



DIVISION OF
CORPORATION FINANCE

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

January 5, 2015

Via E-mail

Guy Sella
Chief Executive Officer and Chairman of the Board
SolarEdge Technologies, Inc.
3347 Gateway Boulevard
Fremont, CA 94538

**Re: SolarEdge Technologies, Inc.
Amendment No. 1 to Draft Registration Statement on Form S-1
Submitted December 16, 2014
CIK No. 0001419612**

Dear Mr. Sella:

We have reviewed your amended draft registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing the information you provide in response to these comments and your amended draft registration statement or filed registration statement, we may have additional comments.

Dilution, page 39

1. We note your response to prior comment 8. Please expand the table on page 39 to include a separate line that shows the effect of the conversion of all outstanding preferred shares. Also, please add a table on page 40 that describes how the numbers and percentages would change assuming exercise of all outstanding warrants and options. We note that the disclosure added in note 1 shows only how exercise of those instruments would affect your net tangible book value.
2. We note that your net tangible book value per share as at September 30, 2014 was \$.13. Please provide us with your supporting calculation.

Performance Measures, page 43

3. Please disclose the last two paragraphs of your response to prior comment 10 and your response to prior comment 11.

Contractual Obligations, page 62

4. We note your revisions in response to prior comment 62. Please revise to highlight the changes in the amount outstanding under your line of credit.
5. We note your revisions in response to prior comments 13 and 14. Please expand to quantify the amount of capital expenses you are responsible for funding in connection with the automated assembly line you mention. Also tell us, with a view toward clarified disclosure, the relative proportion of capital investments for existing assembly lines previously funded by you and your contract manufacturers, which arrangement you expect to continue in the future.

Solar Energy is a Large and Growing Market, page 74

6. Please expand your revisions added in response to prior comment 18 to clarify what you mean by “lower than historical growth levels.” For example, what is the historical growth level and what is the difference between that number and the projected growth level?

Note 2 – Significant Accounting Policies, page F-10

N. Revenue recognition, page F-14

7. We note your response to prior comment 30. You state that you have never sold your power optimizers separate from your cloud-based monitoring services. Please explain to us how you concluded it was appropriate to account for the power optimizers and the cloud-based monitoring services as separate units of accounting. Refer to FASB ASC 605-25-25-5.

X – Accounting for stock-based compensation, page F-20

8. We note your response to prior comment 32. We note that your selection of comparable companies focused on sector and related industry with size and development phase playing a lesser role. As such, of the five companies you selected, all appear to be significantly larger and not comparable on the basis of size or stage of development. Please explain to us why you concluded it was appropriate to focus only on sector and related industry. Explain what consideration you gave to also selecting some peer companies on the basis of size and stage of development and why you ultimately concluded that would not provide a more accurate estimate of your expected volatility.

Guy Sella
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You may contact Eric Atallah at (202) 551-3663 or Kevin Vaughn, Accounting Branch Chief, at (202) 551-3643 if you have questions regarding comments on the financial statements and related matters. Please contact Geoff Kruczek at (202) 551-3641 or me at (202) 551-3528 with any other questions.

Sincerely,

/s/ Amanda Ravitz

Amanda Ravitz
Assistant Director

cc (via E-mail): Rachel Prishkolnik—SolarEdge Technologies, Inc.

John T. Gaffney—Gibson, Dunn & Crutcher LLP
Andrew L. Fabens—Gibson, Dunn & Crutcher LLP