Mail Stop 6010

October 28, 2005

Mr. Anuj Wadhawan Chief Financial Officer OSI Systems, Inc. 12525 Chadron Avenue Hawthorne, CA 90250

Re: OSI Systems, Inc. Form 10-K for the Fiscal Year Ended June 30, 2005 Filed September 29, 2005 File No. 000-23125

Dear Mr. Wadhawan:

We have reviewed your filing and have the following comments. We have limited our review to matters related to the issues raised in our comments. Where indicated, we think you should revise your future filings 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. Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. 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. Form 10-K for the Fiscal Year Ended June 30, 2005 Item 9A. Controls and Procedures, page 57 1. We note your disclosure that "subsequent to June 30, 2005, our

management and the Audit Committee of the Board of Directors have initiated remedial measures to address the internal control deficiencies identified in this Item 9A." Please tell us and revise in future filings, beginning with your next Form 10-Q, to discuss in detail each action that has been taken or will be taken to address each material weakness. Disclose management`s timeline for

Notes to Consolidated Financial Statements

implementing those actions not yet taken.

Note 1. Summary of Significant Accounting Policies, page F-11

Research and Development Costs, page F-14

2. You state that grants for research and development are recorded as revenue in the period earned and the related costs are classified cost of goods sold. Please explain to us and disclose in future filings, if significant, the nature and terms of your research and development arrangements. Tell us why you believe your accounting treatment for these grants is appropriate. In future filings, disclose the amount of grants reflected as revenue for each income statement period presented.

As appropriate, please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a cover letter with your response that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your

responses to our comments.

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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 Exchange Act of 1934 and that they have provided all information investors require for an informed 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 $% \left({{{\boldsymbol{x}}_{i}}} \right)$

disclosures they have made.

In connection with responding to our comments, please provide, in writing, a 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

respect to the rilling, 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.

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 our review of your filing or in response to our comments on your filing.

You may contact Tom Dyer, Staff Accountant, at (202) 551-3641 or me at (202) 551-3327 if you have questions. In this regard, do not hesitate to call Martin James, the Senior Assistant Chief Accountant, at (202) 551-3671.

Sincerely,

Michele Gohlke Branch Chief ?? ?? ?? Mr. Anuj Wadhawan OSI Systems, Inc. October 28, 2005 Page 1