

Mail Stop 3561

March 31, 2009

F. William Capp  
President and Chief Executive Officer  
Beacon Power Corporation  
65 Middlesex Road  
Tyngsboro, MA 01879

**Re: Beacon Power Corporation  
Preliminary Proxy Statement on Schedule 14A  
Filed March 3, 2009  
File No. 0-31973**

Dear Mr. Capp:

We have limited our review of your filing to those issues we have addressed in our 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 a 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.

Preliminary Proxy Statement on Schedule 14A

Security Ownership of certain Beneficial owners and Management, page 6

1. Please disclose the natural person(s) or public company that has the ultimate voting or investment control over the shares held by Capital Ventures International and Height Capital Management, Inc. Please also expand your disclosure to include the purchase of shares that have been and may be made by Seaside 88, LP. Refer to Question 140.02 and Interpretive Response 240.04 of

our Regulation S-K Compliance and Disclosure Interpretations located at our web-site, [www.sec.gov](http://www.sec.gov).

Proposal 1, Amendment of our Sixth Amended and Restated Certificate of Incorporation to Increase the Number of Authorized Shares of Common Stock, page 9

Reasons for the Proposed Amendment, page 9

2. Please reconcile your disclosure here that Seaside will not purchase your shares at a price less than \$0.25 per share, with your disclosure on page 12 that the floor price is \$ 0.20 per share. If you mean to state “market price” in reference to the \$.25 per share, please state this.

Proposal 2, Approval of the Issuance of Common Stock under the Securities Purchase Agreement with Seaside 88, LP, page 12

3. We note that you filed a prospectus supplement on March 20, 2009 to your registration statement on Form S-3 (file no. 333-152140) for purposes of conducting a second take-down in connection with your sale of shares to Seaside 88 LP. Please tell us how you believe that the Plan of Distribution discussed in your registration statement on Form S-3 covers the shares being sold under the Common Stock Purchase Agreement considering it does not specify that you will sell shares pursuant to an equity line agreement.
4. Your disclosure in your prospectus supplement indicates that you have two options to extend the Agreement for two additional six-month periods and that you “...have paid Seaside \$100,000 for the first of these options...” You go on to state that you “have not decided at this time whether to elect either of these options.” Please revise to clarify your disclosure as to whether or not you have elected either of the two options available to you under the Purchase Agreement with a view to disclosing the company’s business plans and need, if any, for the full amount of proceeds.
5. In addition, we note that your prospectus supplement indicates that issuances under the Common Stock Purchase Agreement are limited to the number of shares of common stock that equals 19.9% of your outstanding common stock on the date you entered into the Agreement unless your stockholders approve of your issuance of common stock. Your disclosure here, however, indicates that the Purchase Agreement, even assuming you obtain shareholder approval, would continue to limit the number of shares that Seaside may acquire to 20%. Please clarify whether Seaside is limited to acquiring 20% and state whether this provision is waivable by either party. If either party has the ability to waive this limitation, please revise your disclosure to elaborate upon the potential for change of control that could occur under the terms of the Purchase Agreement.

6. Finally, your statement in your prospectus supplements that “Seaside...might be deemed to be underwriter(s)...” is insufficient. Given the intent to distribute the shares reflected in the structure of this transaction, we deem Seaside to be a statutory underwriter. Please ensure that your disclosure affirmatively states that Seaside is an underwriter.
7. Please provide us, with a view toward disclosure in the proxy, with the total dollar value of the common stock that you have sold to Seaside 88, LP. so far, calculated using the market price on the date of sale.

Effect on Existing Shareholders, page 14

8. We note your Assumed (Constant) Market Price for Common Stock at Monthly Closings chart on page 14. Please update the disclosure that follows to reflect the March 20, 2009 sale. Also, using the assumed market prices from your chart, please provide us, with a view towards disclosure in the proxy, with tabular disclosure of:
  - the total possible profit Seaside could realize as a result of the discount for the common stock, presented in a table with the following information disclosed separately:
    - the assumed market price per share of the common stock for each term of agreement - 6, 12 and 18 months;
    - the price per share of common stock for each term;
  - the total possible shares of common stock;
  - the combined market price of the total number of shares of common stock, calculated by using the assumed market price per share and the total possible shares of common stock;
  - the total possible shares Seaside may receive and the combined discount price of the total number of shares of common stock calculated by using the discount price and the total possible number of shares Seaside may receive; and
  - the total possible discount to the market price as of each term of agreement, calculated by subtracting the total discount price from the combined market price of the total number of shares of the common stock.

If there are provisions in the common stock purchase agreement that could result in a change in the price per share upon the occurrence of certain events, please provide additional tabular disclosure as appropriate. For example, if the discount

price per share is fixed unless and until the market price falls below a stated price, at which point the discount price per share drops to a lower price, please provide additional disclosure.

9. Please provide us, with a view toward disclosure in the proxy, with:
- a materially complete description of the relationships and arrangements that have existed in the past three years or are to be performed in the future between the issuer (or any of its predecessors) and Seaside, any affiliates of Seaside, or any person with whom Seaside has a contractual relationship regarding the transaction (or any predecessors of those persons) – the information provided should include, in reasonable detail, a complete description of the rights and obligations of the parties in connection with the sale of the common stock; and
  - copies of all agreements between the issuer (or any of its predecessors) and Seaside, any affiliates of Seaside, or any person with whom Seaside has a contractual relationship regarding the transaction (or any predecessors of those persons) in connection with the sale of the common stock.

If it is your view that such a description of the relationships and arrangements between and among those parties already is presented in the proxy statement and that all agreements between and/or among those parties are included as exhibits to the proxy statement or other filings, please provide us with confirmation of your view in this regard.

10. We note your disclosure that “The description of the Purchase Agreement above is qualified in its entirety by the text of the agreement set forth in *Appendix B*.” As you are responsible for the accuracy of the information in the proxy, this type of qualification is inappropriate. Please revise accordingly.
11. Please add a discussion that addresses the issue that the number of shares you issue in connection with a draw down under the Securities Purchase Agreement will be based upon a discount to the then-prevailing market price and, as a result, the lower the stock price at the time of the draw down, the more common shares the shareholder will receive. To the extent that Seaside as selling security holder receives and then sells its common stock, the common stock price may decrease due to the additional shares in the market. This could allow Seaside to receive even greater amounts of common stock, the sales of which would further depress the stock price.

12. Please tell us what consideration you have given to appropriate risk factor disclosure relating to the following:

- the dilutive effect of the pricing mechanism contained in the Purchase Agreement, and
- the likelihood that the company will have access to the full amount available to it under the Purchase Agreement.

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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;
- 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.

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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.

You may contact Scott Anderegg, Staff Attorney, at (202) 551-3342 or 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

Eugene W. McDermott, Jr. Esq.