

April 19, 2013

VIA EDGAR

Mr. Kevin L. Vaughn, Accounting Branch Chief
Division of Corporation Finance
U.S. Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549

Re: OSI Systems, Inc.
Form 10-K for fiscal year ended June 30, 2012
Filed August 13, 2012
File No. 0-23125

Dear Mr. Vaughn:

This supplemental letter is submitted in response to the comment of the staff of the Division of Corporation Finance (the "Staff") of the Securities and Exchange Commission with respect to the Form 10-K for the year ended June 30, 2012 of OSI Systems, Inc. (the "Company") as set forth in your letter dated April 4, 2013.

For your convenience, the Staff's comment is reproduced below in italics followed by the Company's supplemental response. The headings and numbered paragraph in this letter correspond to the headings and numbered paragraph in the comment letter from the Staff.

Form 10-K for Fiscal Year Ended June 30, 2012

Item 11. Executive Compensation, page 55

1. *Please expand your response to prior comment 3 to provide support for the following conclusory statements: (i) that disclosing the rate of return "would provide competitors with a sensitivity point for the Company and would potentially allow them to utilize this information in determining their pricing strategies in competitive bidding situations"; (ii) competitors would have "information as to the Company's minimum acceptable growth metric, thereby allowing competitors to potentially undermine the Company's competitive bidding strategies"; and (iii) competitors would be able to "predict the*

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Company's current and future strategic plans." It is unclear how a competitor would be able to draw the specific conclusions you note. In responding, please address the last four sentences of prior comment 3.

The Company advises the Staff that for fiscal year 2012, the Board of Directors established a threshold rate of return on book value of 7%. Achievement of this threshold was not linked to any specific payouts as this metric was not a target performance objective, but rather a minimum performance threshold for the Company below which executive management would not have been entitled to any incentive compensation. As requested by the Staff, the Company will disclose its threshold rate of return in applicable future filings.

If you should have any additional questions regarding this supplemental response, please contact me at (310) 978-0516. My facsimile number is (310) 644-6765.

Sincerely,

/s/ Deepak Chopra

Deepak Chopra
Chief Executive Officer
