



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 4631

September 22, 2016

Via E-mail

Mr. Dana C. Russell
Chief Financial Officer
Vivint Solar, Inc.
1800 West Ashton Boulevard
Lehi, Utah 84043

**Re: Vivint Solar, Inc.
Form 10-K for the Year Ended December 31, 2015
Filed March 15, 2016
Form 10-Q for the Period Ended June 30, 2016
Filed August 8, 2016
File No. 1-36642**

Dear Mr. Russell:

We have reviewed your filings 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 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 comment applies to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

Form 10-K for the Year Ended December 31, 2015

Management's Discussion and Analysis, page 41

1. We note that you no longer have a presence in Nevada in response to the issuance of final rules by the Nevada Public Utilities Commission related to net metering and that other net metering programs have been subject to regulatory scrutiny or legislative proposals. Please discuss the actual and expected impact of these events on your results of operations as well as discuss the impact of any additional known material trends and

uncertainties that will have, or are reasonably likely to have, a material impact on your revenues or income or result in your liquidity decreasing or increasing in any material way. Please also discuss if these regulatory developments have had a significant impact on your cancellation rates. See Item 303 of Regulation S-K and SEC Release No. 33-8350.

Key Operating Metrics, page 43

2. In regard to your presentation of estimated retained value, please disclose the basis for the assumption of a 6% discount rate. In this regard, we note that the discount rates used in your goodwill impairment testing as of March 31, 2016 were 7.25% for cash flows related to current customer contracts and 9.25% for estimated cash flows from customer renewals based on your disclosures on page 10 of your Form 10-Q for the period ended June 30, 2016. Please also consider providing a quantitative sensitivity analysis of the effects of changes in any significant assumptions such as the discount rate used and default rates.

Contractual Obligations, page 65

3. You indicate on page 21 that you recently enter into multi-year agreements with certain of your suppliers. Certain of these agreements require you to make minimum volume purchases on a quarterly basis. Please address the need to present and quantify your purchase obligations under these agreements. Refer to Item 303(a)(5)(i) of Regulation S-K.
4. Please disclose the amount of interest related to your debt. In this regard, since the table is aimed at increasing transparency of cash flow, we believe these payments should be included in the table and any assumptions necessary to derive these amounts should also be disclosed. Refer to Item 303(a)(5) of Regulation S-K and footnote 46 in our Release 33-8350.

Financial Statements

Notes to the Financial Statements

Note 2. Revenue Recognition, page 80

5. We note that you began offering contracts whereby customers could purchase solar energy systems with cash or enter into a loan product administered by a third party in 2015 and that you expect installations related to sales to grow in future periods. We also note that this revenue is recognized when systems are interconnected to local power grids and granted permission to operate, assuming all other revenue recognition criteria are met. Please disclose the obligations you have to customers subsequent to the sale of

these solar energy system compared to customers who lease a solar energy system and your consideration of these obligations in terms of recognizing revenue.

6. Depending on the level of guarantee provided in your lease contracts, you either recognize revenue based on the amount of power generated at rates specified under the contracts and establish a reserve for payments you have to make if the solar energy systems do not meet a guaranteed production level in the prior 12-month period or you recognize revenue on a straight-line basis over the lease term. Please help us better understand the different levels of guarantees provided and explain how they impact your revenue recognition pursuant to ASC 840 and how you determine the amounts reserved for under your guarantee obligations.

Note 2. Revenue Recognition – Lease Pass-Through Arrangements, page 81 and Note 11.

Investment Funds –Lease Pass-Through Obligations, page 94

7. Please provide us with additional information to more fully explain your accounting for lease pass-through arrangements. In this regard, please address the following:
 - The Company accounts for the residual of the payments received from the fund investor, net of amounts allocated to ITCs, as a borrowing by recording the proceeds received as a lease pass-through financing obligation which will be repaid through customer payments that will be received by the investor. Please explain why, as indicated at the bottom of page 94, you recorded the \$47.3 lease pass-through financing obligation as deferred revenue;
 - Explain why your discussion of deferred revenue on page 79 indicates that deferred revenue primarily includes ITC revenue and rebates and incentives;
 - Explain the nature of the \$3.8 million current portion of lease pass-through financing obligation reflected within Accrued and Other Current Liabilities as disclosed on page 89;
 - Address the impact of your classification of these upfront payments as deferred revenue rather than as a borrowing on your statement of cash flows. In this regard, we note that you have included a \$43 million increase in deferred revenues in your 2015 operating cash flows. Please also address the nature of the \$7.2 million proceeds for lease pass-through financing obligations in your 2015 financing cash flows; and
 - Identify the specific accounting literature that supports your accounting.

Note 6. Property and Equipment, page 87

8. In regard to your build-to-suit arrangement, please address the following:
 - Please tell us and disclose the specific factors that led you to determine that you should be deemed to be the owner of the building and therefore should account for as a build-to-suit arrangement; and

- Please tell us and disclose how you determined that the building qualified for sale-leaseback treatment after construction was completed and correspondingly how the sale-leaseback transaction was reflected on your financial statements.
Refer to ASC 840-40.

Item 9A. Controls and Procedures, page 110

9. Please revise your disclosures to address the following pursuant to Items 307 and 308 of Regulation S-K:
- You currently indicate that you concluded your internal control over financial reporting was not effective based on your evaluation of your disclosure controls and procedures. Please state your conclusion based on your evaluation of internal control over financial reporting;
 - In light of your remediation efforts, please tell us why there have not been any changes to internal control over financial reporting or revise your disclosures, as necessary; and
 - Please clearly disclose your conclusions as to whether your disclosure controls and procedures were effective as of the end of the period.

Form 10-Q for the Period Ended June 30, 2016

Components of Results of Operations

Net Income Available to Common Stockholders, page 31

10. Your disclosures on page 36 indicate that a tax equity fund that became operational in 2016 does not use the HLBV method to allocate gains and losses. Please clarify what method is used for this fund and your basis for using an alternate method.

Liquidity and Capital Resources, page 36

11. Please expand your disclosures to better address how you determined that your current sources of cash will be sufficient to meet your anticipated cash needs for at least the next 12 months in light of the following:
- You had a working capital deficit at December 31, 2015 of approximately \$3 million which increased to \$32 million at June 30, 2016; and
 - Your disclosures on page 12 indicate that your unused borrowing capacity has increased from December 31, 2015 of \$105.9 million to \$164.2 million at June 30, 2016. We note that \$125 million of the available capacity at June 30, 2016 is related to the Subordinated Holdco Credit Facility. It appears that the proceeds of this facility can only be used for the construction and acquisition of solar energy systems whereas at December 31, 2015 all of the unused borrowing capacity was attributable

to the aggregation credit facility which does not appear to have the same restriction as far as how the proceeds can be used.

12. You do not have full access to a portion of your cash and cash equivalents of \$69.6 million at June 30, 2016, which is reported as unrestricted cash and cash equivalents. Please disclose the amount that is included in unrestricted cash and cash equivalents that you do not have access to and help us understand why it would not be reflected in restricted cash pursuant to Rule 5.02.1 of Regulation S-X.
13. We note that you are subject to financial covenants which include maintaining a loan-to-value ratio and debt service coverage ratio. In light of your continued losses, please provide us with the calculation of your debt service coverage ratio measure as of December 31, 2015, March 31, 2016, and June 30, 2016. Please also disclose the actual ratios/amounts as of each reporting date for any material debt covenants for which it is reasonably likely that you will not be able to meet or which could impact your ability to obtain additional debt or equity financing to a material extent. See Sections I.D and IV.C of the SEC Interpretive Release No. 33-8350.

Form 8-K filed August 8, 2016

14. Pursuant to Item 100(a)(2) of Regulation G, please provide a reconciliation between the non-GAAP net loss per share amount and the corresponding net loss per share amount calculated in accordance with US GAAP.

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;
- 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.

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Vivint Solar, Inc.
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If you have any questions regarding these comments, please direct them to Nudrat Salik, Staff Accountant, at (202) 551-3692 or, in her absence, Jeanne Baker, Assistant Chief Accountant, at (202) 551-3691.

Sincerely,

/s/ Terence O'Brien

Terence O'Brien
Accounting Branch Chief
Office of Manufacturing and Construction