

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

September 20, 2010

Via Facsimile and U.S. Mail

Mr. John Lackland Chief Financial Officer Power Efficiency Corporation 3960 Howard Hughes Pkwy, Ste 460 Las Vegas, NV 89169

> Re: Power Efficiency Corporation Form 10-K for the Fiscal Year Ended December 31, 2009 Filed March 31, 2010 Forma 10-Q for the Quarter Ended March 31, 2010 and June 30, 2010 File No. 000-31805

Dear Mr. Lackland:

We have reviewed your response letter dated September 7, 2010 and filings and have the following comments. We have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your documents. 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 filings, 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 filings and the information you provide in response to these comments, we may have additional comments.

Form 10-K For the Year Ended December 31, 2009

Note 18. Unaudited Selected Quarterly Financial Data, page F-31

1. We note your response to prior comment 10. FASB ASC 250-10-50-7 states that "when financial statements are restated to correct an error, the entity shall disclose that its

Mr. John Lackland Power Efficiency Corporation September 20, 2010 Page 2

previously issued financial statements have been restated." It is not clear to us how labeling the financial statements "adjusted" satisfies this guidance. To the extent that you restate prior financial statements in any future periods, please revise to include disclosures that provide a clear indication to the readers that the previously filed financial statements have been restated to correct an error. In this regard, disclosures in your September 30, 2010 Form 10-Q should clearly indicate that amounts for the three and nine months ended September 30, 2009 are 'restated' and the footnote should include a clear statement that prior period amounts have been restated to correct for errors.

Exhibits 31.1 and 31.2

2. We note your response to prior comment 11. As previously requested, please amend this filing and each of your March 31 and June 30, 2010 Forms 10-Q to include revised certifications that conform to the requirements of Item 601(b)(31) of Regulation S-K.

Form 10-Q for the Quarterly Period Ended March 31, 2010

Item 4T. Controls and Procedures, page 25

3. We note your response to prior comments 1 and 2 in which you discuss the actions taken by management to correct the deficiencies that resulted in the material weaknesses at December 31, 2009. When you file the amendment to this Form 10-Q, which we previously requested in our letter dated August 18, 2010, please revise this section to include the disclosures required by Item 308(c) of Regulation S-K. That is, consistent with your responses, describe the changes you made to your internal controls over financial reporting during the quarter to correct the deficiencies that resulted in the material weaknesses at December 31, 2009.

Form 10-Q for the Quarterly Period Ended June 30, 2010

Note 7. Convertible Preferred Stock, page 10

4. We note your response to prior comment 12. Please revise your future filings to clearly state the conversion price related to your convertible Series D preferred stock.

Acknowledgements

5. Please provide the three acknowledgements included at the end of our August 18, 2010 comment letter. For your reference, we have repeated the acknowledgements below.

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 the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are Mr. John Lackland Power Efficiency Corporation September 20, 2010 Page 3

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 responding to our comments, please provide a written 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.

You may contact Tara Harkins, Staff Accountant, at (202) 551-3639 or me at (202) 551-3643 if you have questions regarding these comments. In this regard, do not hesitate to contact Martin James, Senior Assistant Chief Accountant, at (202) 551-3671.

Sincerely,

Kevin L. Vaughn Accounting Branch Chief