



DIVISION OF
CORPORATION FINANCE

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

January 29, 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. 2 to Draft Registration Statement on Form S-1
Submitted January 12, 2015
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.

December 2014 grants, page 72

1. We note that you have not provided fair value information related to your stock option grants issued in December 2014. Please update your filing with this information or explain why you are unable to provide this information.

Note 2 – Significant Accounting Policies, page F-10

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

2. We note from your response to prior comment 8 that the five peer companies you selected in determining your expected volatility were all at a similar development stage to

you. Please provide us with your analysis in which you determined that each peer company you selected was comparable to you in terms of its development stage.

3. As a related matter we also note that you performed a sensitivity analysis that took into account a volatility range of plus or minus 15% and concluded that changes in volatility would not materially affect your financial statements for the fiscal years 2012, 2013 and 2104. Please provide us with your sensitivity analysis.

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