

Mail Stop 6010

December 20, 2006

Photowatt Technologies USA Inc.
540-A Silver Creek NW
Albuquerque, New Mexico 87121

**Re: Photowatt Technologies Inc.
Amendment No. 3 to Registration Statement on Form F-1
Filed December 11, 2006
Registration No. 333-137044**

Ladies and Gentlemen:

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 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.

Prospectus Summary, page 1

1. We reissue prior comment 4 of our letter dated November 1, 2006. If you elect to highlight your strengths in your summary, you should provide equally prominent disclosure of your weaknesses and challenges.

Our Business Strategy, page 1

2. From your response to comment 6 of our letter dated November 1, 2006, it is unclear what the purpose and scope of the September 2006 assessment was. With a view toward clarified disclosure, please tell us why the assessment concluded that the issues were "complex" and what indicated that further review was necessary. Also, please provide us a copy of the assessment and any executive

summaries or extracts presented to management or the board of directors. In addition, please tell us who is conducting the January 2007 assessment and how you would not have preliminary information regarding the assessment at this time.

Our Industry, page 2

3. We note the disclosure you have added from Photon Consulting. Please provide us with support for this data. Clearly mark the relevant sections that support this data. Also tell us whether Photon Consulting has consented to your use of its name and data and whether its report was commissioned by you or prepared specifically for your use.

The Offering, page 4

4. Please include the disclosure requested by comment 8 in our letter dated November 1, 2006 regarding the stock option grants in your next amendment or tell us why you believe it is not appropriate to include such disclosure at this time.

Risk Factors, page 9

5. Please add separate risk factors regarding the minority quorum for shareholder meetings and voting by show of hands mentioned in exhibit 3.2.

Management's Discussion and Analysis, page 39

Selling and administrative, page 51

6. We reissue the first sentence of prior comment 15 of our letter dated November 1, 2006. Please quantify the aggregate amount of the incentive compensation increases.

Liquidity, page 57

7. We note that you continue to describe your potential joint venture as “currently under consideration.” With a view toward disclosure, please tell us:
 - when you began consideration of the joint venture;
 - what progress you have made in considering the venture;
 - what hurdles remain until you complete your consideration of the venture; and
 - what material terms of the venture have been decided.

Contractual Commitments, page 59

8. Please expand your response to prior comments 18 and 19 of our letter dated November 1, 2006 to clarify how the agreements are immaterial. Quantify the payments to be made under the agreements, the timing of the payments, the portion of your materials affected, and the importance of the materials to your operations.

Quantitative and Qualitative Disclosure About Market Risk, page 61

9. We note your response to prior comment 20. With respect to the discussion of the foreign exchange risk, please revise to also disclose the impact of a 10% depreciation of the euro against the U.S. dollar on the translation of your revenue. Refer to Item 305(a)(ii)(A) of Regulation S-K.

License and Royalty Agreements, page 74

10. Please avoid using abbreviations, like TPC, where the meaning is not clear from context.

Corporate Structure and Organization, page 79

11. Please clarify the percentage of your ownership of each entity.

Patents and Trademarks, page 80

12. Please revise the statement “some of the technology” added in response to prior comment 22 of our letter dated November 1, 2006 to provide more specific information regarding the scope of your patent protection and how you have rights to the technology needed to operate your business. Also clarify the extent of your business that will be affected by patents that expire in the near future.

Master Separation Agreement, page 83

13. Please describe the material provisions in exhibit 10.1 regarding the spin off. Also, with a view toward disclosure, please tell us ATS’s present plans with regard to the spin off.

Financial Reporting, page 87

14. Please expand your response to prior comment 24 of our letter dated November 1, 2006 to explain the practical effect of the provision in the Stockholder Agreement. Also tell us how that effect is consistent with your audit committee’s responsibilities.

Taxation, 113

Canadian Federal Income Tax Considerations, page 113

15. We note your response to prior comment 33 of our letter dated November 1, 2006. However, from your current disclosure, it appears you have limited the disclosure to federal income tax matters. Please revise to remove any implication that you have not provide all required tax disclosure.

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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.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any registration statement for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

You may contact Kevin Vaughn at (202) 551-3643 or Martin James at (202) 551-3671 if you have questions regarding comments on the financial statements and related matters. Please contact Tim Buchmiller at (202) 551-3635 or me at (202) 551-3617 with any other questions.

Sincerely,

Russell Mancuso
Branch Chief

cc (via fax): Christopher J. Cummings, Esq.