By U.S. Mail and Facsimile to (617) 897-2401

Mr. David E. O'Neil Vice President of Finance and Treasurer Satcon Technology Corporation 27 Drydock Avenue Boston, MA 02210

RE: Satcon Technology Corporation

Form 10-K for the year ended December 31, 2006

File No. 1-11512

Dear Mr. O'Neil:

We have reviewed your filings and have the following comments. We have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your documents. Where indicated, we think you should revise your future documents 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 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.

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Form 10-K for the year ended December 31, 2006

<u>Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 30</u>

Critical Accounting Policies, page 32

Convertible Debt Instruments and Warrant Liabilities, page 35

1. We note your disclosure that you determined the fair value of your convertible notes in consultation with valuation specialists. Please revise future filings to name any independent valuation specialists. In addition, please note that if you intend to incorporate your Form 10-K by reference into any registration statement, you will be required to identify any independent valuation specialists in the "Experts" section and include its consent in the registration statement.

Results of Operations, page 37

- 2. Please tell us and revise your MD&A in future filings to discuss the effects of any significant or unusual events or transactions that materially affected your results of operations. In this regard we note a significant increase in your deferred revenue balance but do not see a corresponding discussion. Refer to Item 303 of Regulation S-K and SEC Release 34-48960. Please also tell us the reasons for the significant increase in deferred revenues as of March 31, 2006.
- 3. In this regard, and with a view towards disclosure with respect to your revenue recognition policies, please be specific about the revenue recognition criteria that resulted in deferring the revenue.

Consolidated Financial Statements and Supplementary Data, page 51

Note G – Convertible Debt Instrument and Warrant Liabilities, page 73

Accounting for the Convertible Debt Instruments and Warrants, page 77

4. We see your disclosure that you are accounting for your July 19, 2006 convertible note and warrant transaction at fair value in accordance with SFAS 133 and EITF 00-19. Please tell us and revise future filings to disclose the methodology and significant assumptions you used to value these instruments at issuance and at your latest balance sheet date. This comment also applies to any other

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- instruments that you are carrying at fair value, including your Series B convertible preferred stock. We may have further comments after reviewing your response.
- 5. Consistent with SFAS 129, please tell us and revise future filings to disclose all of the pertinent rights and privileges of the debt, including penalties for liquidating damages. Please also discuss how you account for these terms.

Series B Convertible Preferred Stock, page 81

- 6. We note that you reflect the Series B preferred stock on your balance sheet within long-term liabilities and not within the mezzanine between liabilities and equity (i.e., temporary equity). Given this and your disclosure on page 83 referring to your accounting for these instruments under EITF 00-27 and not under SFAS 150, it is unclear why these instruments are reflected as a liability. Please tell us why you are classifying the Series B preferred stock as a long-term liability. Discuss your consideration of SFAS 150, SFAS 133, and EITF 00-19 to these instruments.
- 7. Please tell us and revise future filings to provide all of the disclosures required by SFAS 129. For example, your disclosure should discuss the redemption terms of the stock.

Itme 9A. Controls and Procedures, page 107

8. We note your disclosure that your "Chief Executive Officer and Chief Financial Officer, concluded that [y]our disclosure controls and procedures are effective as of December 31, 2006 to ensure that information required to be disclosed by [you] in the reports [you] file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms." The language that is currently included after the word "effective" in your disclosure appears to be superfluous, since the meaning of "disclosure controls and procedures" is established by Rule 13a-15(e) of the Exchange Act. Please remove the language in your future filings or revise the disclosure so that the language that appears after the word "effective" is substantially similar in all material respects to the language that appears in the entire two-sentence definition of "disclosure controls and procedures" set forth in Rule 13a-15(e).

As appropriate, please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a cover letter that keys your

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responses 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 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 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 Eric Atallah, Staff Accountant at (202) 551-3663 or me at (202) 551-3604 regarding comments on the financial statements and related matters. In this regard, do not hesitate to contact, Kevin L. Vaughn, Branch Chief, at (202) 551-3643 with any other questions.

Sincerely,

Kate Tillan Assistant Chief Accountant