



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

Mail Stop 3030

March 3, 2009

VIA U.S. MAIL and FACSIMILE (248) 844-1214

Harry Zike
Vice President and Chief Financial Officer
Energy Conversion Devices, Inc.
2956 Waterview Drive
Rochester Hills, Michigan 48309

**Re: Energy Conversion Devices, Inc.
Form 10-K for Fiscal Year Ended June 30, 2008
Filed August 28, 2008
Form 10-Q for the Quarterly Period Ended December 31, 2008
File No. 1-08403**

Dear Mr. Zike:

We have reviewed your response dated February 18, 2009 and filings and have the following comments. Where indicated, we think you should revise your documents in future filings 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.

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.

Harry Zike
Energy Conversion Devices, Inc.
March 3, 2009
Page 2

Form 10-Q for the Quarterly Period Ended December 31, 2008

Note B – Investments, page 11

1. We see that in October 2008, you agreed to an offer from UBS AG to sell at par value, at anytime from June 30, 2010 through July 2, 2012, the auction rate securities (ARCs) purchased from UBS. Please tell us and revise future filings to disclose the amount or percentage of ARCs that are covered under this agreement.
2. We note that the agreement with UBS also grants them the right to purchase your ARCs at par value at anytime without notice and, therefore, you have reclassified the ARCs as “trading securities” in accordance with SFAS No. 115. Please tell us and revise future filings to quantify the amount of securities that are recorded as trading and discuss where the previously unrealized loss of \$5,551 has been recorded on your statement of operations.

Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter with your response that keys your responses to our comments and provides any requested information. Detailed letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your responses to our comments.

You may contact Kristin Lochhead, Staff Accountant, at (202) 551-3664 or me at (202) 551-3604 if you have questions regarding comments on the financial statements and related matters. You may also contact Brian Cascio, Branch Chief, at (202) 551-3676. Please contact Ruairi Regan, Staff Attorney, at (202) 551-3269 or Tim Buchmiller, Reviewing Attorney, at (202) 551-3635 if you have any other questions.

Sincerely,

Kate Tillan
Assistant Chief Accountant