

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

March 23, 2011

Mr. Scott R. Jensen Chief Financial Officer Orion Energy Systems, Inc. 2210 Woodland Drive Manitowoc, Wisconsin 54220

Re: Orion Energy Systems, Inc.

Form 10-K for the fiscal year ended March 31, 2010

Filed June 14, 2010

Form 10-Q for the quarter ended December 31, 2010

File No. 1-33887

Dear Mr. Jensen:

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. Please provide us with the requested 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 the information you provide in response to these comments, we may have additional comments.

Form 10-K for the fiscal year ended March 31, 2010

<u>Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations</u>

Critical Accounting Policies and Estimates, page 44

- 1. Provide us with a detailed analysis of your Orion Virtual Power Plant Agreements (OVPP) and Orion Throughput Agreements (OTA) financing programs. Tell us how you applied the guidance in ASC 840 or other accounting guidance in determining the appropriate accounting treatment for these transactions, including the sale of future cash flows and residual rights to equipment to an unrelated third party. In your response, please describe the material terms of the agreements, including the following:
 - your obligations under the agreements and how you evaluated the impact of these obligations in recording the sale of future payment streams or contract rights to third parties,
 - the term of the agreements, including renewal periods,
 - the details of the right of return, and

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- the details of the early buyout provisions.
- 2. Describe in your response the selling and administrative costs and expenses you are deferring under the OTA and OVPP agreements and your basis for deferral. In this regard we note that in some instances you disclose that all costs are expensed up front and in other instances you state that most are expensed up front. Also describe the costs of revenues that you are deferring, your basis for the deferral, and your basis for the amortization period for the related deferred costs.

Form 10-Q for the quarterly period ended December 31, 2010

Note B – Summary of Significant Accounting Policies

Revenue Recognition, page 9

3. Please address comments one and two above, as applicable, in regards to your solar power purchase (PPA) financing program.

Please file all correspondence over EDGAR. 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.

You may contact Michael Henderson, Staff Accountant, at (202) 551-3363 or Terry French, Accountant Branch Chief, at (202) 551-3828 if you have questions regarding comments on the financial statements and related matters. Please contact me at (202) 551-3810 with any other questions.

Sincerely,

Larry Spirgel
Assistant Director