



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

Mail Stop 6010

June 6, 2008

Via Facsimile and U.S. Mail

Mr. Patrizio Vinciarelli
Chief Executive Officer
Vicor Corporation
25 Frontage Road
Andover, MA 01810

Re: Vicor Corporation
Form 10-K for the year ended December 31, 2007
Filed March 19, 2008
File No. 0-18277

Dear Mr. Vinciarelli:

We have reviewed your filings and have the following comments. We have limited our review to only your financial statements and related disclosures and will make no further review of your documents. Where indicated, we think you should revise future filings 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 on 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, 2007

Note 1. Significant Accounting Policies, page 34

Revenue recognition, page 34

1. We note your disclosures on page 63 regarding the material weakness that you identified relating to insufficient experienced personnel and resources with the requisite technical skills to address complex and judgmental accounting, tax and financial reporting matters, including accounting for complex revenue transactions. In light of this disclosure, it appears that your current revenue recognition is broad and vague. Please tell us and revise this note in future filings to address the following:
 - Describe in detail the significant terms of your revenue contracts, including the complex revenue transactions referenced in your material weakness disclosures.
 - For complex revenue arrangements, discuss in detail how you evaluate each of the revenue recognition criteria of SAB 104 in determining when to recognize revenue.
 - Tell us and revise future filings to expand your discussion of your application of EITF 00-21 to discuss the multiple elements of your revenue transactions and how you allocate and record revenue based on EITF 00-21.

Note 7. Investments, page 49

2. We note that as of December 31, 2007, you owned approximately 24% of Great Wall Semiconductor Corporation (GWS), which you now account for under the equity method of accounting. We further note that your loss from this investment in 2007 was \$1.1 million, or 21% of your income before income taxes. Please tell us how you have considered the requirements of Rule 3-09 of Regulation S-X with respect to this equity method investment.

* * * *

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 with your response that keys your 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 amendment and responses to our comments.

Mr. Patrizio Vinciarelli
Vicor Corporation
June 5, 2008
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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 and 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 Burton, Staff Accountant, at (202) 551-3626 or me at (202) 551-3643 if you have questions regarding these comments. In this regard, do not hesitate to contact Martin James, Senior Assistant Chief Accountant, at (202) 551-3671.

Sincerely,

Kevin L. Vaughn
Accounting Branch Chief