

The entity requesting confidential treatment is:

SolarEdge Technologies, Inc.
47505 SeaBridge Drive
Fremont, CA 94538
Attn: Guy Sella, Chief Executive Officer

March 6, 2015

VIA EDGAR AND HAND DELIVERY

Ms. Amanda Ravitz
U.S. Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549-7010

Re: *SolarEdge Technologies, Inc.*
Registration Statement on Form S-1
Filed February 18, 2015
File No. 333-202159

Dear Ms. Ravitz:

On behalf of SolarEdge Technologies, Inc. (the "Company"), this letter responds to your letter, dated March 4, 2015 (the "Comment Letter"), regarding the above-referenced Registration Statement on Form S-1 (the "Registration Statement"), filed on February 18, 2015. Your comment is set forth below, followed by our response. For ease of reference, the heading and numbered paragraph below corresponds to the heading and numbered comment in the Comment Letter. The response of the Company is set forth in ordinary type beneath the comment of the Staff of the Division of Corporation Finance (the "Staff") from the Comment Letter appearing in bold type.

The Company respectfully requests confidential treatment for the redacted information in this letter pursuant to Rule 83 promulgated by the Commission, 17 C.F.R. §200.83, and that the Commission provide timely notice to Guy Sella, SolarEdge Technologies Inc., 47505 SeaBridge Drive, Fremont, CA 94538, before it permits disclosure of such information.

Management's Discussion and Analysis, page 46

Common Stock Valuations, page 69

- 1. Please refer to our prior comment 16 in our letter dated December 2, 2014 and your response to that comment in your letter dated December 15, 2014. As requested in that comment, please tell us the significant reasons for any material**

differences between your last fair value determination and the midpoint of the estimated IPO price range.

Answer: The most recent valuation date used by the Company's Board of Directors (the "Board") in determining the fair value of the Company's common stock in connection with setting the exercise price of option grants occurred on December 31, 2014 (the "Valuation Date"), when the Board determined the fair value of the Company's common stock was \$3.14 per share (equivalent to \$[***] per share following the contemplated [***]-for-[***] reverse stock split) (the "December Valuation"). In determining the December Valuation, the Board considered an independent third party valuation, conducted for December 31, 2014 (the "December Valuation Report"). Key assumptions with respect to the December Valuation Report included, among other factors: (i) the use of a probability-weighted estimated return method assuming a 50% probability of an initial public offering of the Company's common stock; (ii) a discount of 16.6% for the lack of transferability; and (iii) an expected volatility of 54.5% based on the average volatility of comparable companies.

On February 18, 2015 (the "Range Date"), we supplementally advised the Staff that representatives of Goldman, Sachs & Co. and Deutsche Bank Securities Inc., the lead underwriters for the Company's initial public offering advised the Company that, based on then-current market conditions, they anticipated that the underwriters would recommend to the Company a preliminary price range of \$[***] to \$[***] per share (after giving effect to a [***]-for-[***] reverse stock split to be effected prior to the effective date of the Company's registration statement) (the "Estimated IPO Range").

The difference between the December Valuation and the midpoint of the Estimated IPO Range can be attributed to the following factors that occurred during the period between the Valuation Date and the Range Date:

- 1. Revenue Growth:** During the period between the determination of the December Valuation and the agreement on the Estimated IPO Range on February 18, 2015, the Company increased its revenue forecast for calendar 2015 by approximately [***]%. The increase in the revenue forecast was based on increased demand from several existing customers in the U.S.
- 2. Gross Margin expansion:** The Company increased its gross margin forecast for calendar 2015. The increase in the gross margin forecast was due to a combination of faster cost reduction realization and increased economies of scale associated with the increased revenue forecast.
- 3. Increased profitability:** The Company increased its profitability forecast for calendar 2015 by approximately [***]%. The increase in the profitability forecast

was due to increases in the revenue and gross margin forecast and a relatively lower increase in operating expenses compared to the increase in revenues.

4. **General markup performance:** The NASDAQ composite index performed strongly since the Valuation Date. In particular, on March 2, 2015, the NASDAQ composite index closed at its highest levels since 2000, and solar stocks, including Canadian Solar, Vivint Solar and SunEdison have experienced recent gains.

To summarize, in the period between the Valuation Date and the Range Date, several material positive events have occurred both with respect to the Company's business and companies in the solar industry that explain the increase in estimated valuation.

* * *

If you have any questions regarding the above, please do not hesitate to call me at (212) 351-2626.

Very truly yours,

/s/ John T. Gaffney
John T. Gaffney

cc: Geoff Kruczek, Securities and Exchange Commission
Eric Atallah, Securities and Exchange Commission
Kevin Vaughn, Securities and Exchange Commission
Rachel Prishkolnik, SolarEdge Technologies, Inc.
Guy Sella, SolarEdge Technologies, Inc.
Andrew L. Fabens, Gibson, Dunn & Crutcher LLP