



UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549-7010

Mail Stop 7010

February 27, 2009

**Via U.S. mail and facsimile**

Mr. Robert Rubin  
Chief Financial Officer  
Solar Thin Films, Inc.  
25 Highland Blvd.  
Dix Hills, NY 11746

**RE: Form 10-KSB for the fiscal year ended December 31, 2007  
Form 10-Q for the quarter ended September 30, 2008  
File No. 001-13549**

Dear Mr. Rubin:

We have reviewed your response letter dated February 2, 2009 and have the following additional comments. If you disagree with any comments, we will consider your explanation as to why a comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation.

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.

**FORM 10-KSB FOR THE YEAR ENDED DECEMBER 31, 2007**

**General**

1. Where a comment below requests additional disclosures or other revisions to be made, please show us in your supplemental response what the revisions will look like. These revisions should be included in your future filings, including your interim filings.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Commitments and contingencies, page 25

2. We note your proposed revisions to your table of contractual obligations on page 26 in response to comment 7 from our letter dated December 10, 2008. Please revise to disclose the following in a footnote to the table:
  - the amount of principal debt payments separate from estimated interest payments, and
  - the assumptions used in determining the estimated interest payments on your debt.

Consolidated Financial Statements

Note 1 – Summary of Significant Accounting Policies, page F-7

3. We note your response to comment 11 from our letter dated December 10, 2008. SAB Topic 11:B specifically indicates that if cost of sales excludes charges for depreciation of property, plant and equipment, the description of the line item should read somewhat as follows..."Cost of goods sold (exclusive of depreciation shown separately below)". Therefore, please revise your description of cost of sales on the face of your consolidated statements of operations in future filings as previously requested. Since you do not include any portion of depreciation in your cost of goods sold, please also remove any references in the filing to gross profit or gross profit margin.
4. We note your response to prior comments 2, 4, and 13 from our letter dated December 10, 2008 and have the following comments.
  - Please revise your disclosures to clarify the difference between product and contract sales or simply refer to equipment sales. In this regard, your proposed revenue recognition policy begins "For revenue from product/contract sales (Equipment Sale)..."
  - You indicate that when you sell hardware equipment such equipment includes associated software. You further indicate that this software is integrated into the equipment and controls the operation of the equipment. Revise your disclosures to clarify, with reference to footnote 2 of SOP 97-2, whether the software is incidental to your equipment. If not, address the need to recognize revenue pursuant to the guidelines of SOP 97-2.
  - You indicate that hardware equipment has associated installation. Please revise your revenue recognition policy to address this fact. In this regard, we note your current policy that indicates you recognize revenue when delivery has occurred and that there was no impact from the implementation of EITF 00-21 as there were no multiple-deliverable arrangements. This policy appears to overlook the fact that you provide installations services.

- We note that if you sell all of the hardware equipment necessary for a manufacturing plant, you recognize those revenues as equipment sales. However, when “services sufficient to allow the customer to produce product meeting an agreed upon performance specification” are included in the contract, you will recognize revenue using the percentage of completion. Please further explain the nature of these services and with reference to paragraphs 12 through 15 of SOP 81-1, explain the appropriateness of using percentage of completion accounting.
5. We note your response to comment 15 from our letter dated December 10, 2008. Your Form 10-K disclosures and statements in your response letter seem to indicate that you have a limited number of customers that comprise the majority of your revenues. Please explain the reasons why you have determined that it is impracticable to quantify the geographic information about revenues required by paragraph 38(a) of SFAS 131. Your response also seems to indicate that you have long-lived assets in both the United States and Hungary. It is unclear why it is impracticable for you to quantify the amount of long-lived assets located in the United States and in foreign countries as required by paragraph 38(b) of SFAS 131.

Note 5 – Notes Payable Other, page F-18

6. We note your response to comment 18 from our letter dated December 10, 2008. Please confirm and revise your disclosures to clarify that there are no cross-default provisions related to your other outstanding debt.

Note 10 – Minority Interest and Put Liability, page F-26

7. We note your response to comment 19 from our comment letter dated December 10, 2008.
- Please revise your disclosure to clarify the number of Solar Thin Power, Inc. shares you have agreed to re-acquire and the aggregate purchase price at which you agreed to acquire the shares. We note that pursuant to paragraph 15 of EITF D-98 if a security is not redeemable currently (for example, because a contingency has not been met), and it is not probable that the security will become redeemable, subsequent adjustment is not necessary until it is probable that the security will become redeemable. However, you must disclose why it is not probable that the Solar Thin Power, Inc. shares will become redeemable.
  - Disclose the steps, if any, you have been taken to register the shares of Solar Thin Power, Inc. With reference to these steps, please reassess your conclusion as of December 31, 2008 as to whether it is probable that these shares will become redeemable. Address the need accrete changes in the redemption value over the period from the date of issuance (or from the date that it becomes probable that the Solar Thin Power, Inc. shares will become redeemable, if later) to their earliest redemption date or recognize changes in the redemption value

immediately as they occur and adjust the carrying value of the Solar Thin Power, Inc. shares to equal their redemption value at the end of each reporting period in accordance with paragraph 16 of EITF D-98.

FORM 10-Q FOR THE PERIOD ENDED SEPTEMBER 30, 2008

General

8. Please address the above comments in your interim filings as well.

Unaudited Condensed Consolidated Financial Statements

Note 1 – Summary of Significant Accounting Policies, page 8

9. We note your response to comment 24 from our letter dated December 10, 2008. Please revise your future filings, beginning with your Form 10-K for the year ended December 31, 2008 to include the disclosures required by paragraphs 17 and 18 of FASB Staff Position Nos. FAS 115-1 and FAS 124-1. Please also revise your filings, including interim filings, to include an accounting policy footnote explaining how you evaluated your cost basis investments for any temporary or other than temporary impairments as of each period end. Refer to FSP FAS 115-1 and FAS 124-1.

Note 5 – Deposit, page 15

10. We note your proposed revisions to future filings in response to comment 27 from our letter dated December 10, 2008. Please tell us how you accounted for the transfer of \$500,000 in equity in CG Solar from RESI in partial satisfaction of the \$1.3 million related party accounts receivable. Please also tell us and disclose the extent to which the August 2008 settlement agreement indicates the timing and method of payment for the remaining \$800,000 owed.

\* \* \* \*

Please respond to these comments within 10 business days. Please provide us with a response letter that keys your responses to our comments and provides any requested information. Detailed letters greatly facilitate our review. Please furnish your response on EDGAR as a correspondence file. Please understand that we may have additional comments after reviewing your responses to our comments.

Mr. Robert Rubin  
Solar Thin Films, Inc.  
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If you have any questions regarding these comments, please direct them to Lisa Haynes, Staff Accountant, at (202) 551-3424 or, in her absence, to Jeanne Baker, Assistant Chief Accountant, at (202) 551-3691.

Sincerely,

Rufus Decker  
Accounting Branch Chief