



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

Mail Stop 7010

April 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-K/A for the fiscal year ended December 31, 2008  
Form 10-KSB for the fiscal year ended December 31, 2007  
File No. 001-13549**

Dear Mr. Rubin:

We have reviewed your response letter dated April 21, 2009 as well as your Form 10-K and Form 10-K/A for the year ended December 31, 2008 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-K/A FOR THE YEAR ENDED DECEMBER 31, 2008**

**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. With the exception of the comments below that specifically request an amendment, all other revisions may be included in your future filings.

Consolidated Financial Statements

Consolidated Statements of Operations and Comprehensive Income, Page F-3

2. Please revise future filings to delete your “Net” caption as that caption excludes depreciation. As we have indicated in prior comment letters, SAB Topic 11:B states, in part, that depreciation, depletion and amortization should not be positioned in the income statement in a manner which results in reporting a figure for income before depreciation.

Note 13 – Minority Interest and Put Liability, page F-24

3. We note your response to comment 7 from our letter dated February 27, 2009. It remains unclear to us how you determined that the put obligation was not probable as of December 31, 2008 or the date your response was filed on April 21, 2009. Please tell us and revise your future filings to describe the circumstances under which you would consider that your obligations under the put option are probable.

Controls and Procedures

Evaluation of Disclosure Controls and Procedures

4. We note that you amended your Form 10-K on April 23, 2009 to indicate that management determined your internal controls over financial reporting were ineffective as of December 31, 2008. It appears that you intended to also disclose that management determined your disclosure controls and procedures were ineffective as of December 31, 2008, however, your current disclosures included in the Form 10-K/A do not provide any assessment as to the effectiveness of disclosures controls and procedures as of December 31, 2008. Please amend your filing to include management’s assessment of the effectiveness of disclosure controls and procedures as of December 31, 2008.

\* \* \* \*

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.

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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