

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

April 28, 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 reviewed your response letter dated April 4, 2011 and your filings and have the following comments. As noted in our letter dated March 23, 2011, 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. We note your response to comments one and three from our letter dated March 23, 2011. Tell us how you determined the appropriate depreciation period for the equipment under both your OTA and PAA agreements. We note that under both agreements the useful life of the underlying assets exceeds the contract life. Also if the contract is not renewed after one year tell us how you account for the assets and how this factors into your evaluation of the depreciation period.

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- 2. We note your response to comment one from our letter dated March 23, 2011. Please address the following items:
 - Tell us who retains title to the assets in the OTA and PPA agreements sold to the equipment financing company.
 - Describe what happens to the assets and who retains ownership if the agreement is not renewed.
 - You indicate that payments are received from the equipment financing company over a four-year period. Tell us if you receive payments before the monthly payments are collected from your customers and describe the timing of payments.
 - Tell us who collects the cash from the customer.
 - Explain the primary business purposes for involving the financing company.
 - Tell us why the finance company is willing to assume the risk that customers will not renew the agreements.
 - If the agreement is not renewed by the customers, tell us if you still have the right to collect the payments from the financing company.
- 3. You state in your response that you applied the provisions of ASC 860 in accounting for the sale of OTA contracts. We note that the scope section of ASC 860-10-15 indicates that this topic does not address the transfers of unrecognized financial assets, for example, minimum lease payments to be received under operating leases. Tell us why you believe it is appropriate to recognize revenue for future payments when OTA agreements are sold to the financing company. Please tell us the consideration you gave to treating this as a financing transaction, similar to a sale of future revenues addressed in ASC 470-10-25, Sales of Future Revenues. Also discuss the consideration given similar transactions addressed in the implementation guidance on software revenue recognition in ASC 985-605-55-31 and 32 where extended payment terms are transferred or converted to cash without recourse to the vendor. Upon satisfaction of the revenue recognition model, the underlying cash flows would constitute a receivable and would then be eligible for sales treatment under ASC 860.

Please file all correspondence over EDGAR. You may contact Michael Henderson, Senior Accountant, at (202) 551-3364 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