



John H. Sellers
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VIA EDGAR AND OVERNIGHT DELIVERY

January 31, 2012

Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Washington, D.C. 20249
Attn: Russell Mancuso
Ruairi Regan

RE: Enphase Energy, Inc.
Amendment No. 5 to Registration Statement on Form S-1
Filed January 31, 2012
File No. 333-174925

Ladies and Gentlemen:

On behalf of Enphase Energy, Inc. (the "**Company**" or "**Enphase**"), we are transmitting for filing Amendment No. 5 (the "**Amendment**") to the Registration Statement on Form S-1, File No. 333-174925 (the "**Registration Statement**"). We are also sending a courtesy package containing a copy of this letter and the Amendment, including a version of the Amendment that is marked to show changes to Amendment No. 4 to the Registration Statement filed with the U.S. Securities and Exchange Commission (the "**Commission**") on November 22, 2011, for the staff of the Commission (the "**Staff**"), in care of Mr. Ruairi Regan.

The Amendment and certain updated exhibits are being filed in response to comments received from the Staff, by letter dated December 7, 2011, with respect to the Registration Statement (the "**Comments**"). The numbering of the paragraphs below corresponds to the numbering of the Comments, which, for the Staff's convenience, have been incorporated into this response letter. Page references in the text of this response letter correspond to the page numbers of the Amendment.

1. *Given your response to prior comment 1, please ensure the basis for your remaining claims of leadership is clear from context.*

In response to the Staff's comment, the Company has revised the language on pages 4, 76 and 77 to eliminate the references to its "technology leadership". The Company respectfully submits that the remaining claims of leadership on pages 1, 3, 4, 39, 63, 68, 75 and 76 refer to the Company as a "market leader" in microinverter category, which claims are supported by the data from California Solar Initiative (CSI).

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Page Two

Cost of Revenue and Gross Profit, page 42

2. *Please quantify the impact of raw materials pricing.*

In response to the Staff's comment, the Company has revised the language on page 43 of the Amendment.

Exhibit 1.1

3. *Please file the exhibits to this exhibit.*

In response to the Staff's comment, the Company has filed the exhibits to Exhibit 1.1 in connection with filing of the Amendment.

Please do not hesitate to contact me at (650) 843-5070 if you have any questions or would like any additional information regarding these responses.

Sincerely,

/s/ John H. Sellers

John H. Sellers

cc: Paul B. Nahi, President and Chief Executive Officer, Enphase Energy, Inc.
Sanjeev Kumar, Chief Financial Officer, Enphase Energy, Inc.
Gary Caine, Deloitte & Touche LLP
Bruce K. Dallas, Davis Polk & Wardwell LLP
Marina Remennik, Cooley LLP

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