February 20, 2008

Kate Tillan Assistant Chief Accountant Division of Corporate Finance U.S. Securities and Exchange Commission

## Re: OSI Systems, Inc., Form 10-K for the fiscal year ended June 30, 2007

Dear Ms. Tillan:

I received your letter of February 15, 2008, regarding your review of OSI Systems, Inc.'s ("OSI") Form 10-K for the fiscal year ended June 30, 2007.

## Your letter indicates:

We note during fiscal 2007, as part of a global review of your operations, the Company assessed the value of certain technologies and product lines, which resulted in total impairment charges of \$31.8 million. In future filings, please revise your disclosure to describe the facts and circumstances leading to the impairment, consistent with paragraph 26(a) of SFAS 144. In this regard, it should be clear from the disclosure what caused you to test the assets for recoverability under paragraph 8 of SFAS 144.

In response to your request, we intend to revise the identified disclosures in future filings to read as follows:

During fiscal 2007, the Company conducted a global review of its operations. This review included assessments of the Company's product lines and their economic viability, resulting in management's decision to discontinue several products. As a result, identifiable intangible and fixed assets related to these products were tested for impairment and were deemed to be permanently impaired, whereby the Company recorded impairment charges of \$21.5 million. Further, it was determined that the abandonment of certain product lines required that \$10.3 of inventory charges be recorded to reduce inventory levels to the lower of cost or market. Of the \$21.5 million of impairment charges, \$21.3 million was recorded within the Company's Security division and \$0.2 million was recorded within the Optoelectronics and Manufacturing division. Of the \$10.3 million of inventory charges, \$9.9 million was recorded within the Company's Security division and \$0.4 million was recorded within the Optoelectronics and Manufacturing division. Such inventory charges are reflected in cost of goods sold in the Consolidated Financial Statements. Asset impairments were calculated in accordance with SFAS No. 144 as discussed in Note [\_\_].

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## OSI further acknowledges that:

- it is responsible for the adequacy and accuracy of the disclosures in its filings;
- staff comments or changes to disclosures in response to staff comments in the filings reviewed by the staff do not foreclose the U.S. Securities and Exchange Commission ("Commission") from taking any action with respect to the filing; and
- it 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

We thank you for your assistance in our compliance with applicable disclosure requirements and in our effort to enhance the overall disclosures in our filings.

Sincerely,

/s/ Alan Edrick ALAN EDRICK Chief Financial Officer