

John H. Sellers (650) 843-5070 jsellers@cooley.com

October 14, 2011

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. 3 to Registration Statement on Form S-1 Filed September 23, 2011 File No. 333-174925

Ladies and Gentlemen:

On behalf of Enphase Energy, Inc. (the "*Company*" or "*Enphase*"), this letter is being filed in response to comments received from the staff of the U.S. Securities and Exchange Commission (the "*Staff*"), by letter dated October 4, 2011, with respect to the Amendment No. 3 to the Registration Statement on Form S-1, File No. 333-174925 (the "*Registration Statement*").

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 No. 3 to the Registration Statement filed on September 23, 2011.

Competitive Strengths, page 3

1. Given that you state in your response to prior comment 1 that you do not believe there is sufficient data available to make comparisons to other microinverter products, please revise your disclosure that your microinverter is industry leading in the last paragraph on page 2 and elsewhere in your prospectus to more clearly reflect the status of your product.

In response to the Staff's comment, the Company will revise its disclosure on pages 2, 63 and 69 to remove the references to the "industry leading" when describing Enphase microinverters in connection with the filing of its next amendment to the Registration Statement.

Business, page 63

2. Please tell us why you believe it is appropriate to present your California market share and your Americas market share based upon different metrics. Also, tell us whether your market share would be materially different if your used alternative metrics for the regions you describe, such as the number of installations, total wattage of installations in the "Americas" or total dollar sales volume in California.

FIVE PALO ALTO SQUARE, 3000 EL CAMINO REAL, PALO ALTO, CA 94306-2155 T: (650) 843-5000 F: (650) 849-7400 WWW.COOLEY.COM

VIA EDGAR AND OVERNIGHT DELIVERY



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In response to the Staff's comment, the Company respectfully advises the Staff that IMS Research and California Solar Initiative, or CSI, do not provide data that would enable the Company to present its California market share and Americas market share based on the same metrics. The CSI database contains an extensive amount of data on the California solar market, including aggregate installed wattage in California by inverter manufacturer, which enables the Company to calculate its market share percentages based on installed wattage in California for each of the residential and small commercial wattage ranges, as discussed in the Company's letter to the Staff dated September 23, 2011. CSI does not provide data that would enable the Company to calculate its market share data by revenue in California. IMS Research does not provide installed wattage data by inverter manufacturer in its report. The IMS Research data includes inverter supplier market share data for the Americas and the United States by revenue, but does not separately present market share data for California by revenue. Further, the IMS Research report does not segment its market share data by revenue into <10kW residential solar PV inverter market or the 10kW to 100kW small commercial solar PV inverter market.

The Company respectfully submits to the Staff that it added disclosure of its Americas market share by revenue in response to the Staff's comment in its letter of September 9, 2011 requesting that the Company disclose its market share in North America. The Company respectfully advises the Staff that it believes that such information may be useful to investors. The Company does not believe that its market share would be materially different if the Company used alternative metrics for the regions presented. Therefore, the Company feels it is appropriate to present its California market share and its Americas market share based upon different metrics since that is the best information available.

Furthermore, in response to the Staff's comment, the Company will revise its disclosure on page 63 in connection with the filing of its next amendment to the Registration Statement, to disclose the fact that the CSI data is based on the total wattage of installation as prominently as the fact that IMS Research data is based on the total dollar sales volume by moving the disclosure from the footnote to the table on page 63 to the lead-in paragraph preceding the table.

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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