



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

Mail Stop 3030

July 29, 2009

Via Facsimile and U.S. Mail

Mr. Charles S. Rhoades
Chief Executive Officer
Satcon Technology Corporation
27 Drydock Avenue
Boston, Massachusetts 02210

**Re: Satcon Technology Corporation
Form 10-K for the Year Ended December 31, 2008
Filed March 12, 2009
Form 10-Q for the Quarter Ended April 4, 2009
File No. 001-11512**

Dear Mr. Rhoades:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your documents in future filings in response to these comments. If you disagree, we will consider your explanation as to why our comments are 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.

Form 10-K for the year ended December 31, 2008

Significant Customers, page 9

1. Your disclosure indicates that in 2008 you had two customers that accounted, in aggregate, for approximately 24% (14% and 10%, respectively) of your 2008 revenue. To the extent that sales to a customer account for more than 10% of your revenue, please name, and describe your relationship with, such customer. Please confirm that you will comply with this comment in future filings or tell us why you believe the requested disclosure is not necessary.
2. In the first bullet on page 7, you state that you are not dependent on the business of a single customer. In future filings, please revise to reconcile your disclosure on page 7 with your disclosure in this section that approximately one-quarter of your revenues are derived from sales to two customers.

Note C. Significant Accounting Policies, page 46

Revenue Recognition, page 46

3. We note that your deferred revenue consists of payments received from customers in advance of services performed, product shipped, or installation completed. Given the significance of your deferred revenue balance, please revise future filings to clearly describe how you present related deferred costs of revenues in your consolidated balance sheets. If you record both the deferred revenues and the deferred costs together in one line item on the balance sheet, revise future filings to clearly disclose the components of the net deferred balance.

Note H. Line of Credit, page 75

4. We note that your line of credit is subject to certain financial covenants. Please revise future filings to quantify your most restrictive financial covenants.

Note I. Redeemable Convertible Series B and Series C Preferred Stock, page 75

Accounting for the Series C Preferred Stock, page 86

5. We note that you have classified your Series C Preferred Stock as temporary equity. Please tell us how you considered the guidance in FASB Accounting Standards Codification 815-15-25-1, 815-40-25, and 480-10 including 480-10-S99 in classifying your Series C Preferred Stock on your balance sheet. Revise future filings to clearly disclose why your classification of the Series C Preferred Stock as temporary equity is appropriate.

Note S. Segment Disclosures, page 100

6. We note that your disclosure of long-lived assets by geographic region includes goodwill and intangible assets. Please note the guidance set forth in the FASB Accounting Standards Codification 280-10-55-23, which indicates that disclosure relating to long-lived assets by geographic region should not include intangible assets. Please revise your future filings accordingly.

Form 10-Q for the quarter ended April 4, 2009

Item 3. Quantitative and Qualitative Disclosures about market risk, page 48

7. You do not appear to provide the quantitative analysis required by Item 305(a) of Regulation S-K. In future filings please provide such an analysis.

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 responses to our comment 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 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.

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You may contact Eric Atallah, Staff Accountant, at (202) 551- 3663 or me at (202) 551-3639 if you have questions regarding comments on the financial statements and related matters. Please contact Ruairi Regan, Staff Attorney, at (202) 551- 3269, or Dan Morris, Special Counsel, at (202) 551-3637 if you have questions on any other comments. In this regard, do not hesitate to contact me or Kevin Vaughn, Accounting Branch Chief, at (202) 551- 3643 with any questions.

Sincerely,

Tara L. Harkins
Reviewing Accountant