

Mail Stop 3720

February 23, 2006

William H. Everett
Senior Vice President
and Chief Financial Officer
Tekelec
5200 Paramount Parkway
Morrisville, NC 27560

**Re: Tekelec
Item 4.02 Form 8-K
Filed February 21, 2006
File No. 000-15135**

Dear Mr. Everett:

We have reviewed your filing and have the following comments. Please be as detailed as necessary in your response. In some of our comments, we may ask you to provide us with more 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.

1. We note that you intend to file restated financial statements for each of the first three quarters of 2005. Please tell us when you will file them.
2. We note that you are continuing to evaluate “certain revenue recognition and other financial presentation and disclosure matters,” as well as “reassessing the accounting for certain other errors which management previously determined were not material to its previously reported financial statements.” Please tell us in detail about these matters, their materiality, and the anticipated timing of their resolution.

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Please respond to these comments, via EDGAR, within five business days or tell us when you will provide us with a response. Please understand that we may have additional comments after reviewing your 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 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.

If you have any questions, please call Kenya Wright Gumbs at (202) 551-3373.

Sincerely,

Robert S. Littlepage
Accountant Branch Chief