

Mail Stop 3561

March 14, 2007

Richard E. Kessel, President and Chief Executive Officer
Environmental Power Corporation
One Cate Street, 4th Floor
Portsmouth, N.H. 03801

**Re: Environmental Power Corporation
Amendment No. 2 to Registration Statement on Form S-3
Filed March 7, 2007
File No. 333-138999**

Dear Mr. Kessel:

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 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.

Selling Stockholders, page 17

1. We note your response to comment 2 of our letter dated February 22, 2007. Please revise to quantify the liquidated damages since the March 9th deadline has passed.

Incorporation of Certain Documents by Reference, page 28

2. Prior to requesting effectiveness of your registration statement, please file your annual report on Form 10-K for the year ended December 31, 2006 and incorporate the report by reference into your filing. Reference is made to Rule 3-12 and Rule 3-01(c) of Regulation S-X.

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As appropriate, please amend your registration statement in response to these comments. 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.

You may contact Robert Babula, Staff Accountant, at (202) 551-3339 or Michael Moran, Accounting Branch Chief, at (202) 551-3841 if you have any questions regarding comments on the financial statements and related matters. Please contact Scott Anderegg, Staff Attorney, at (202) 551-3342 or Peggy Kim, Senior Staff Attorney, at (202) 551-3411 or me at (202) 551-3720 with any other questions.

Sincerely,

H. Christopher Owings
Assistant Director

cc: Scott Pueschel, Esq.
Pierce Atwood LLP