Via EDGAR and Overnight Delivery

U.S. Securities and Exchange Commission Division of Corporation Finance 100 F Street, N.E. Mail Stop 3561 Washington, DC 20549-3561

Attn: Mara L. Ransom Chris Chase

Re: Active Power, Inc.

Registration Statement on Form S-3

Filed April 30, 2012 File No. 333-181054

Ladies and Gentlemen:

On behalf of Active Power, Inc. ("Active Power" or the "Company"), we submit this letter in response to comments from the staff (the "Staff") of the Securities and Exchange Commission (the "Commission") received by letter dated May 22, 2012 (the "Comment Letter"), relating to the Company's Registration Statement on Form S-3") filed with the Commission on April 30, 2012 (File No. 333-181054).

We are currently filing via EDGAR an Amendment No. 1 to Form S-3 (the "Form S-3/A"), and for the convenience of the Staff, we are providing to the Staff by overnight delivery copies of this letter and a marked copy of the Form S-3/A (as compared to the Form S-3).

For your convenience, we have repeated the Staff's comments below in italicized, bold face type before each of our responses. The numbered paragraphs of this letter correspond to the numbered paragraphs of the Comment Letter. References to "we," "our" or "us" mean the Company or its advisors, as the context indicates.

Selling Stockholder, page 15

1. We note your indication that you have agreed to appoint one designee of the selling stockholder to your board of directors. Please revise to summarize the terms of the Letter Agreement dated March 7, 2012 between you and the selling stockholder, with a view to explaining your obliquations in this regard.

In response to the Staff's comment, we have revised the third paragraph of the Section titled "Selling Stockholder" to read as follows:

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The selling stockholder has not held any position or office or had any other material relationship with us or any of our predecessors or affiliates within the past three years. However, the Company entered into a Side Letter Agreement with the selling stockholder pursuant to which it was granted the right to designate one member of the Company's board of directors. The Company is obligated to use its reasonable best efforts to cause to be appointed any designee of the selling stockholder to the board of directors within 10 days after the Company receives written notice of such designation. Until such designee has been appointed to the Company's board of directors, the Company will invite a representative of the selling stockholder to attend all meetings of its board of directors in a nonvoting observer capacity."

Experts, page 21

2. Please revise your Experts disclosure on page 21 to also identify Ernst & Young LLP which provided the audit report for your financial statements for the year ended December 31, 2009.

In response to the Staff's comment, we have revised the Experts disclosure on page 21 to also identify Ernst & Young LLP.

Exhibits

3. We note that you have incorporated by reference your Form 10-K for the fiscal year ended December 31, 2011. Please file Ernst & Young LLP's consent to your incorporation by reference of its audit report dated March 4, 2010 with respect to your consolidated financial statements for the year ended December 31, 2009, which is included in your Form 10-K for the year ended December 31, 2011.

In response to the Staff's comment, we have filed as Exhibit 23.2 to the Form S-3/A Ernst & Young LLP's consent to incorporation by reference of its audit report dated March 4, 2010 with respect to our consolidated financial statements for the year ended December 31, 2009.

* * * * * * * * * *

The Company acknowledges that:

- · should the Commission or the staff, acting pursuant to delegated authority, declare the Form S-3, as amended by the Form S-3/A, effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the Form S-3, as amended by the Form S-3/A, effective, does not relieve the Company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the Company may not assert staff comments and the declaration of effectiveness 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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Should you have any follow-up questions, please call me at (512) 338-5412.

Very truly yours,

WILSON SONSINI GOODRICH & ROSATI Professional Corporation

/s/ Derek L. Willis, Esq.

Derek L. Willis, Esq.

Enclosures

John K. Penver, Chief Financial Officer, Active Power, Inc.