



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

Mail Stop 3030

October 2, 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
File No. 001-11512**

Dear Mr. Rhoades:

We have reviewed your filings and your response letter dated September 11, 2009 and we have the following comments. Where indicated, we think you should revise your documents in future filings in response to this 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 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. We note your response to prior comment 1. It remains unclear how you determined that the loss of one of your two largest customers would not have a material adverse effect. Your response seems to imply that it is inappropriate to determine the materiality of the loss of any 10% customers for FY2008 until the end FY2009 when you would determine whether the lost FY2008 sales have been adequately offset by increased sales to new customers in the following year. In other words, we understand your position to be that because Customers #3 and #4 emerged in FY2008, the loss of customers #1 and #2 was immaterial. Please tell us whether, and if so, why, you believe that materiality should not be judged at the close of the period covered by the 10-K (unless subsequent events prior to the filing of the 10-K require otherwise.) We note that if assessed at the end of FY2008, the loss of Customers #3 or #4 would appear to be material and therefore require disclosure of the identities of the customers. To the extent that you continue to believe otherwise, please provide us with your analysis and cite the authority upon which you rely. Alternatively, please confirm that you will disclose the identities of your 10% customers.

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.

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