

April 11, 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 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 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

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competitive bidding strategies"; and (iii) competitors would be able to "predict the 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 the rate of return on book value of the Company is a minimum annual performance threshold for the Company. This is the value that the Board of Directors has determined is the lowest rate of return for incentive compensation to be paid, below which management should not receive any incentive compensation. The Company's management endeavors to exceed (and in the past has succeeded in exceeding) this minimum by, on the one hand, maintaining an efficient cost structure, and on the other hand, setting pricing for each sale at a level that, while competitive, would in the aggregate exceed the minimum return determined by the Company's Board. Disclosing this metric would give competitors information that, when combined with publicly available information, could assist them in deriving the Company's pricing behaviors. This would be especially detrimental to the Company as many of its products are sold in competitive bid processes, where for qualifying products, the provider with the lowest price tends to be selected.

Many of the Company's products, such as inspection systems and patient monitors, are required to meet certain technical and performance specifications set by the customers. This means that all competitors' products would contain the same standard features at competitive pricing levels. Moreover, there is a substantial amount of general knowledge in the industry regarding each competitor's sourcing and manufacturing, thereby providing each competitor with the ability to make reasonable estimates of its competitors' product costs. Utilizing this information, competitors can estimate profit margins for each competitor at various pricing levels.

However, the Company's threshold rate of return metric used for executive compensation purposes cannot be derived from information generally available to the industry. Disclosing this metric would therefore provide competitors with a distinct element of information that would not otherwise be publicly available that would further assist them in estimating the Company's pricing strategies, thereby helping them to potentially under-bid the Company in competitive bidding situations. Additionally, because the Compensation Committee has historically set the threshold rate of return at the same level and has not indicated any intention to change the hurdle rate or methodology, if the Company were to disclose this information, competitors could reasonably anticipate that future year threshold rates would remain relatively constant and in the same general range, thereby allowing competitors to continue to derive a competitive advantage from knowing the Company's historical threshold values.

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

Sincerely,

/s/ Deepak Chopra

Deepak Chopra Chief Executive Officer