



DIVISION OF
CORPORATION FINANCE

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

November 23, 2010

VIA U.S. Mail and Facsimile

Charles Michel
Chief Financial Officer
Entech Solar, Inc.
13301 Park Vista Blvd. Suite 100
Ft. Worth, Texas 76177

Re: Entech Solar, Inc.
Form 10-K for the fiscal year ended December 31, 2009
Filed March 31, 2010
Form 10-Q for the fiscal quarter ended September 30, 2010
Forms 8-K filed on September 10, 2010 and November 2, 2010
File No. 001-34592

Dear Mr. Michel:

We have reviewed your filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by providing the requested information or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

Charles Michel
Chief Financial Officer
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Form 10-K for the fiscal year ended December 31, 2009

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 18

Critical Accounting Policies and Estimates, page 19

Goodwill and Other Intangible Assets, page 20

1. We see that you have one operating segment; however, it is unclear how many reporting units you identify. In future filings please disclose the reporting units evaluated for goodwill impairment testing purposes and clarify how those reporting units were identified. If you have more than one reporting unit, please discuss how goodwill is allocated to those reporting units.
2. Please revise future filings to disclose the specific methods used to determine the fair value of your reporting units when performing the first and second step of the goodwill impairment test. Refer to FASB ASC 350-20-35-22 through 35-24.
3. We see that you recognized impairments of \$4,461,000 in goodwill and \$863,000 in intangible assets during fiscal year 2009. Please tell us the significant assumptions and judgments you used in determining the respective impairments and the business facts and circumstances leading to the impairments. In addition, explain to us how you determined that the remaining goodwill and intangible assets were recoverable. Please also tell us how you considered any possible further impairment during the interim period considering the discussion on page 18 of your September 30, 2010 Form 10-Q that indicates that you will run out of funds at or near the end of 2010 and if you are unable to raise additional financing you may be forced to discontinue operations.

Results of Operations for the years ended December 31, 2009 compared to the year ended December 31, 2008

Cost of Revenues, page 21

4. We see from page 23 that you recognized \$1,334,000 provision for inventory impairment during 2009. Please tell us where this expense is recorded within cost of revenues. In addition, in future filings please discuss the impact of significant inventory impairments on cost of revenues and gross margin.

Operating Expenses, page 21

5. We reference the disclosure that you reclassified \$4.2 million from SG&A expenses to research and development expenses during 2009. Please tell us the nature of those expenses and why you reclassified it to research and development. Please also tell us why you did not reclassify similar costs for the year ended 2008 for consistent presentation.

Liquidity and Capital Resources, page 22

6. We note that your discussion of liquidity and capital resources does not appear to be complete under the requirements of Item 303(a)(1) and (2) of Regulation S-K. In that regard, in future filings please disclose:
 - Your primary sources and uses of cash. Describe how you intend on financing your continuing operations, including a discussion of any related uncertainties.
 - We see that you plan to continue to raise funds through the sale of capital stock. Please describe the expected sources and amounts.
 - Describe expected capital expenditures, including how you intend on financing capital expenditures.
 - Disclose the amount of cash you will require to develop the solar energy products and services based upon the ENTECH CPV technology and how you intend to finance the research and development necessary to begin selling and marketing your products.

Please provide us with a copy of your revised disclosure. For further guidance on disclosures about liquidity and capital resources, refer to Section IV of Securities Act Release 33-8350, "Interpretation: Commission Guidance Regarding Management's Discussion and Analysis of Financial Condition and Results of Operations."

Consolidated Financial Statements

Consolidated Statements of Operations, page 27

7. We see that you present cost of revenues and gross profit (loss) allocated to five different sources, including the separate presentation of cost of revenues and gross profit allocated to "Impairment of Manufacturing Operations." We have the following comments:
 - Please tell us why you did not allocate the impairment of manufacturing operations to the either contract or equipment & services line item. We see that the impairment relates to the suspension of manufacturing your first

generation product and it appears that the impairment cost should be included with the other costs of revenues and gross margin from that product. Please tell us why you believe this presentation is useful and meaningful to investors.

- Please tell us how you considered that you are presenting a non-GAAP measure on the face of your financial statements since you present cost of sales and gross revenues excluding impairment charges. Refer to Item 10 of Regulation S-K which states that you may not present non-GAAP financial measures on the face of the financial statements prepared in accordance with GAAP or in the accompanying notes.

Note 2. Nature of the Business, page 30

8. We see that you suspended manufacturing start-up activities associated with your first generation CPV products in the first quarter of 2009 and that you discontinued selling conventional solar cells with flat plate technology. Please tell us how you considered that you should present these operations as “discontinued” under FASB ASC 205-20-45.

Note 3. Summary of Significant Accounting Policies

Inventory, page 33

9. We reference the disclosure that the “reserve” for inventory of \$2,272,000 relates to a 2009 non-cash impairment charge. Please reconcile the \$2,272,000 charge to the amount recorded on the statement of cash flows of \$1,398,000 and the discussion on page 23 which describes a provision for inventory of \$1,334,000.
10. As a related matter, the accounting policy disclosure in Note 2 on page 36 also characterizes inventory impairment charges as establishing “reserves.” As indicated in FASB ASC 330-10-35-14 and SAB Topic 5-BB, inventory impairment charges establish a new cost basis for impaired inventory. Please tell us how your policy is consistent with the referenced accounting literature.

Property and Equipment, page 33

11. Please reconcile the \$4,446,000 impairment of fixed assets disclosed in this footnote to the \$6,968,000 impairment disclosed on page 23 and on the statement of operations.
12. Please tell us the specific methods and assumptions you used to determine the write down to fair value of the property and equipment during 2009. Discuss how you applied the “alternate use” method and what significant assumptions you considered.

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Chief Financial Officer
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Goodwill, page 33

13. Please tell us where you have provided all of the disclosures required by FASB ASC 350-20-50-1 and 50-2.

Share Based Compensation, page 34

14. We see from page 20 that prior to the 4th quarter of fiscal year 2009 you estimated fair value of stock-based compensation using the binomial option pricing model. Please tell us why you made this change in accounting estimate and why you believe that the use of the new methodology is preferable.
15. As a related matter, please revise future filings to also disclose here or in footnote 14 the significant assumptions used in applying all fair value methodologies used during the periods presented.

Signatures, page 52

16. Please revise your future filings to indicate who is signing in the capacity of principal accounting officer and controller. Refer to Instruction D(2)(a) to Form 10-K.

Form 10-Q for the fiscal quarter ended September 30, 2010

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Revenues, page 14

17. Please tell us what you mean by the statement that the revenues generated during the quarter ended September 30, 2010 were related to the company's "services for operations and management." In future filings, given the start up nature of your current business, please provide a detailed and clear discussion of the nature of revenues generated.

Liquidity and Capital Resources, page 18

18. We note your discussion on page 18 that you will run out of funds at or near the end of 2010 and if you are unable to raise additional financing you may be forced to discontinue operations. Please tell us the amount of financing that you need by the end of the year and over the next twelve months and how you plan to raise this financing.

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Forms 8-K filed on September 10, 2010 and November 2, 2010

19. We note your disclosure that pursuant to the terms of the pledge agreement, the California Community Foundation has agreed “to use commercially reasonable efforts to sell the donated securities within one month of receipt.” Given this arrangement, please provide us with your analysis as to why California Community Foundation would not be considered an “underwriter,” as defined in Securities Act Section 2(a)(11), with respect to your securities. If California Community Foundation intends to claim an exemption from registration under Securities Act Rule 144, please tell us how you concluded that this agreement is consistent with the holding period requirements set forth in Rule 144(d).

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 the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. 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 responding to our comments, please provide a written 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.

You may contact Kristin Lochhead at (202) 551-3664 or me at (202) 551-3676 if you have questions regarding comments on the financial statements and related matters. If you have other questions, please contact Celia Soehner at (202) 551-3463 or Tim Buchmiller at (202) 551-3635

Sincerely,

Brian Cascio
Accounting Branch Chief