

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

July 6, 2010

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

Re: Atlantic Power Corporation

Amendment No. 2 to Registration Statement on Form 10-12B

Filed June 16, 2010 File No. 001-24691

Dear Mr. Welch:

We have reviewed your filing and have the following 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.

Item 6. Executive Compensation, page 84

Elements of Compensation, page 85

Annual Cash Bonus (Non-equity Incentive Plan Compensation), page 85

1. We note your response to comment five of our letter dated June 8, 2010. Please revise your summary discussion under the heading "Annual Cash Bonus (Non-Equity Incentive Plan Compensation)," second full paragraph under this heading, to identify that the amounts awarded under component (i) are identified as "Bonus" in your Summary Compensation Table and that the amounts awarded under components (ii) and (iii) are combined and identified as "Non-Equity Incentive Plan Compensation" in your Summary Compensation Table for each

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executive. In this regard, the title of this heading covers both elements of compensation when it appears that these should be treated as separate elements of compensation for ease of presentation.

2. We note your response to comment six of our letter dated June 8, 2010 and your description of your goals and objectives. However, we note that you have not provided a qualitative discussion explaining how your board of directors determined that each senior officer met the performance standard of component (iii) by disclosing how each of them contributed to the achievement of your company's goals and objectives. Please revise or advise.

Long-Term Incentive Plan, page 86

3. We note your response to comment eight of our letter dated June 8, 2010. It appears that you are benchmarking each component of compensation against the "competitive peer group." If you engage in benchmarking in setting your components of compensation, please identify the companies that make up the "competitive peer group" pursuant to Item 402(b)(2)(xiv). Also see Item 402(b)(1)(v) of Regulation S-K.

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