

June 25, 2008

Via EDGAR

Mr. Kevin L. Vaughn
Accounting Branch Chief
Securities and Exchange Commission
Mail Stop 6010
100 F Street, N.E.
Washington, D.C. 20549-0306

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

Dear Mr. Vaughn:

This letter is submitted on behalf of Vicor Corporation (“Vicor” or “the Company”) in response to comments of the staff of the Division of Corporation Finance (the “Staff”) of the Securities and Exchange Commission (the “Commission”) with respect to the Company’s Form 10-K for the year ended December 31, 2007, as set forth in the letter dated June 6, 2008 from the Staff to Mr. Patrizio Vinciarelli (the “Comment Letter”).

For reference purposes, the text of the Comment Letter has been reproduced herein with responses below each numbered comment.

Form 10-K as of 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 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.*
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- *Tell us and revise for future filings to expand your discussion of your application of EITF 00-21 to discuss multiple elements of your revenue transactions and how you allocate and record revenue based on EITF 00-21.*

Response to Comment No. 1

A very high percentage of the Company's revenues have historically been from the sale of products under single-element, non-complex revenue arrangements in which revenue is recognized upon shipment. In 2007, over 99% of the consolidated revenues were for product shipments for which the revenue was recognized on that basis. Typically the terms of the arrangements are based on customers' purchase orders and the Company's standard terms and conditions. Significant terms of each arrangement include, but are not limited to, product description, product pricing, shipping terms, shipment schedule and payment terms. The Company generally does not enter into complex revenue contracts with its customers.

There were two separate situations regarding revenue recognition in 2007 that contributed to the material weakness. The first situation involved a division of the Company that initially recognized revenue on units shipped to a customer in the second and third quarters of 2007 for which the product specifications had not been finalized and accepted by the customer. This matter was identified by the Company's independent registered public accounting firm. Upon subsequent review of all the facts and circumstances by the corporate accounting group and the Company's independent registered public accounting firm, it was determined that revenue recognition was not appropriate upon the initial shipment of these units because the remaining performance obligations were neither inconsequential nor perfunctory. Therefore, adjustments were recorded to defer the revenue and related cost of revenues until finalization and acceptance of the product specifications, which occurred during the fourth quarter of 2007. The amount of revenue deferred in each period was approximately \$197,000 and \$83,000 in the second and third quarters of 2007, respectively. The total of \$280,000 was recognized as revenue in the fourth quarter of 2007. Due to the timing of the Company's late filings of the Quarterly Reports on Form 10-Q for the second and third quarters of 2007, these adjustments were properly reflected in those filings made on February 27, 2008.

The second situation involved the Company's subsidiary in Japan, Vicor Japan Company, Ltd. ("VJCL"). During the fourth quarter of 2007, VJCL recognized revenue from a customer under a bill-and-hold arrangement. This was a very unique transaction as the Company historically has not entered into any material bill-and-hold arrangements and, except for the one discussed herein, none within the last three years. This matter was identified by the Company's independent registered public accounting firm. Upon subsequent review of all the facts and circumstances by the corporate accounting group and the Company's independent registered public accounting firm, it was determined that the arrangement did not meet the criteria for

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revenue recognition as outlined in Staff Accounting Bulletin Topic 13: Revenue Recognition for bill-and-hold arrangements. Therefore, an adjustment was recorded in the fourth quarter of 2007 on VJCL's books to reverse the revenue of approximately \$400,000 and the related cost of revenues of approximately \$263,000 previously recorded for this arrangement.

As noted above, substantially all of the Company's revenue is derived from single-element, non-complex revenue arrangements. Per Note 1. — Significant Accounting Policies on page 34 of the Company's Form 10-K for the year ended December 31, 2007, product revenue is recognized in the period when persuasive evidence of an arrangement with a customer exists, the products are shipped and title has transferred to the customer, the price is fixed and determinable, and collection is considered probable, in accordance with SAB 104. The Company has entered into license arrangements from time to time, though revenues from these arrangements have not been material for the past several years. During 2007, the Company did enter into a licensing arrangement that contained multiple elements for which the Company applied the guidance from EITF 00-21 to determine the appropriate accounting. Total revenue recognized under this arrangement in 2007 was approximately \$65,000.

As discussed above, the contribution of revenues from complex revenue arrangements and/or arrangements that contain multiple elements have not been material to the Company's consolidated revenues. We will continue to closely monitor our revenue recognition disclosures for future filings if and when we enter into material complex revenue arrangements and/or arrangements that contain multiple elements for which expanded disclosures would be warranted.

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.*
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Response to Comment No. 2

The calculation by the Company of the test of significance in applying Rules 3-09 and 4-08(g) of Regulation S-X for the investment in GWS for the year ended December 31, 2007 was based on the date of adoption of the equity method accounting, which occurred on May 18, 2007. Specifically, the equity method loss from the investment in GWS was calculated for the period May 18, 2007 through December 31, 2007, as follows (dollar amounts in thousands):

Equity method losses for the year ended December 31, 2007, as reported	\$ 1,139
Less: impact of equity method losses from January 1, 2007 through May 17, 2007	<u>(149)</u>
Equity method losses, as adjusted	\$ 990
Consolidated income before taxes for the year ended December 31, 2007	\$ 5,439

Equity method losses as a percentage of consolidated income before taxes	18.2%
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Since calendar year 2007 was the initial year of equity method accounting for the Company's investment in GWS, the methodology used by the Company for the calculation was based on guidance from the minutes of a meeting of the AICPA SEC Regulations Committee ("the Committee") in a joint meeting with SEC Staff on June 14, 2005, which addressed certain aspects of the income test in applying S-X Rules 3-09 and 4-08(g) when an investor adopts EITF 02-14 for an investment in in-substance common stock. The Company did previously consider the guidance under EITF 02-14 to determine whether its holdings would be deemed to be in-substance common stock, as the Company's investment in GWS is in non-voting preferred stock. The Company concluded that this did represent an investment in in-substance common stock. The Committee concluded, and the SEC Staff did not object to, the following position regarding the income test: *"Notwithstanding the fact that the registrant had a prior ownership interest in the equity investee, the adoption of EITF 02-14 should be treated similar to the acquisition of an equity investee. As such, the significance test would be computed using the results from the date of adoption (i.e., commencement of equity method accounting) through the end of the fiscal year and, if significant, separate audited financial statements of the equity investee would only be required in the year of adoption as well as in subsequent years (i.e., separate financial statements of the equity investee would not be required prior to the initial adoption of EITF 02-14)".* The minutes provide a specific calculation formula based on this position, which the Company followed as noted above. The minutes go on to state that *"The Committee believes that a literal application of Rule 3-09 of Regulation S-X indicates that the significance test would be computed using only the results of the investee from the period of time beginning when the investment was accounted for under the equity method through the end of the reporting period. This application is consistent with historical practice of Rule 3-09"*. Since the resulting

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calculation is less than 20%, the income test was not met for purposes of Rule 3-09 and therefore separate audited financial statements of GWS were not required to be included in the filing of the Company's Form 10-K for the year ended December 31, 2007. We do acknowledge that the income test for the year ended December 31, 2008 will be based on the full year equity method income (loss) for GWS.

* * * * *

In connection with providing our responses to your comments, we acknowledge that:

- The Company is responsible for the adequacy and accuracy of the disclosure in its filings with the Commission;
 - Staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the Company's filings with the Commission; 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.
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If you should have any questions concerning the enclosed matters, please contact either Jamie Simms at (978) 749-3391 or Dick Nagel at (978) 749-3424.

Regards,

/s/ Patrizio Vinciarelli
Patrizio Vinciarelli
President
Chief Executive Officer

/s/ James A. Simms
James A. Simms
Vice President
Chief Financial Officer

/s/ Richard J. Nagel, Jr.
Richard J. Nagel, Jr.
Vice President
Chief Accounting Officer