Mail Stop 4561 Via fax (724) 514-9494

March 22, 2010

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

> Re: Ansys, Inc. Form 10-K for the Fiscal Year Ended December 31, 2009 Filed February 25, 2010 File No. 000-20853

Dear Mr. Cashman:

We have reviewed the above-referenced filing and have the following comments. If 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 supplemental 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 December 31, 2009

Management's Discussion and Analysis of Financial Condition and Results of Operations

Critical Accounting Policies and Estimates, page 35

1. We note your discussion regarding goodwill and intangible assets on page 37. While it appears that you are not at risk of failing step one of your impairment test for the reporting units, we believe additional disclosures could be provided. Tell us how you considered disclosing all material implications of uncertainties associated with the methods, assumptions and estimates underlying your critical Mr. James E. Cashman III Ansys, Inc. March 22, 2010 Page 2

accounting policy disclosure pursuant to Section V of Release No. 33-8350. In this regard, please tell us supplementally and disclose the following:

- the amount of goodwill allocated to each reporting unit;
- the percentage by which the fair value of the reporting unit exceeded the carrying value as of the date of most recent test for those reporting units that may be at risk of failing step one, if any; and
- describe the potential events and/or changes in circumstances that could reasonably be expected to negatively affect the key assumptions used in determining fair value.

If you have determined that the estimated fair value substantially exceeds the carrying value for all of your reporting units, please disclose this determination. Please refer to Item 303(a)(3)(ii) of Regulation S-K and Section V of SEC Release No. 33-8350.

Notes to the Consolidated Financial Statements

Note 2. Summary of Significant Accounting Policies, page 53

2. We note that your deferred revenue balance represents a significant percentage of your liabilities. We further note your disclosure on page 26 where you state that "[a]s a result of the significant recurring revenue base, the Company's license and maintenance revenue growth rate in any period does not necessarily correlate to the growth rate of new license and maintenance contracts sold during the period." Please tell us when you invoice your customers for lease licenses and maintenance contracts (i.e. monthly, quarterly, annually, etc.) and clarify whether the deferred revenue balance represents all unearned revenue for these arrangements. To the extent that you do not invoice for the entire arrangement up-front, then tell us how you considered disclosing the amount of backlog orders (bookings) resulting from your recurring revenue arrangements pursuant to Item 101(c)(viii) of Regulation S-K. Also tell us how you considered including a discussion regarding the nature and origin of deferred revenue in MD&A.

Note 8. Fair Value Measurement, page 64

3. We note your cash and cash equivalents consist primarily of highly liquid investments with original maturities of three months or less. If material, tell us how you considered providing disclosures pursuant to the requirements of ASC 820-10-50-1 through 50-9 related to your cash equivalent investments. In addition, please tell us and in the future revise to disclose the composition of your cash and cash equivalents and the amounts held in each type of instrument.

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Exhibits

- 4. We note your Section 906 Certifications refer to the Form 10-K for the year ended December 31, <u>2008</u>. Please amend your current Form 10-K to include these certifications with the correct report reference. Also, please be advised that your amended filing should also include updated Section 302 certifications.
- 5. You state on page 68 that you have one stock option plan, the Third Amended and Restated 1996 Stock Option and Grant Plan, but you do not appear to have filed this agreement as an exhibit to your Form 10-K. Please advise.

* * * * * *

Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please submit all correspondence and supplemental materials on EDGAR as required by Rule 101 of Regulation S-T. If you amend your filing(s), you may wish to provide us with marked copies of any amendment to expedite our review. Please furnish a cover letter that keys your response 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 any amendment and your response 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 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.

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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 Robert Benton, Staff Accountant, at (202) 551-3804 if you have any questions regarding comments on the financial statements and related matters. Please address questions regarding all other comments to David Orlic, Staff Attorney, at (202) 551-3503. If you need further assistance, you may contact me at (202) 551-3499.

Sincerely,

Kathleen Collins Accounting Branch Chief