



DIVISION OF  
CORPORATION FINANCE

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

September 9, 2011

Via E-mail

Paul B. Nahi  
Chief Executive Officer and President  
Enphase Energy, Inc.  
201 1st Street, Suite 100  
Petaluma, CA 94952

**Re: Enphase Energy, Inc.  
Registration Statement on Form S-1  
Amendment No. 2 filed August 24, 2011  
File No. 333-174925**

Dear Mr. Nahi:

We have reviewed your amended 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 amending your registration statement and providing the requested information. 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 any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

Competitive Strengths, page 3

1. Please expand your response to prior comment 8 to clarify how you have established industry-leading reliability compared to other producers of microinverters.

Use of Proceeds, page 31

2. We reissue prior comment 12 because you have not disclosed the approximate amount that you currently intend to use for each disclosed purpose. Include the nature of the capital expenditures. Although you may not have commitments, you should disclose your current intentions based on current circumstances; in this regard, your disclosure regarding lack of plans to enter new international markets appears to conflict with your

disclosure in the last bullet point on page 76. See also instructions 4 and 7 to Regulation S-K Item 504.

Stock Based Compensation, page 54

3. Please expand your response to prior comment 15 to explain how you concluded that you are not required to name and file the consent of each third party whose valuations and underlying assumptions are disclosed in this section. Refer to Rule 436(a) of Regulation C in your response.

Business, page 63

4. It remains unclear how the percentages disclosed in your three-month moving average data table on this page, or provided in Exhibit 1 to your response to comment 5, are supported by the California Solar Institute database identified in your response to prior comment 4. Please provide an expanded response that shows clearly how you derived the number of installations in each period that were completed and the number that used your product from the California Solar Institute database. Also, if your table represents only the market share of the installations for the three-month period and not cumulative market share, please revise to clarify.
5. Please tell us why it is appropriate to present the table on page 63 based upon installations <10kW, if your offerings are in the residential and small commercial solar market up to 100kW as you indicate in the first paragraph of your response to comment 9.
6. Given the 10.6% market share referenced in your response to prior comment 5 and the market shares disclosed in the table on page 63, it remains unclear how you concluded that the North American market share data and the California share data are consistent. If you elect to disclose your California market share, please disclose your market share in North America and the relative size of the California market in this section.

Industry Overview, page 64

7. Given your response to prior comment 16, please provide the consent of Westinghouse Solar required by Rule 436.

LCOE Case Studies, page 70

8. We reissue the sixth bullet point of prior comment 18. You appear to be attributing your disclosure to the third party; therefore, the guidance you cite regarding whether a consent is required when the disclosure is not attributed to a third party is not applicable.

9. With a view toward clarification of the disclosure added in response to prior comment 18, please tell us why you used costs estimates for actual installations. Why did you not use actual costs?

Competition, page 85

10. Please clarify your response to prior comment 23 regarding your deletion of DC-to-DC optimizers from your competition disclosure because they require additional upfront expenditures. Since your product also appears to require additional upfront expenditures, it appears that, depending on the benefits to be received from the additional expense for the DC-to-DC optimizer relative the benefits from your product, the optimizer could be a potential competitor. Please advise or revise.
11. Please tell us why you deleted your disclosure that some of your customers and partners intend to develop competing microinverter devices.

Compensation Risk Assessment, page 122

12. It remains unclear from your revisions in response to prior comment 28 whether risks arising from your compensation policies and practices are reasonably likely to have a material adverse effect on you. Please clarify.

Exhibits and Financial Statement Schedules, page II-4

13. Refer to prior comment 36. Please tell us why exhibit 10.12 appears to omit schedule 1C.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Act of 1933 and all applicable Securities Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement please provide a written statement from the company acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and

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- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Jeanne Bennett, Staff Accountant, at (202) 551-3606 or Brian Cascio, Accounting Branch Chief, at (202) 551-3676 if you have questions regarding comments on the financial statements and related matters. Please contact Ruairi Regan, Staff Attorney, at (202) 551-3269 or me at (202) 551-3617 with any other questions.

Sincerely,

/s/ Russell Mancuso

Russell Mancuso  
Branch Chief

cc (via e-mail): John H. Sellers  
Cooley LLP