January 15, 2015

VIA EDGAR

Mr. Brian Cascio, Accounting Branch Chief
Mr. Kevin Kuhar, Accountant
United States Securities and Exchange Commission
Division of Corporation Finance
100 F Street, NE
Washington, D.C. 20549

Re: Enphase Energy, Inc.
Form 10-K for the Fiscal Year Ended December 31, 2013
Filed March 4, 2014
Form 10-Q for the Quarterly Period Ended September 30, 2014
Filed November 5, 2015
File No. 001-35480

Gentlemen:

This letter is being transmitted by Enphase Energy, Inc. (the "***Company***") in response to the comments received from the staff (the "***Staff***") of the Securities and Exchange Commission (the "***SEC***"), by letter dated December 23, 2014 (the "***Comment Letter***"), with respect to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2013 (the "***10-K***") and the Quarterly Report on Form 10-Q for the period ended September 30, 2014 (the "***10-Q***"). The text of the Staff's comments has been included in this letter in italics for your convenience, followed by the Company's responses.

Form 10-K for the Fiscal Year Ended December 31, 2013

Note 5. Warranty Obligations, page 54

1. *We note you provide a warranty of up to 15 years for first and second generation products and up to 25 years for third and fourth generation products. You appear to have limited operating history since the first sales of these products commenced in fiscal 2008. We also note the increase in actual failures of your second generation microinverters that exceeded estimates in 2012 and 2013 and in interim period of 2014 in your September 30, 2014 Form 10-Q that resulted in significant changes in estimates in recent years. Please explain to us how the significant increase in estimated failure rates have been considered in determining your estimate for warranty obligations.*

Response:

The Company advises the Staff that the total number of microinverter units shipped by the Company from 2008 (date of first shipment) through December 31, 2014 approximates 7.2 million units. Approximately 1.1 million units are the Company's first and second generation microinverters, sold from 2008 through the end of 2012, and include a warranty term of up to 15 years. Approximately 6.1 million

units are the Company’s third and fourth generation microinverters, sold from 2011through the end of 2014, and include a warranty term of up to 25 years. For all generations of microinverters sold, the Company’s Quality and Reliability department has primary responsibility for establishing, monitoring and revising estimated failure rates, when necessary. In so doing, the department employs a consistent, systemic and rational methodology that carefully considers a number of factors including actual field performance data, root-cause and failure analyses on microinverters returned, and manufacturer and industry data related to the reliability and performance of individual components used in the Company’s microinverters. Through its Enlighten monitoring platform, each unit shipped and placed into production provides the Quality and Reliability department with the opportunity to gather valuable information and data related to the microinverter’s actual field performance in varying operating environments over time.

In addition to actual production data gathered from its microinverters, the Quality and Reliability department also considers the potential impact on long-term failure rates resulting from differences in product design, any variations in the individual components used in production, the potential effect of geographical and climate differences on units deployed, and any revisions to the manufacturing process. Through root-cause and failure analyses, the Quality and Reliability department identifies and isolates the individual failure mechanism(s) present in failed units returned to the Company and determines why such failures occurred. They also investigate the variation in the time-to-failure profiles for any given failure mechanism and incorporate any findings into their failure rate estimates.

In estimating the failure rates for the Company’s third and fourth generation microinverters, the Quality and Reliability department carefully considered the performance-related data collected on its first and second generation microinverters (including the significant increase in failure rates), as well as the information gathered from root-cause and failure analyses performed on those products. This information formed the basis of certain process, design, engineering, and manufacturing improvements that were incorporated into its third and fourth generation microinverters. For example, the Company made significant investments in automation equipment used in the critical stages of its manufacturing process to improve manufacturing yields, reduce production variability and improve the reliability of its microinverters. In addition, the Company made certain modifications and improvements to several key components used in its third and fourth generation microinverters. The Company also implemented significant operational improvements related to the qualification of all component vendors supplying raw materials used in the Company's microinverters. Finally, the Company identified the specific failure mechanisms present in its second generation microinverters and performed discrete tests and analyses to determine that those failure mechanisms were not present in its third or fourth generation products.

Prior to the launch of its third and fourth generation microinverter, the Company employed a more robust and methodical product development, qualification and verification process that involved rigorous environmental stress testing that included, but was not limited to, thermal cycling and damp heat testing. These stress tests and associated test processes were designed to simulate extreme operating conditions under which the Company’s microinverters might be deployed. The Company also introduced and performed accelerated life testing intended to simulate the operation and performance of its microinverters over extended periods of time of up to 25 years. After product launch and during manufacturing production, the Company’s Quality and Reliability and Manufacturing departments executed ongoing reliability and environmental stress testing on its third and fourth generation microinverters. Taken collectively, the Company believes that these factors have resulted in a significant improvement in the performance and reliability of the Company’s third and fourth generation microinverters, and have facilitated improved estimates used by the Company to measure warranty

obligations for those products. As a result, since 2011, the Company has not increased the estimated failure rates used for its third or fourth generation microinverters.

2. *Please tell us the business purpose for modifying the warranty contracts related to microinverters sold since January 1, 2014 to allow for the right, but not the requirement, to assign warranty obligations to a third party. Please also explain why you have changed your accounting to elect the fair value option to measure microinverter warranties for those sold subsequent to January 1, 2014.*

Response:

The Company advises the Staff that the change in business practice of modifying the warranty contracts related to microinverters sold since January 1, 2014 to allow for the right, but not the requirement, to assign warranty obligations to a third party resulted from a forward-looking strategy that provides the Company with maximum flexibility in managing the risks associated with the extended duration of its microinverter warranties. The Company believes the solar industry is still in its early stages. As the industry matures and evolves, the Company anticipates new entrants into the solar warranty fulfillment business given the growing installed base of deployed solar components and systems (e.g. solar panels and inverters) which typically carry warranties of up to 25 years. The ability to assign warranty obligations to such third parties in certain situations (e.g. in specific countries or regions, or a specific product generation) may make economic sense and will allow the Company to remain focused on its core business of designing, manufacturing and of selling microinverters.

In addition, after modifying the contractual provisions of the Company's microinverter warranties, the warranty obligations became eligible for fair value accounting pursuant to FASB ASC 825-10-15-4(e). The Company's decision to elect the fair value option for eligible microinverter warranties was made to reflect the underlying economics of the time value of money for an obligation that will be settled over an extended period of up to 25 years.

Note 11. Income Taxes, page 62

3. *Please revise future filings to disclose the amount of income (loss) before income tax expense attributable to domestic or foreign operations. Refer to Rule 4-08(h) of Regulation S-X.*

Response:

The Company advises the Staff that it will revise its footnote disclosures in future filings to disclose the components of income (loss) before income tax expense (benefit) attributable to domestic and foreign operations for the relevant periods.

Exhibit 31

4. *We note that on page 67 you have included management's report on internal control over financial reporting since this is your second annual report subsequent to your effective registration statement as required by Item 308 of Regulation S-K. As such, your 302 certifications are required to include the introductory language in paragraph 4 of the certification that refers to the certifying officers' responsibility for establishing and maintaining internal control over financial reporting for the company and should also include paragraph 4(b) which refers to the*

design of your internal reporting. Please file an amendment to the Form 10-K to include certifications that include the required language. You may provide an abbreviated amendment that consists of a cover page, explanatory note, signature page and paragraphs 1, 2, 4 and 5 of the certification. Please also apply this comment to each of your Form 10-Q filings for the quarterly periods ended March 31, June 30, and September 30, 2014.

Response:

The Company advises the Staff that it will file the requested amendments to include the required introductory language in paragraph 4 and subparagraph 4(b) of the Section 302 certifications as soon as all Comments are resolved to the satisfaction of the Staff, but in any event prior to the filing of its Form 10-K for the year ended December 31, 2014.

Form 10-Q for the Quarterly Period Ended September 30, 2014

Quantitative and Qualitative Information about Level 3 Fair Value Measurements, page 11

5. *Please explain to us how you determined the significant unobservable inputs disclosed on page 11 and how these are used in your estimate of fair value. Considering the recent significant changes in estimates from the increase in actual failures of your products and the uncertainty in the timing of cash flows, please tell us about your ability to develop estimates necessary to determine the fair value of your warranty obligation. Please also tell us your consideration of the disclosure requirements in FASB ASC 820-10-50-2(g).*

Response:

The following describes how the significant unobservable inputs are used in calculating the Company's warranty obligations at fair value:

1. the Company first estimates the undiscounted cash outflows associated with warranty obligations issued during a period in the same manner as the warranties that were issued prior to January 1, 2014;

2. the Company then increases the estimated undiscounted cash outflows determined above by a multiple of the profit element and risk premium; and

3. the resultant estimated undiscounted cash outflows, which now incorporate a profit element and risk premium, are then discounted back to a measurement date using an appropriate discount rate (described below) to arrive at a fair value measurement for its warranty obligations.

For the Staff's reference, the significant unobservable inputs used in the fair value measurement of the Company's eligible warranty obligations are (1) a profit element and risk premium; and (2) the Company's credit-adjusted risk-free interest rate (i.e. discount rate). The two unobservable inputs are determined by the Company, with the assistance of an unrelated third-party valuation specialist, as of each reporting date.

In determining the profit element and risk premium used to value the Company's warranty obligations at fair value, the Company considered FASB ASC 820-10-35-16J, which states:

> *When using a present value technique to measure the fair value of a liability that is not held by another party as an asset (for example, an asset retirement obligation), a reporting entity shall, among other things, estimate the future cash outflows that market participants would expect to incur in fulfilling the obligation. Those future cash outflows shall include market participants' expectations about the costs of fulfilling the obligation and the compensation that a market participant would require for taking on the obligation. Such compensation includes the return that a market participant would require for the following:*
>
> a. *Undertaking the activity (that is, the value of fulfilling the obligation—for example, by using resources that could be used for other activities)*
>
> b. *Assuming the risk associated with the obligation (that is, a risk premium that reflects the risk that the actual cash outflows might differ from the expected cash outflows).*

The profit element and risk premium captures the price that a market participant would require to assume the risk associated with the contingent liability above and beyond the expected liability. In the absence of market information (e.g. quotes, rates, or margins for market participants) indicating the returns a market participant would require to assume warranty obligations of microinverters, the Company turned to the property and casualty insurers who offer products that cover many unique risks and is in the market of assuming a wide range of risk liabilities. Such insurers' products cover a diverse set of risks including equipment breakdown, errors and omissions, business interruption and professional liability. The Company believes the returns required by property and casualty insurers provide a reasonable basis to estimate the profit element and risk premium that a hypothetical market participant (engaged in warranty fulfillment for microinverters) would require since both parties would be assuming risks associated with the uncertainties in timing and amount of future cash outflows and both would require a profit element to assume similar liabilities.

In determining the discount rate used to value the Company's warranty obligations at fair value, the Company used the risk-free interest rate based on a weighted-average of implied yields on U.S. Treasury zero-coupon issues commensurate with the weighted-average remaining warranty periods outstanding, plus the credit-risk adjusted bond yield curves from publicly available surveys in categories of credit risk (as published by Standard & Poor's and Bank of America Merrill Lynch) that the Company considers similar to its own credit risk.

The Company advises the Staff that the significant changes in estimates from the increase in actual failures of microinverters relate only to its second generation microinverters, which the Company last sold in 2012. The warranties associated with the Company's second generation microinverters are not eligible for fair value accounting as terms of those warranties do not meet the conditions set forth in FASB ASC 825-10-15-4(e). Accordingly, the changes to the failure rate assumptions related to its second generation microinverters do not necessarily have a direct correlation with the Company's ability to develop estimates necessary to determine the fair value of its warranty obligations related to its third and fourth generation microinverters, which are being accounted for at fair value if sold subsequent to January 1, 2014. To date, the Company has not increased the estimated failure rates used for its third or fourth generation microinverters.

As disclosed in Note 1 on page 8 of the 10-Q under the paragraph titled “Fair Value Option for Warranty Obligations Related to Microinverters Sold Since January 1, 2014” and discussed above, the only difference between how warranty obligations are being calculated prior to fair value accounting and post-election of the fair value option is the application of an expected present value technique to the estimated undiscounted cash outflows.

The Company considered FASB ASC 820-10-50-2(g), which requires an entity to provide a narrative description of the sensitivity of the fair value determination to changes in the level 3 inputs, and disclosed in Note 4 on page 11 of the 10-Q the following:

“An increase (decrease) in the profit element and risk premium input in isolation would result in a higher (lower) fair value measurement of the liability. An increase (decrease) in the discount rate in isolation would result in a substantially lower (higher) fair value measurement of the liability.”

In response to the Staff’s comment, the Company will enhance its disclosure in future filings by replacing the above paragraph with quantitative sensitivity analysis of changes in significant level 3 inputs of the (1) profit element and risk premium; and (2) discount rate similar to the following:

“Each of the significant unobservable inputs is independent of the other. The profit element and risk premium are estimated based on requirements of a third-party participant willing to assume the Company's warranty obligations. The discount rate is determined by reference to the Company's own credit standing at the fair value measurement date. Increasing (decreasing) the profit element and risk premium input by 100 basis points would not have a material impact on the fair value measurement of the liability. Increasing (decreasing) the discount rate by 100 basis points would result in a ($_____) $_____ (decrease) increase to the fair value measurement of the liability.”

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The Company further acknowledges that:

- the Company is responsible for the adequacy and accuracy of the disclosure in the filing;
- Staff comments or changes to disclosure in response to Staff comments do not foreclose the SEC 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 SEC or any person under the federal securities laws of the United States.

Please contact me at 707-763-4784, ext. 7493 with any questions or further comments regarding the Company's responses to the Staff's comments.

Sincerely,

/s/ Kris Sennesael

Kris Sennesael
Vice President and Chief Financial Officer