



DIVISION OF
CORPORATION FINANCE

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

September 30, 2013

Via E-mail

Kris Sennesael
Vice President and Chief Financial Officer
Enphase Energy, Inc.
1420 N. McDowell Blvd.
Petaluma, CA 94954

**Re: Enphase Energy, Inc.
Form 10-K for the Fiscal Year Ended December 31, 2012
Filed March 5, 2013
Form 10-Q for the Quarterly Period Ended June 30, 2013
Filed August 7, 2013
File No. 001-35480**

Dear Mr. Sennesael:

We have reviewed your filings and have the following comments. We have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your documents. 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 within ten business days by providing the requested information or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing any amendment to your filings and the information you provide in response to these comments, we may have additional comments.

Form 10-K for the Fiscal Year Ended December 31, 2012

Note 5. Warranty Obligations, page 52

1. We see that you recorded a \$10.2 million increase in your warranty expense related to the estimated long-term performance of previous generations of your products offset by a decrease of \$2.6 million from a reduction in replacement costs and claim rates. Please explain to us in greater detail the specific reason for the significant increase in the accrual and the related assumptions underlying these changes to your accrual. Please also clarify the reason for your change to present warranty obligation on a gross basis. Discuss how you determined that your warranty accruals are sufficient to cover future warranty claims and clarify each of the factors you considered in your analysis. Include a discussion of the following:

- Describe how you determined the change in the estimated long term performance of your previous generations of products including any changes in the estimated mean time between failures.
- Discuss how you quantifiably determined the change in the replacement cost for these products.
- Discuss how changes in replacement cost are described as a factor in both the increase and decrease in the accrual.
- Describe how claims history is cited as a factor in reducing the accrual when your products have a warranty term of 15 or 25 years.
- Discuss whether you still factor the “Entrust Program” into your accrual as described on page F-10 of amendment No. 10 to the Form S-1 filed March 28, 2012.

Note 11. Stock-Based Compensation, page 57

2. We note that you disclose weighted averages for the assumptions underlying your Black-Scholes option pricing models on page 60. However, please tell us and revise future annual filings to provide a description of the significant assumptions used during the year to estimate the fair value of share-based compensation awards consistent with FASB ASC 718-10-50-2(f)(2).

Form 10-Q for the Quarterly Period Ended June 30, 2013

Note 3. Warranty Obligations, page 8

3. We reference the discussion in Note 3 of the significant increase in warranty expense resulting from changes in estimates arising from increased failure rates related to previous generation products. Please explain to us in greater detail the reason for the increased failure rates and how this was considered in your estimates of future warranty obligations. Please also clarify whether there were any changes made to your products related to the increased failure rates.

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 Exchange Act of 1934 and all applicable Exchange 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.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;

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- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

You may contact Kevin Kuhar, Accountant, at (202) 551-3662 or me at (202) 551-3676 if you have questions regarding comments on the financial statements and related matters. In this regard, do not hesitate to contact Martin James, Senior Assistant Chief Accountant, at (202) 551-3671 with any other questions.

Sincerely,

/s/ Brian Cascio

Brian Cascio
Accounting Branch Chief