ownership of each member of the JWMA partnership currently and the basis JWMA will use to re-allocate shares among those members upon dissolution. We may have further comments.
11. We reissue prior comment 27. The last row of your beneficial ownership table mentions 9 directors and executive officers; the table on page 68 identifies 8 individuals.

Certain Relationships and Related Party Transactions, page 76

12. Refer to prior comment 30 and your response. Tell us where you have disclosed the transactions described in the first paragraph of Note 9 to financial statements.

Related Party Debt, page 76

13. Refer to prior comment 28 and your response. It appears the loan agreement described in the second paragraph has not been filed as an exhibit. Please revise or advise.
14. The "Demand Note" dated July 26, 2005 with Walton Enterprises II, LP filed as Exhibit 4.13 is not described in this section. Please advise or revise.

Related Party Equity Contributions, page 76

15. Refer to prior comment 25 and your response. Disclose the number of shares issued or attributed to JWMA for each transaction discussed.

Registration Rights, page 76

16. State the date of the date of the registration rights agreement with JWMA, and tell us why you have not filed it an exhibit to the registration statement.

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17. Clarify what will happen to the Estate's unlimited registration events when the Estate is terminated, as referred to at page 75.

Options with Repurchase Rights, page 80

18. Tell us why you did not file the "change of control agreement" mentioned in Section 14 (a)(i) of Exhibit 4.15.

Note 2. Summary of Significant Accounting Policies, page F-7

Revenue recognition, page F-9

19. We note on page 35, that you changed your shipping terms from delivered duty paid to carriage and insurance paid, which added \$5.4 million to your net sales during the first half of 2006. Please confirm that the shipping terms "carriage and insurance paid" transfers the risk and reward of ownership to the customer. Explain how the revenue recognition criteria in SAB 104 have been met. Also, revise your revenue policy to clarify the delivery terms.

Note 9. Equity Transactions and Settlement, page F-17

20. Please refer to prior comment 37. Please revise to clarify that the senior subordinated notes were converted under terms identical to the original agreement, but at an earlier date, as discussed in your response.

Note 10. Stock Options, page F-18

21. Please refer to prior comment 38. We note that you have not disclosed an estimated offering price. Be advised that we are deferring final evaluation until the estimated offering price is specified.

Recent Sales of Unregistered Securities, page II-2

22. We reissue prior comment 40. In the fifth and sixth paragraphs provide the information required by Regulation S-K Item 701(d) by briefly stating the facts relied upon. Further, in the sixth paragraph, please substantiate your claim for application of Rule 701 to a corporate reorganization transaction.

Item 17 Undertakings, page II-4

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23. We note your revisions in response to prior comment 42. However, your document omits the undertakings required by Regulation S-K Item 512(a)(5)(ii) and 512(a)(6). Please see comment 74 in our July 27, 2006 letter to you.

Exhibits

24. Refer to your response to prior comment 41 and comment 73 of our July 27, 2006 letter. Tell us where you responded to our request to file the deposit agreement and the waiver agreement we cited.

\* \* \* \* \*

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