

Mail Stop 4561

February 20, 2009

C. Richard Harrison  
Chief Executive Officer and President  
Parametric Technology Corporation  
140 Kendrick Street  
Needham, MA 02494

**Re: Parametric Technology Corporation  
Form 10-K for the Fiscal Year Ended September 30, 2008  
Filed November 26, 2008  
File No. 000-18059**

Dear Mr. Harrison:

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 September 30, 2008

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 17

Results of Operations, page 19

1. Your discussion of the results of operations frequently does not quantify sources of material changes. For example, the contributions of the acquired business, CoCreate Software GmbH, during the ten months ending September 30, 2008,

should be disclosed in quantified terms with respect to each category of revenues and expense categories to which the CoCreate activities had a substantial impact. As a further example, refer to disclosure on page 22 addressing the increase in maintenance revenue. Please note that prefacing the reference to these sources of changes with the word “primarily” obscures the ability of the reader to identify the material sources of the change. In addition, where a material change is attributed to two or more factors, including any offsetting factors, the contribution of each identified factor should be described in quantified terms. See Section III.D of SEC Release No. 34-26831. In future filings, please quantify the sources of material changes and offsetting factors.

Revenue, page 21

2. We note that you refer to “new seat revenue” and “seats under maintenance” throughout your discussion of revenues without quantifying the number of seats. Tell us how you considered whether these seat measures are key performance indicators under Section III.B.1 of SEC Release No. 34-48960. As part of your response, tell us whether you provide this information to analysts and, if so, why.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures, page 47

3. We note your statement that your disclosure controls and procedures are designed to provide “reasonable assurance” that information required to be disclosed in your reports filed or submitted under the Securities Exchange Act of 1934, is recorded, processed, summarized and reported within the time periods specified in the SEC rules and forms. In addition, you state that you concluded that your disclosure controls and procedures were effective as of September 30, 2008. Your disclosure in future filings should state clearly, if true, that your principal executive officer and principal financial officer concluded that your disclosure controls and procedures were effective at the reasonable assurance level as of the end of the period covered by the report. See Section II.F.4 of SEC Release No. 34-47986. In your response letter, please confirm, if true, that your principal executive officer and principal financial officer concluded that your disclosure controls and procedures were effective at the reasonable assurance level as of the end of the period covered by the report.

Item 11. Executive Compensation

Incorporated by Reference from Schedule 14A Filed January 20, 2009

Compensation Discussion and Analysis, page 26

4. In future filings please provide a more specific explanation of the manner in which the Company's achievement of performance criteria affects the actual number of shares awarded to each of your named executive officers.

Consolidated Financial Statements

Consolidated Statements of Operations, page F-2

5. Your disclosures indicate that revenues from certain multiple-element arrangements are recognized using the percentage of completion method. Please tell us where you classify these revenues and related costs in your Consolidated Statements of Operations. If you classify these revenues and related costs as services or allocate between products and services, please explain your basis of presentation, why you believe such presentation is reasonable and confirm to us that this presentation has been consistently applied. Assuming that your presentation of revenues and cost of revenues is considered reasonable for purposes of complying with Rule 5-03(b)(1) and (2) of Regulation S-X, please ensure that your MD&A, Critical Accounting Policies and Estimates and footnote disclosures include a discussion of your basis of presentation and discuss the reasons for such presentation.

\* \* \* \* \*

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.

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 David Edgar, Staff Accountant, at (202) 551-3459 if you have any questions regarding comments on the financial statements and related matters. Please address questions regarding all other comments to Evan Jacobson, Staff Attorney, at (202) 551-3428 or Mark Shuman, Legal Branch Chief, at (202) 551-3462. If you need further assistance, you may contact me at (202) 551-3451.

Sincerely,

Mark Kronforst  
Accounting Branch Chief