



DIVISION OF
CORPORATION FINANCE

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

December 2, 2011

Via E-mail

Barry E. Welch
President and Chief Executive Officer
Atlantic Power Corporation
200 Clarendon Street
Floor 25
Boston, MA 02116

**Re: Atlantic Power Corporation
Form 10-K for Fiscal Year Ended December 31, 2010
Filed March 18, 2011
File No. 1-34691**

Dear Mr. Welch:

We have reviewed your filing and have the following comments. We have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your document. 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.

Form 10-K for Fiscal Year Ended December 31, 2010

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 51

Results of Operations, page 57

1. Please include a comparative analysis and discussion of income tax expense (benefit) and the effective tax rate for the periods presented.

Critical Accounting Policies and Estimates, page 74

2. Please provide information for investors to assess the probability of future goodwill impairment charges. For example, please disclose whether any of your reporting units are at risk of failing step one of the impairment test or that the fair value of each of your reporting units are substantially in excess of carrying value and are not at risk of failing step one. If a reporting unit is at risk of failing step one, you should disclose:
- the percentage by which fair value exceeded carrying value at the date of the most recent step one test;
 - the amount of goodwill allocated to the reporting unit;
 - a more detailed description of the methods and key assumptions used and how the key assumptions were determined;
 - a discussion of the degree of uncertainty associated with the assumptions; and
 - a description of potential events and/or changes in circumstances that could reasonably be expected to negatively affect the key assumptions.

Please refer to Item 303(a)(3)(ii) of Regulation S-K, which requires a description of known uncertainties, and Section V of the Commission's Guidance Regarding Management's Discussion and Analysis of Financial Condition and Results of Operations, SEC Release No. 34-48960, issued December 19, 2003 and available on our website at www.sec.gov.

Consolidated Financial Statements, page F-1

Notes to Consolidated Financial Statements, page F-8

General

3. Please tell us your consideration of disclosing information about your asset retirement obligations in accordance with ASC 410-20-50.

Note 4. Equity method investments, page F-21

4. Please tell us why you are not required to provide separate financial statements for any of your equity method investments other than Chambers Cogeneration Limited Partnership ("Chambers") pursuant to Rule 3-09 of Regulation S-X. Please provide your significance tests for the four most significant equity method investments other than Chambers for each year presented. Please ensure that any impairment write-down or other activity related to each investment is included in your significance computations and is clearly

identified. In addition, please explain why audited financial statements were not provided for Chambers for the year ended December 31, 2008. In this regard, we note these audited financial statements were included in Amendment No. 4 to Form 10 filed July 21, 2010 and the significance tests provided in our review of your Form 10 and related amendments supported the need for these audited financial statements.

Note 14. Long-Term Incentive Plan

5. Please tell us your consideration of disclosing the effect of compensation cost arising from share-based payment arrangements on the statements of operations and the cash flow effects resulting from share-based payment arrangements. Refer to ASC 718-10-50-1b and 718-10-50-1d. Please also tell us your consideration of providing separate disclosures for awards that are classified as equity and those classified as liabilities. Refer to ASC 718-10-50-2g. In addition, please tell us your consideration of disclosing the method used to estimate the fair value of notional units awarded for each year presented and a description of the significant assumptions used to estimate such fair values.

Note 19. Commitments and contingencies, page F-45

6. Please tell us your consideration of disclosing commitments related to long-term leases and unconditional purchase obligations such as fuel and transportation purchase contracts and committed construction and plant acquisition contracts. Refer to ASC 440-10-50.

Signatures, page 84

7. The narrative prior to the signatures by persons on behalf of the registrant is not provided. Refer to the signature page of Form 10-K. Please revise.

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.

You may contact Adam Phippen, Staff Accountant, at (202) 551-3336 or me at (202) 551-3344 if you have questions regarding our comments or any other questions.

Sincerely,

/s/ William H. Thompson

William H. Thompson
Accounting Branch Chief