



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-7010

Mail Stop 7010

May 19, 2009

By U.S. Mail and Facsimile

Mr. David Eichinger
Chief Financial Officer
Synthesis Energy Systems, Inc.
Three Riverway, Suite 300
Houston, TX 77056

Re: Synthesis Energy Systems, Inc.
Form 10-K for the Fiscal Year Ended June 30, 2008
Form 10-K/A for the Fiscal Year Ended June 30, 2008
Form 10-Q for the Fiscal Quarter Ended September 30, 2008
Form 10-Q for the Fiscal Quarter Ended December 31, 2008
Definitive Proxy Statement on Schedule 14A filed January 7, 2009
Form 10-Q for the Fiscal Quarter Ended March 31, 2009
File No. 001-33522

Dear Mr. Eichinger:

We have reviewed your response letter dated April 17, 2009 and have the following additional comment. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. After reviewing this information, we may or may not raise additional comments

Form 10-Q for the Fiscal Quarter Ended March 31, 2009

Item 2. Management's Discussion and Analysis - Critical Accounting Policies, page 24

1. We note your responses to prior comments one, two, and three and the additional disclosures you provided in your most recent Form 10-Q. In future filings, please expand your disclosures under critical accounting policies as noted:
 - Revise your disclosures related to VIE's to specifically identify each VIE you evaluated, disclose and discuss how you account for each VIE, and explain how the relevant facts and circumstances related to each VIE impact your accounting;
 - Provide disclosures related to the significant estimates and assumptions underlying your determination that the agreements associated with the HH

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Joint Venture do not contain a lease and discuss the impact of that determination; and

- Revise your disclosures related to impairments to more specifically address when and how you assess different asset types for impairment, disclose if you performed impairment analyses for specific material assets/asset groups during the periods presented, discuss the facts and circumstances you considered in determining if an impairment analysis was necessary, and quantify and discuss the material assumptions underlying your determination of the fair value of the assets you tested and provide sensitivity analyses that show the potential impact of changes in those assumptions. For the HH Joint Venture, specifically address the impact of the Supplementary Agreement.

* * *

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

If you have any questions regarding these comments, you may contact Dale Welcome, Staff Accountant, at (202) 551-3865, Anne McConnell, Senior Staff Accountant, at (202) 551-3709 or, in their absence, to the undersigned at (202) 551-3768.

Sincerely,

John Cash
Accounting Branch Chief