June 2, 2010

VIA EDGAR AND FEDERAL EXPRESS

Mr. David L. Orlic Division of Corporation Finance Securities and Exchange Commission 100 F Street, N.E. Washington, DC 20549

Re: ANSYS, Inc.

Definitive Proxy Statement on Schedule 14A Filed on March 26, 2010

File No. 000-20853

Dear Mr. Orlic:

This letter is submitted on behalf of ANSYS, Inc. (the "<u>Company</u>"), in response to the comments of the staff of the Division of Corporation Finance (the "<u>Staff</u>") of the Securities and Exchange Commission (the "<u>Commission</u>") raised in your letter of May 19, 2010 to James E. Cashman III, Chief Executive Officer of the Company (the "<u>Comment Letter</u>").

For your reference, the text of each of the Staff's comments is reproduced below in italics, which are numbered to correspond with the numbers set forth in the Comment Letter. The Company's responses to each comment immediately follow the reproduced text in regular typeface.

Our Board of Directors

The Board's Role in Risk Oversight page 7

Comment 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.

Response 1:

The Company's Compensation Committee and Board considered the following elements of the Company's compensation plans and policies when evaluating whether its plans and policies encourage its executives and employees to take unreasonable risks:

- · The Company's base salary component of compensation does not encourage risk taking because it is a fixed amount.
- For the Company's cash bonus programs, awards are based on the achievement of at least three objective performance measures, thus diversifying the risk associated with any single indicator of performance.
- Awards under the Company's cash bonus programs are also based on qualitative individual performance goals that vary depending on each
 executive's role, which limits the risk associated with awarding cash bonuses based on Company financial metrics.
- The Company uses restricted stock as well as stock options for equity awards to provide a balanced equity portfolio to executives creating a level of diversification to withstand market fluctuations that might incent unreasonable risk if holdings were limited to options.
- Assuming achievement of a threshold level of performance, payouts under our performance-based plans result in some compensation at levels below full target achievement, rather than an "all-or-nothing" approach, which could engender excessive risk taking.
- The Company has implemented a Long Term Incentive Plan which awards our executives with restricted stock units based on the performance of our Common Stock over successive three-year periods providing executives with strong incentives to increase stockholder value over the long-term. This plan is capped at 100% of target awards to prevent excessive compensation or risk taking on the part of the participants.
- The Company's Compensation Committee, or in the case of the Company's President and Chief Executive Officer, the Board of Directors, determine achievement levels under the Company's cash bonus program and performance-vesting restricted stock unit awards in their discretion after reviewing Company and executive performance.
- The Company's executive stock ownership policy requires executives to hold equity equal to a minimum of two times their base salary and at least half of that minimum must be comprised of shares of stock, which aligns an appropriate portion of their personal wealth to the long-term performance of the Company.

The Company will include similar disclosure regarding the process it undertook and the factors that it considered in making a determination regarding the impact of the Company's compensation programs and policies upon the Company in its future filings.

Comment 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.

Response 2:

The Board of Directors of the Company delegates principal responsibility for its risk management and assessment functions to its Audit Committee. In addition to the Audit Committee, the Compensation Committee has primary responsibility for reviewing the impact of the Company's compensation programs upon the Company's risk management efforts. The Company has determined that the Chair of each of the Audit Committee and the Compensation Committee, Bradford C. Morley and John F. Smith, respectively, should not serve on the other Committee with a significant area of risk management responsibility in order to further diversify the primary opinions of the quality of the Company's risk management. Additionally, the Company has appointed Patrick J. Zilvitis as the Chairman of the Nominating and Corporate Governance Committee, and Mr. Zilvitis leads all meetings of the independent directors, including Mr. Morley and Mr. Smith. The Company believes that this division of risk management related roles among the independent directors fosters an atmosphere of significant involvement in the oversight of risk at the Board of Director level and strongly complements the Company's risk management policies.

The Company will include similar disclosure in its future filings in accordance with Item 407(h) of Regulation S-K.

Compensation Discussion and Analysis, page 11

Comment 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.

Response 3:

The Company has previously discussed with the Staff the requirement to disclose the Company's internal financial targets used in determining bonus amounts for its executive officers in the Compensation Discussion and Analysis section of its Proxy Statements. As you are aware, the Company received comments from the Staff on this topic on August 21, 2007 and November 30, 2007, and following the Company's responses to these comments, the Staff concluded on February 15, 2008 that it had "no basis to disagree with [the Company's] decision to omit this information from [its] filing." Since that time, the Company has consistently followed the same rationale regarding its determination not to disclose the specific internal financial targets used in determining bonus amounts for its executive officers, including in its Proxy Statement filed March 26, 2010. Since receiving the Staff's comments in the Comment Letter, and based on discussion with the Staff concerning the Staff's position on disclosure of the Company's internal financial targets in its CD&A disclosure, the Company has determined that it will disclose any such material internal financial targets that the Company uses in determining its executive compensation in its future filings in accordance with Item 402(b) of Regulation S-K, so long as the Company's Annual Report on Form 10-K for the fiscal year to which such targets apply has been publicly filed.

Notwithstanding the foregoing, the Company believes it should not be required to amend its previous filings, including the Proxy Statement filed on March 26, 2010 to disclose its prior internal financial targets, because (1) the determination not to disclose such targets was consistent with previous comments from the Staff, (2) the Company's annual meeting took place on May 12, 2010 and (3) the Company believes that its 2009 non-GAAP targets, which were referred to in its Proxy Statement filed on March 26, 2010, are not material to its current and potential investors following our annual meeting, as those historic targets do not have any impact on future compensation of the Company's executive officers.

Comment 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.

Response 4:

The Company derives its non-GAAP operating profit target and non-GAAP diluted earnings per share target from its operating profit and diluted earnings per share, each as calculated in its audited financial statements, respectively, by (1) excluding amortization of intangibles from acquisitions and the related tax impact, (2) excluding stock-based compensation expenses and the related tax impact and (3) excluding the impact of purchase accounting adjustments to deferred revenue and the related tax impact. The Company will provide the appropriate disclosure in accordance with Instruction 5 to Item 402(b) of Regulation S-K for any non-GAAP financial targets it discloses in its future filings.

As requested in the Comment Letter, the Company acknowledges 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;
- 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.

If you should have any questions concerning the enclosed matters, please contact Joseph L. Johnson III, Esq. of Goodwin Procter LLP, our outside counsel, at (617) 570-1633 or by facsimile at (617) 523-1231.

Very truly yours,

/s/ Sheila S. DiNardo

Sheila S. DiNardo

Vice President, General Counsel & Secretary

cc: Joseph L. Johnson III, Esq. Goodwin Procter LLP