Via fax (724) 514-9494

Mr. James E. Cashman III President and CEO ANSYS, Inc. 275 Technology Drive Canonsburg, PA 15317

Re: ANSYS, Inc.

Definitive Proxy Statement on Schedule 14A

Filed on March 26, 2010 File No. 000-20853

Dear Mr. Cashman:

We have limited our review of your filing to those issues we have addressed in our 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.

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.

Our Board of Directors

The Board's Role in Risk Oversight, page 7

1. We note your statement that it is not reasonably likely that your compensation policies would have a material adverse effect on the company. Please describe the process that you undertook to reach this conclusion.

Mr. James E. Cashman III ANSYS, Inc. May 19, 2010 Page 2

2. You do not appear to have provided disclosure regarding the effect of the board's role in risk oversight on its leadership structure. See Item 407(h) of Regulation S-K. With a view towards disclosure in future filings, please tell us how the company's risk management policies inform the structure of your board of directors.

Compensation Discussion and Analysis, page 11

- 3. You have not disclosed your revenue target, your non-GAAP operating profit target, or your non-GAAP earnings target, each of which you used in determining bonus amounts for fiscal 2009. These targets appear to be material and thus should be disclosed unless you have met the requirements of Instruction 4 to Item 402(b) of Regulation S-K. Please provide us with your analysis of the competitive harm which would result from disclosure of these targets. We note that, prior to the time you filed your definitive proxy statement, you had already publicly disclosed company-wide results for fiscal 2009 using these measures.
- 4. With respect to your non-GAAP financial targets, you must provide disclosure as to how the number is calculated from your audited financial statements. See Instruction 5 to Item 402(b) of Regulation S-K. Please tell us how you intend to comply with this requirement in future filings.

As appropriate, please amend your filing in response to these comments within 10 business days. You should provide us with marked copies of the amedment 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 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 Exchange Act of 1934 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 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

Mr. James E. Cashman III ANSYS, Inc. May 19, 2010 Page 3

foreclose the Commission from taking any action with respect to the filing; 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 connection with our review of your filing or in response to our comments on your filing.

Please address all comments to David L. Orlic at (202) 551-3503, or, if you require further assistance, to me at (202) 551-3462.

Sincerely,

Mark P. Shuman Branch Chief-Legal