



DIVISION OF
CORPORATION FINANCE

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

August 4, 2010

Andrew Marsh
Chief Executive Officer
Plug Power Inc.
968 Albany Shaker Road
Latham, New York 12110

Re: Plug Power Inc.
Form 10-K for fiscal year ended December 31, 2009
Filed March 16, 2010
File No. 001-34392

Dear Mr. Marsh:

We have limited our review of your filing to those issues we have addressed in our 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 amending your filing, 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 or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to these comments, we may have additional comments.

Cover Page

1. Tell us why the cover page of your periodic and current reports under Exchange Act section 13 refers to Commission file no. 0-27527, rather than the file number you use when electronically submitting your filings, 1-34392, and tell us how you will ensure you use the correct file number in the future.

Item 1. Business, page 3

Raw Materials, page 9

2. Tell us why you have not filed the supply agreement with Ballard Power Systems as an exhibit to your annual report. See Item 601(b)(10)(ii)(B) of Regulation S-K. We note your disclosure on pages 9 and 15 that the loss of this contract could have a material adverse impact on the company.

Item 10. Directors, page 45

3. We note your disclosure on page 7 of the definitive proxy statement that you have incorporated by reference that the positions of chief executive officer and chairman of the board of directors are currently filled by different people. In future filings, please also include a discussion of why you have determined that your leadership structure is appropriate given your specific characteristics or circumstances. Refer to Regulation S-K Item 407(h).

Item 11. Executive Compensation, page 45

4. We note that you have not included any disclosure in response to Item 402(s) of Regulation S-K. Please advise us of the basis for your conclusion that disclosure is not necessary and describe the process you undertook to reach that conclusion.

Item 12. Security Ownership of Certain Beneficial Owners..., page 46

5. We note you have filed as an exhibit the Investor Rights Agreement with Smart Hydrogen, but it does not appear you have filed the joinder agreement to your Investor Rights agreement executed by OGK-3, as described in footnote 3 to the beneficial ownership table on page 38 of the definitive proxy statement that you have incorporated by reference to your Form 10-K. Please file this agreement or provide us your analysis as to why filing this agreement as an exhibit is not required.

Signatures, page 48

6. It appears that you have not included the signature from the individual who is acting as your controller or principal accounting officer. If not please amend your Form 10-K to include that signature. Otherwise, please tell us how you have complied with General Instruction D(2)(a) of Form 10-K.

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

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- 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.

Please contact Mary Beth Breslin at (202) 551-3625 or Jay Mumford, Senior Attorney, at (202) 551-3637 with any questions.

Sincerely,

Russell Mancuso
Branch Chief