



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

Mail Stop 3030

February 4, 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  
File No. 1-08403**

Dear Mr. Zike:

We have reviewed your response dated January 15, 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.

Form 10-K for the fiscal year ended June 30, 2008

Consolidated Financial Statements, page 50

Note D. Joint Ventures and Investments, page 73

1. We note your response to prior comment 7 in our letter dated December 30, 2008 that you account for your investment in Cobasys based on the equity method under APB 18. We further reference the disclosure on page 31 that you have not reported any earnings or losses from Cobasys because your contributions have been non-cash items, including intellectual property and expertise. Please tell us how this is consistent with the equity method of accounting which requires that the investor's share of the net income or loss of an equity method investee be included in the investor's income statement.
2. Refer to prior comment 8 in our letter dated December 30, 2008. Please provide us with a more detailed analysis of why you are not the primary beneficiary of Cobasys, including your analysis of each of the factors described in paragraph 14 of FIN 46-R. Please include how you considered that CTV is no longer funding Cobasys and the license agreement between Cobasys and Energy Conversion Devices in your analysis.
3. As a related matter, since you have concluded that Cobasys is a variable interest entity under FIN 46 but you are not the primary beneficiary, please revise future filings to disclose:
  - The nature of the entity's involvement with the VIE and when that involvement was initiated.
  - The nature, purpose, size, and activities of the VIE.
  - The reporting entity's estimated maximum exposure to loss as a result of its involvement with the VIE.

Refer to paragraph 24 of FIN 46-R.

Item 12. Security Ownership of Certain Beneficial Owners and Management, page 9

4. We note from your response to prior comment 9 that you relied upon an ownership summary report of NASDAQ Online in preparing your beneficial ownership disclosures. Please be advised that, pursuant to Instruction 3 to Item 403 of Regulation S-K, registrants are deemed to know the contents of any statements filed with the Commission pursuant to Section 13(d) or Section 13(g) of the Exchange Act. In this regard, we note the Schedule 13G and the Schedule 13G/A filed by Legg Mason Capital Management, Inc. and Clint D. Coghill on February 14, 2008. Please tell us why you did not rely upon the

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information set forth in those filings which were available at the time you prepared your beneficial ownership disclosures. For example, tell us if you knew or had reason to believe that such information was not complete or accurate or that a statement or amendment should have been filed and was not.

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