



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 3030

August 20, 2009

VIA U.S. MAIL AND FAX 905-361-3626

Lawrence Davis
Chief Financial Officer
Hydrogenics Corporation
5985 McLaughlin Road
Mississauga, Ontario
Canada L5R 1B8

Re: Hydrogenics Corporation
Form 20-F for the year ended December 31, 2008
Filed June 30, 2009
File No. 000-31815

Dear Mr. Davis:

We have reviewed your letter dated August 12, 2009 and have the following comments. Where indicated, we think you should revise your future documents 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 any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 20-F for the Fiscal Year Ended December 31, 2008

Item 7. Major Shareholders and Related Party Transactions, page 59

Transactions with General Motors, page 59

1. We note your response to prior comment 2. However, since General Motors Corporation is a security holder named in Item 7 of your Form 20-F, it would appear that the agreement is required to be filed as an exhibit to your filing under the requirements of Instruction 4(b)(i) of the Instructions as to Exhibits of Form 20-F since it is a contract to which a security holder named in your filing is a party. While we understand that under some circumstances such agreements are not required to be filed if the contract is immaterial in amount or significance, it is unclear to us how the agreement, which provides General Motors with the right to nominate one director to your board of directors, is immaterial. We also note that the agreement appears to include pre-emption rights and tag along rights which you did not address in your response. Therefore we reissue the comment and request that you either file the requested agreements as exhibits to your future filings or provide us with a much more detailed analysis as to why such agreements are not required to be filed.

Representations

2. We note that the third acknowledgement referred to the *Commissioner* and not the *Commission* and that the acknowledgements were not provided by the company. Please provide a statement from the company that includes the three requested acknowledgements in the form previously requested.

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 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 responses to our comments.

You may contact Andri Boerman at (202) 551-3645 or me at (202) 551-3604 if you have questions regarding comments on the financial statements and related matters. Please contact Ruairi Regan at (202) 551-3269 or Tim Buchmiller at (202) 551-3635 if you have questions on other comments.

Sincerely,

Kate Tillan
Assistant Chief Accountant