November 7, 2022

Nicole Anasenes Chief Financial Officer ANSYS INC 2600 ANSYS Drive Canonsburg, PA 15317

> Re: ANSYS INC Form 10-K for the Filed February 23, File No. 000-20853

GAAP revenue.

Year Ended December 31, 2021

2022

Dear Nicole Anasenes: We have limited our review of your filing to the financial statements and related disclosures and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. Please respond to these comments within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response. After reviewing your response to these comments, we may have additional comments. Form 10-K for the Year Ended December 31, 2021 Management's Discussion and Analysis of Financial Condition and Results of Operations **Overview** Other Key Business Metric, page 32 Please explain to us, 1. and revise your disclosures as necessary to clarify, how you calculate the annualized value of lease contracts for your key business metric of annual contract value (ACV). At a minimum, address the following: Clarify whether ACV is impacted by the timing of revenue recognition (e.g. up-front recognition for the term license). Provide us with an example of a term license contract with a mid-year start date to illustrate your calculations. Explain how your calculations may be impacted if the maintenance or lease contract has a multi-year term and provide us an example of the ACV during each year of the contract. Nicole Anasenes ANSYS INC November 7, 2022 Page 2 Tell us the typical terms of your multi-year lease licenses and the percentage of revenue from multi-year lease licenses for each period presented. Explain your reference to "anniversary dates" and to the extent this relates to the renewal date of your contracts, tell us why fixed-term service contracts would renew. Revise your disclosures to clarify your statement that "summed over the long-term, ACV and revenue are equal" and describe further how this measure differs from

We note that you rely on high renewal rates for your annual lease and 2. maintenance contracts. Please tell us the renewal rates for each period covered by your financial statements, including interim periods, and tell us your consideration to quantify such rates in future filings. Alternatively, tell us what measures you use to monitor customer retention and revise to include a quantified discussion of measures. Refer to SEC Release No. 33-10751. Results of Operations Year Ended December 31, 2021 Compared to Year Ended December 31, 2020, page 35 З. You refer to various factors that impacted your revenue growth such as new license and maintenance sales, maintenance renewals, and your recent acquisitions. Where a material change from period-to-period is due to two or more factors, including any offsetting factors, please revise to describe the underlying reasons for the material changes in both quantitative and qualitative terms. Refer to Item 303(b) of Regulation S-K. In closing, we remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff. You may contact David Edgar, Senior Staff Accountant, at (202) 551-3459

or Kathleen Collins, Accounting Branch Chief, at (202) 551-3499 with any questions.

FirstName LastNameNicole Anasenes Comapany NameANSYS INC

Corporation Finance November 7, 2022 Page 2 Technology FirstName LastName Sincerely, Division of Office of