

Mail Stop 3561

May 12, 2010

Patrick J. Welch, Chief Financial Officer
Atlantic Power Corporation
200 Clarendon Street, Floor 25
Boston, MA 02116

**Re: Atlantic Power Corporation
Registration Statement on Form 10-12B
Filed April 13, 2010
File No. 001-24691**

Dear Mr. Welch:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your document 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.

General

1. In an appropriate place in your registration statement, please revise to provide an organizational chart that depicts you and all of your operating subsidiaries.
2. Throughout the document, management states its intent to pay future dividends at Cdn \$1.094/year, the same rate that was paid to IPS holders before the IPS to common conversion in November 2009. In light of this stated intent, we believe a separate section regarding dividend policy disclosures should be provided. We believe this section should include:
 - Clear articulation of the dividend policy and how you expect to be able to pay it;
 - Identification of risks and limitations associated with payment of the dividends;
 - Historical or pro forma historical information and forward-looking information regarding cash flow available for distribution to support the ability to pay the stated dividends; and

- Detailed discussion regarding assumptions used in the forward looking information, including the basis for those assumptions and how those assumptions compare to historical results.

The intended policy should not be stated for periods in excess of periods supportable by expected future cash flows (usually the next 12 months). The forward-looking information should be more detailed than the information currently provided under the Outlook section starting on page 59 and might include a reconciliation from estimated project adjusted EBITDA by segment/project to estimated cash flow available for distribution for the next 12 months.

Business, page 3

3. Disclose the basis for your assertion that you are a “leading power producer.” In this regard, disclose whether this information is based upon management’s belief, industry data, reports/articles or any other source. If the statement is based upon management’s belief, please indicate that this is the case and include an explanation for the basis of such belief. Alternatively, if the information is based upon reports or articles, please provide these documents to us, appropriately marked and dated.
4. Please describe the historical development of your business over the last five years. For example, provide the year you were organized, your form of organization and any material changes in the mode of conducting your business. These are only examples. In this regard, we note that you were previously managed by Atlantic Power Management, LLC which is owned by two private equity funds. To the extent applicable, please describe the role of these private equity funds in your development. See Item 101 of Regulation S-K.
5. We note your reference on page six to the “North American Electric Reliability Council’s Long-Term Reliability Assessment, published in December 2009” and “information published by the Energy Information Administration.” Please provide copies of the reports or studies that support the qualitative and comparative statements contained in your registration statement. Please mark your furnished support or provide page references in your response to the sections you rely upon for each specific statement. To the extent you are unable to provide support, please delete the qualitative and comparative statement.

Power Industry Overview, page 6

6. At the bottom of page 6, you express your belief as to the fact that an active secondary market in the power generation sector will continue to provide you with meaningful acquisition and growth opportunities. Please revise to provide the basis for your belief so that readers can appreciate how you determined which opportunities to pursue.

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Our Power Projects, page 7

Path 15 Segment, page 15

7. You mention here that your wholly-owned subsidiaries have incurred non-recourse debt relating to your interest in the Path 15 project. Please revise to quantify this debt. This comment applies to all instances in which you discuss debt at the subsidiary level as it relates to a particular power project.

Selkirk Project, page 19

8. Please elaborate upon the terms of the cash distribution policy as it relates to this project. In this regard, we note your indication that the distributions change “when certain partners achieve a specified return on their equity contributions.”

Delta-Person Project, page 25

Factors Influencing Project Results, page 26

9. Please revise to explain why artificially high heat rate affects the dispatch of the project by PNM at current market conditions.

Risk Factors, page 30

Our revenue may be reduced upon the expiration or termination of our power purchase agreements, page 30

10. Please revise your disclosure to name and quantify your exposure to the PAAs that will expire in the near term.

Certain of our projects are exposed to fluctuations in the price of electricity, page 31

11. Please revise to name the projects with no PAA or PAAs based on spot market pricing and provide readers a quantified amount of projects or services that will be subject to this risk so that the magnitude of the risk can be readily assessed.
12. In general, descriptions of risks that describe circumstances that could apply equally to other businesses that are similarly situated are generic risks that should not be included in your risk factor section. Please either eliminate these generic risks, or revise them to state specific material risks to your company or to the purchasers in this offering. For example, we note that the following risk factors appear to contain generic disclosures:

- Our projects depend on suppliers under fuel supply agreements and increases in fuel cost may adversely affect the profitability of the projects, page 31;
- Predicting project cash flow over the long term is difficult, page 33;
- Sufficient capital may not be available to fund acquisitions, investments, expansions or capital expenditures, page 35;
- Operations are subject to a number of natural and inherent risks, page 36; and,
- The projects' operations are subject to operating and legal risks, page 37.

Please note these are examples only. Review your entire risk factor section and revise as necessary.

Noncompliance with regulations and standards may subject us and our projects to penalties, page 33

13. It appears that the risk factor you are discussing concerns your compliance with reliability standards. Please revise the title of this risk to reflect the nature of the risk. Please also revise your discussion of the risk to explain how this risk is applicable to you.

Our projects are subject to significant environmental and other regulations, page 33

14. In this risk factor you discuss both general environmental regulations and CO2 and GHGs regulations. Please break out in a separate risk factor with an appropriate risk factor title, the risk associated with regulation of CO2 and GHGs.

The projects are exposed to risk inherent in the use of derivative instruments, page 37

15. If you have experienced a loss to derivative instruments please disclose that in this risk factor or, alternatively, if you believe the risk of loss in the future is a material one of which investors should be aware, please revise to quantify the risk as much as possible.

Our indebtedness could negatively impact our business and our projects, page 38

16. Please revise to convey the degree of your present debt leverage in a manner so a reader can weigh the significance of this risk.

Financial Information, page 41

Selected Financial Data, page 41

17. Briefly describe, or cross-reference to a discussion thereof, factors such as business combinations or dispositions of business operations that materially affect the comparability of the information reflected in selected financial data. Refer to the instructions to Item 301 of Regulation S-K.

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 41

18. Please expand this section to discuss known material trends and uncertainties that will have, or are reasonably likely to have, a material impact on your revenues or income or result in your liquidity decreasing or increasing in any material way. We note that in four out of the last five years you have had net losses. Discuss whether you expect that trend to continue. Please provide additional analysis concerning the quality and variability of your earnings and cash flows so that investors can ascertain the likelihood of the extent past performance is indicative of future performance. Please discuss whether you expect levels to remain at this level or to increase or decrease. Also, you should consider discussing the impact of any changes on your earnings. Further, please discuss in reasonable detail:

- Economic or industry-wide factors relevant to your company, and
- Material opportunities, challenges, and
- Risk in short and long term and the actions you are taking to address them.

See Item 303 of Regulation S-K and SEC Release No. 33-8350.

Results of Operations, page 48

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

Year Ended December 31, 2009 vs. Year Ended December 31, 2008, page 49

20. Where you describe two or more factors that contributed to a material change in a financial statement line item between periods, please quantify, to the extent practicable, the incremental impact of each factor identified. For example, please quantify the effect of items discussed when comparing year ended December 31, 2009 and 2008 Pasco and Chambers project income. See Item 303(a) of Regulation S-K and Financial Reporting Codification 501.04.

Cash Flow from Operating Activities, page 57

21. You disclose that cash provided by operating activities improved in fiscal 2008 as compared to fiscal 2007 due to the positive impact of working capital changes. However, working capital changes appear to have had a greater positive impact in fiscal 2007 than in fiscal 2008. Please revise or advise.

Liquidity and Capital Resources, page 62

Project-level debt, page 63

22. We note your indication that the covenants at certain of your projects are temporarily preventing those projects from making cash distributions to you. Please revise your discussion here to disclose the terms of the applicable covenants, what is causing the cash distributions to be unavailable to you and whether and when you expect these circumstances to change.

Capital Expenditures, page 64

23. Please revise this discussion to quantify the level of capital expenditures for 2009 and estimate the amount you expect to allocate in 2010.

Directors and Executive Officers, page 72

24. Please briefly discuss each director's specific experience, qualifications, attributes, or skills that led to the conclusion that he or she should serve as one of your directors in light of your business. If material, these disclosures should cover more than the past five years, including information about each person's particular areas of expertise or other relevant qualifications. See Item 401(e)(1) of Regulation S-K.
25. Please revise to describe the business experience of Messrs. Patrick Welch, William Daniels and John Hulburt for the past five years, or clarify your disclosure by adding dates or the duration of employment. Refer to Item 401(e) of Regulation S-K.

Compensation Discussion and Analysis, page 75

Annual Cash Bonus (Non-Equity Incentive Plan Compensation), page 76

26. We note that you state that a portion of the annual cash bonus is a fixed amount and a portion is based on total shareholder return to the peer companies with respect to certain named executive officers. Your discussion is difficult to follow without referring to the employment agreement of certain executives. Please revise to explain in greater detail how the annual cash bonus is calculated as compared to the

non-equity incentive plan award and how you determined the amounts paid with respect to each element of compensation.

27. For the named executive officers other than Messrs. Welch, Welch and Rapisarda, clarify whether they are eligible for an annual bonus or to participate in your non-equity incentive plan. If so, disclose the terms of these elements of compensation and how you determine the amounts of these awards. The introductory paragraph to this section would lead readers to believe that they are eligible for both, however, the manner in which awards are determined is unclear.
28. Please revise to discuss the results of the total shareholder return analysis for 2009 with a view to explaining how you arrived at the amounts disclosed in the column devoted to non-equity incentive plan compensation in your summary compensation table.

Long Term Incentive Plan, page 77

29. You mention here that you retained Mercer Human Resource Consulting to assist you in your review of the compensation of the employees of the Manager. If Mercer assisted you with respect to elements of compensation other than long-term compensation, such as with respect to benchmarking, please revise to elaborate upon the results of Mercer's compensation review.
30. Please revise disclosure to provide additional details of your Long Term Incentive Plan. For example, please provide the LTIP percentage for each executive and explain in greater detail the 2009 cash flow target and how it was calculated. Also explain the concept of notional units in greater detail. Further, make it clear that in accordance with certain executives' employment agreements, that they cannot receive an award less than they received when they were employed by Atlantic Power Management, LLC. Finally, explain how broad the discretion of the board is in making adjustments to the cash flow number and whether they can either reduce or increase the cash flow number used to calculate the LTIP awards.

Summary Compensation Table, page 79

31. Please revise to disclose that your Stock Awards disclosure was calculated in accordance with FASB ASC Topic 718. See Item 402(c)(2)(v) of Regulation S-K.
32. Please also revise to explain the underlying detail behind the amounts disclosed in the "All Other Compensation" column. Refer to Item 402(c)(ix) of Regulation S-K.

Grants of Plan-Based Awards, page 80

33. Please revise to disclose that your Grant Date Fair Value of Stock and Option Awards disclosure was calculated in accordance with FASB ASC Topic 718. See Instruction 8 to Item 402(d) of Regulation S-K.
34. 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.

Termination and Change of Control Benefits, page 84

35. We note that for the description of the term “termination for cause” for Barry Welch’s, Patrick Welch’s and Paul Rapisarda’s employment you refer the reader to each of their employment agreements. Please revise your disclosure to provide a description of the term “termination for cause.”

Recent Sales of Unregistered Securities, page 88

36. We note that on November 27, 2009, you completed the conversion of all of your IPSs to common shares. State briefly the facts relied upon to make the exemption available in this transaction.

Financial Statements, page F-1

Consolidated Statements of Changes in Shareholders’ Equity, page F-4

37. It appears your adoption of the fair value measurement standard on January 1, 2008 resulted in a significant reduction in your retained deficit. However your disclosure on page F-13 indicates that the impact of your adoption of this standard resulted in a significant increase to retained deficit. Please revise your disclosure to address this inconsistency or otherwise advise. Please also explain to us why your adoption of this standard resulted in a \$25.2 million reduction in your retained deficit.

Consolidated Statements of Cash Flows, page F-5

38. Please tell us why distributions from equity method investees in excess of equity method earnings are properly classified as operating as opposed to investing cash flows and explain to us at what point the distributions would be considered a return of rather than a return on investment. Refer to ASC 230.
39. Please explain why purchases and sales of auction rate securities are presented as financing as opposed to investing activities referencing FASB ASC 230.

40. Please explain the nature of the “[p]roceeds from escrow used for redemption of non-controlling interest” and “[r]epayment of obligation to non-controlling interest” line items and tell us why financing activity classification is appropriate referencing FASB ASC 230.

Notes to Consolidated Audited Financial Statements, page F-6

41. With reference to the applicable authoritative guidance, please tell us the basis in GAAP for your accounting treatment of the November 2009 conversion of income participating securities into common shares.

Note 2. Summary of Significant Accounting Policies, page F-6

(c) Regulatory Accounting, page F-7

42. To the extent material, please disclose the components of your regulatory assets and liabilities, including the balance for each. Also disclose the nature and amount of all regulatory assets not earning a return, including the remaining recovery period applicable to them. Refer to FASB ASC 980-340-50.

(d) Revenue, page F-7

43. Please tell us your consideration of whether certain of your power purchase agreements where the energy component of the contract is variable are subject to derivative accounting under ASC 815.

Note 4. Equity Method Investments, page F-16

44. Please tell us why you are not required to provide separate financial statements for any of your equity method investments pursuant to Rule 3-09 of Regulation S-X. Please include your significance tests for your three most significant equity method investments in each period presented. Please ensure that any goodwill amortization, impairment write-down, or other activity related to each investment is included in your significance computations and is clearly identified.
45. Reference is made to your disclosure in footnote 10 to the table on page 7 that your economic interest in certain projects represents your estimated share of the cash flows from the project, as opposed to your percentage ownership interest. Please tell us more about the nature of your interest in these entities. Also tell us how you determined to account for your interest in these entities using the equity method.
46. With respect to summarized financial information of equity method investees, Rule 1-02(bb) of Regulation S-X requires the presentation of gross profit or, alternatively, costs and expenses applicable to net sales or gross revenues. As such, please revise

the summarized financial information to include a line item for project expenses applicable to revenues or, if more appropriate, include a line item for project income. Otherwise, please tell us why these amounts should be omitted. Refer to Rules 4-08(g) and 1-02(bb) of Regulation S-X.

Note 9. Long-term debt, page F-20

47. Please tell us your consideration of the applicability of the disclosure requirements in Rule 4-08(e)(2) and (3) of Regulation S-X. Please also clarify your disclosure that all of your projects were in compliance with the covenants contained in project-level debt in light of disclosures elsewhere in the document which indicate that covenants at certain projects are temporarily preventing these projects from making cash distributions to you.

Note 14. Income Taxes, page F-28

48. Please tell us why the “Canadian loss carryforwards” line item is appropriate in the effective rate reconciliation.
49. The first table on page F-29 indicates a December 31, 2009 valuation allowance of \$67.1 million; however, the narrative below the table indicates a December 31, 2009 valuation allowance of \$51.8 million. Please address this apparent inconsistency.

As appropriate, please amend your filing and respond to these comments within 10 business days or tell us when you will provide us with a response. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment 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 amendment and responses to our comments.

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 all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. 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 connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;

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- 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.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

Please contact Adam Phippen, Staff Accountant at (202) 551-3336 or Robyn Manuel, Staff Accountant, at (202) 551-3823 if you have any questions regarding comments on the financial statements and related matters. Please contact Scott Anderegg, at (202) 551-3342, Mara Ransom, Legal Branch Chief, at (202) 551-3264 or me at (202) 551-3720 with any other questions.

Sincerely,

H. Christopher Owings
Assistant Director