

November 27, 2007

Mail Stop 6010

Neal R. Verfueth
President and Chief Executive Officer
Orion Energy Systems, Inc.
1204 Pilgrim Road
Plymouth, WI 53073

**Re: Orion Energy Systems, Inc.
Registration Statement on Form S-1/A
Filed November 16, 2007
File No. 333-145569**

Dear Mr. Verfueth:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Inside Front Cover

1. We note that this disclosure was formerly included as your inside back cover. Please tell us why you believe it is appropriate to present this data before the context and significant assumptions provided on page 9.

Products, page 62

2. Please disclose your response to prior comment 4 that sales of your Compact Modular contributed over 85% of your revenue.

Base Salary, page 75

3. Please replace vague disclosure like “higher than the 75th percentile” to disclose with specificity how the compensation amounts for each of the named executives compares to the benchmarked companies.

Short-Term Cash Bonus Incentive Compensation and Other Cash Bonus Compensation, page 76

4. Please disclose with specificity how much above the median in the comparable companies’ analysis your 2008 target bonus is for Messrs. Verfuert, Waibel, and Scribante.
5. Please disclose with specificity the “broad mix of factors” that will be the basis for the 2008 bonus payments.
6. We note your disclosure on page 79. Please provide specific information regarding the qualitative and quantitative bases for the \$100,000 cash bonus you awarded to Mr. Waibel and the \$500,000 cash bonus you awarded to Mr. Verfuert.
7. Please expand your discussion of the stock price performance cash bonus you awarded to Mr. Verfuert. Please explain how you determined the appropriate stock price thresholds and bonus payment amounts, including the \$1.5 million bonus cap.

Executive Officer Stock Ownership Guidelines, page 84

8. Please expand the disclosure provided in response to prior comment 8 to disclose the “relevant multiples typically utilized” by the companies in the survey.

New Employment Agreements, page 90

9. We note your response to prior comment 10. Please specify what you mean by “consistent with general public company practices.”

Principal and Selling Shareholders, page 97

10. Please revise the number of shares to be sold by Neal Verfuert and Patricia Verfuert to reflect all beneficially owned shares to be sold by these individuals.
11. In light of the anticipated sale by Clean Technology Affiliates, please revise the number of shares to be sold by Diana Propper de Callejon and the number of shares beneficially owned by Ms. Callejon after the offering.

12. We note your responses to prior comments 11 and 12 regarding aggregated disclosure. However, since you already have a footnote for each selling stockholder, it is unclear why the footnote could not be expanded to provide information responsive to the comments rather than providing the disclosure via a complex paragraph with a long, embedded list. Please revise for clarity.
13. Please identify the selling stockholders whom you have employed during the past three years. See Regulation S-K Item 507. For instance we note your disclosure on page 107 that you employ Josh and Zach Kurtz as national account representatives.

Exhibit 1.1

14. Please file complete exhibits with all attachments. We note the exhibits missing from exhibit 1.1.

Exhibit 23.1

15. We note the Consent of the Independent Registered Public Accounting Firm refers to Amendment No. 2 to the Registration Statement (Form S-1 No. 333-145569) and Prospectus and not the current amendment No. 3. Please request your auditors to provide a currently dated and signed consent for your latest amendment prior to requesting effectiveness.
16. We refer to the last sentence in the consent that reads: “We consent to the use of the aforementioned report contained in Amendment No. 2 to die Registration Statement and Prospectus and to die use of our name as it appears under the caption “Experts” (emphasis added). Please request your auditors to correct this language.

Exhibit 23.3

17. We note that WIPFLi’s consent does not include a consent to the references to the firm in Note A – Summary of Significant Accounting Policies, Stock Option Plans of the financial statements. Please request WIPFLi to provide a consent to those references. Refer to Rule 436 and Item 601(b)(23) of Regulation S-K.

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As appropriate, please amend your registration statement in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover

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letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

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 all information required under the Securities Act of 1933 and that they have provided all information investors require for an informed investment decision. 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 addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in connection with our review of your filing or in response to our comments on your filing.

We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

You may contact Dennis Hult at (202) 551-3618 or Kaitlin Tillan, Assistant Chief Accountant, at (202) 551-3604 if you have questions regarding comments on the financial statements and related matters. Please contact Joseph McCann at (202) 551-6262 or me at (202) 551-3617 with any other questions.

Sincerely,

Russell Mancuso
Branch Chief

cc (via fax): Steven R. Barth, Esq.—Foley & Lardner LLP