

Mail Stop 6010

March 31, 2006

VIA U.S. MAIL AND FAX (203) 825-6100

Mr. Joseph G. Mahler
Senior Vice President and Chief Financial Officer
Fuelcell Energy, Inc.
3 Great Pasture Road
Danbury, Connecticut 06813

**Re: Fuelcell Energy, Inc.
Form 10-K for the year ended October 31, 2005
Filed January 17, 2006
File No. 001-14204**

Dear Mr. Mahler:

We have reviewed your response filed March 9, 2006 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. In our comments, we asked you to provide us with supplemental information so we may better understand your disclosure. After reviewing this information, we may or may not 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 comment 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 October 31, 2005

Financial Statements

Consolidated Balance Sheets, page 67

1. Please refer to our prior comment 1. We note that under Section 11(g) of your Amended Certificate of Designation for the 5% Series B cumulative convertible perpetual preferred stock that your option to pay the redemption amount of the stock is conditioned upon the stock being registered under the Securities Act and eligible for immediate sale in the public market by non-affiliates of your company. As such, please tell us in more detail how you were able to conclude that the shares should not be reflected as temporary equity under EITF Topic D-98.
2. Additionally, we note that if you redeem the preferred stock in shares of your common stock the redemption amount is based upon a discount of 5% from the market price of your common stock. Please provide us with your consideration of whether the put option should be separated from the host contract under SFAS 133 and EITF 00-19.
3. Please also tell us your consideration of EITF 03-6, *Participating Securities and the Two-Class Method under FASB Statement No. 128*.

Note 12. Shareholders' Equity, page 85

4. Please refer to prior comments 2, 3 and 5. We note that you classified the Series 1 preferred shares of your subsidiary within equity because of the following:
 - You own 100% of the voting equity in FuelCell Energy, Ltd., the issuer of the preferred shares.
 - There are no voting minority interest holders.
 - The preferred shares are convertible into common stock at the option of FuelCell.
 - The preferred shareholders do not share in either the earnings of FuelCell or FeulCell Energy, Ltd.

As such, you do not reflect these shares as a minority interest and exclude the amount from your consolidated shareholders' equity. And dividends on the preferred stock are not charged to expense (minority interest in income of subsidiary) in your consolidated statements of operations.

Please respond to the following comments:

- Please tell us and disclose in future filings all of the significant terms of the Series 1 preferred stock, including all of the conditions that may result in adjustments to the conversion rate.

- Please revise future filings to disclose the valuation method and significant assumptions, including discount rates, underlying your valuation of the preferred stock.
 - Please reconcile your statement that the preferred shares are convertible at your option with the disclosure on page 87 stating that the shares are convertible at the option of the holder.
 - Please reconcile your statement that the shareholders do not share in earnings of FuelCell or FuelCell Energy, Ltd. with the disclosure on page 87 stating that you are required to pay/accrue quarterly dividends of C\$312,500.
 - Please provide us with the conceptual support in U.S. accounting literature for your classification of the preferred shares and the related dividends and discuss how you considered Rule 5-02.27 of Regulation S-X. Discuss whether the accounting would be different if you were to account for FuelCell Energy under the equity method. That is, discuss whether your equity in the income of FuelCell would be computed after providing for the dividends to outside preferred shareholders of that subsidiary. See paragraph 19(k) of APB 18.
 - Please tell us the nature of the assets and operations of FuelCell Energy, Ltd. Discuss whether the preferred shareholders of this subsidiary have a senior claim on its assets.
 - With respect to the fair value discount, it appears that you “accrete” the discount by debiting APIC and crediting preferred stock. Please discuss why you believe that this method is appropriate by citing the accounting literature upon which you relied and how you applied that literature to your facts and circumstances.
 - Tell us and disclose how you determine the number of shares to be issued when the dividends are paid in shares. Tell us whether those shares must be registered and readily marketable.
 - Please show us your calculations and journal entries with respect to these shares and the accretion of fair value and dividends. Please explain how you calculated the amounts. Please reconcile to your October 31, 2005 and January 31, 2006 financial statements and the amount of dividends reflected in those statements.
5. Please refer to our prior comment 4. We see that you cancelled the Series 2 Preferred shares and replaced them with equivalent Series 1 Preferred Shares. Please tell us how you effected the cancellation. For example, tell us whether you redeemed the Series 2 Preferred Shares and then subsequently issued the Series 1 Preferred Shares. In addition, tell us how you determined the value of the Series 1 Preferred Shares on the date of issuance. We note your reference to SFAS 141 for the valuation of the Series 1 preferred

shares. Explain why SFAS 141 applies to the Series 1 issuance in May 2004 for your acquisition of Global in November 2003. It appears that SFAS 141 was inly applicable to the Series 2 preferred shares. Please also address the rights and obligations of each series. Discuss whether the Series 2 preferred shares were for stock of your subsidiary, Global, or you. Explain why you transferred the assets to FuelCell Energy, Ltd. and why they issued the Series 1 preferred shares instead of you.

Item 9A. Controls and Procedures, page 98

6. Please refer to prior comment 6. We note your proposed disclosure that your "principal executive officer and principal financial officer have concluded that the Company's disclosure controls and procedures were effective to provide a reasonable level of assurance in timely alerting them to material information required to be included in [y]our periodic SEC reports." Please note that all language that appears following the word "effective" must be consistent with the language that appears in the definition of "disclosure controls and procedures" set forth in Rule 13a-15(e) of the Exchange Act. Since you disclose that your disclosure controls and procedures are *designed to* provide reasonable assurance of achieving their objectives, your principal executive officer and principal financial officer should continue to conclude whether the disclosure controls and procedures are effective at that reasonable assurance level. Please refer to Section II.F.4 of *Management's Reports on Internal Control Over Financial Reporting and Certification of Disclosure in Exchange Act Periodic Reports*, SEC Release No. 33-8238, available on our website at <<http://www.sec.gov/rules/final/33-8238.htm>>. Please similarly revise your Form 10-Q for the quarterly period ended January 31, 2006.

Acknowledgements

7. We note that you did not provide the three acknowledgements requested at the end of our prior letter dated February 10, 2006. Please provide all three acknowledgements in the form previously requested. In that letter we ask that when responding to our comments you provide, in writing, a statement from the company acknowledging that:
- the company is responsible for the adequacy and accuracy of the disclosure in the filings;
 - 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.

As appropriate, please respond to these comments within 10 business days or tell us when

Mr. Joseph G. Mahler
Fuelcell Energy, Inc.
March 31, 2006
Page 5

you will provide us with a response. Please furnish a cover letter that keys your responses to our comments and provides any requested supplemental information. Detailed cover letters greatly facilitate our review. Please file your cover letter on EDGAR as correspondence. Please understand that we may have additional comments after reviewing your responses to our comments.

You may contact Julie Sherman, Staff Accountant, at (202) 551-3640 or me at (202) 551-3604 if you have any questions regarding these comments. In this regard, do not hesitate to contact Martin James, Senior Assistant Chief Accountant, at (202) 551-3671.

Sincerely,

Kate Tillan
Assistant Chief Accountant