



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

Mail Stop 7010

February 4, 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-Q for the Fiscal Quarter Ended September 30, 2008  
Form 10-K/A for the Fiscal Year Ended June 30, 2008  
Definitive Proxy Statement on Schedule 14A filed January 7, 2009  
File No. 001-33522**

Dear Mr. Eichinger:

We have reviewed your filings and have the following comments. Where indicated, we think you should revise your documents in response to these comments. If you disagree, we will consider your explanation as to why our comments are 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

Item 1. Description of Business, page 1

1. In future filings, please disclose the year in which you were organized and your form of organization pursuant to Item 101(a)(1) of Regulation S-K.

2. In future filings, please begin your discussion of your business, as applicable, by indicating the fact that you are in the development stage and have had limited operations.
3. In future filings, please describe who your customers are and your methods of distribution for your products and services.
4. In future filings, please disclose your dependence upon a single customer or a few customers, the loss of which would have a material adverse effect on the business pursuant to Item 101(c)(1)(vii) of Regulation S-K.

Item 7. Management's Discussion and Analysis..., page 30

General

5. In future filings, please disclose information regarding your critical accounting policies. Please refer to Section V. of Release No. 33-8350, *Interpretation - Commission's Guidance Regarding Management's Discussion and Analysis of Financial Condition and Results of Operations* for guidance.

Liquidity and Capital Resources, page 33

Off Balance Sheet Arrangements, page 36

6. In future filings, please disclose the terms of your letters of credit, including the interest rate, pledged collateral and whether or not you are in compliance with the terms of the agreement.

Item 8. Financial Statements and Supplementary Data, page 39

Note 3 – Current Projects, page 50

Hai Hua Joint Venture, page 50

7. Your disclosure states that for the first 20 years, 95% of all net profits and losses of the HH Joint Venture will be distributed to you, and thereafter, the profit distribution percentages will be changed and you will receive 10% of the net profits and losses. It appears from your disclosure that you may be conveying the joint venture to Hai Hua over the 20-year term. In this regard, please explain to us your accounting for this joint venture and the related syngas purchase and sale agreement, particularly as it relates to the change in the profit distribution, and including any consideration given to EITF 01-08, *Determining Whether an Arrangement Contains a Lease*.

Note 7 – Intangible Assets, page 59

8. Please tell us and revise future annual and quarterly filings to disclose and discuss your current status and ability to meet each of the requirements under the license agreement with GTI.

Exhibits 31.1 and 31.2

9. In future filings, please file the certification exactly as set forth in Item 601(b)(31)(i) of Regulation S-K.

Form 10-Q for the Fiscal Quarter Ended September 30, 2008

Item 1. Financial Statements, page 1

General

10. In note 2 you indicated that you adopted SFAS 157. In this regard, please supplementally provide us, and revise future filings to disclose, the information required by paragraph 32 of SFAS 157, as it relates to your marketable securities.

Item 2. Management's Discussion and Analysis...page, 10

Liquidity and Capital Resources, page 13

Hai Hua Joint Venture, page 13

11. Given the importance of available funding for the Hai Hua Joint Venture, please revise future filings to include a more specific and comprehensive discussion of the significant covenants in the joint venture's loan agreement, as well as whether the joint venture is in compliance with such covenants at each balance sheet date.

Golden Concord Joint Venture, page 14

12. You disclosed in your Form 10-K for the fiscal year ended June 30, 2008 that the remainder of your equity contribution to the Golden Concord Joint Venture was due no later than September 3, 2009. However, in your Form 10-Q for the fiscal quarter ended September 30, 2008, you disclosed that the additional equity contribution won't be funded until acceptable financing can be obtained. Please tell us and clarify in future filings:
- why there was a change in the requirement for the additional equity contribution;
  - if/when you expect acceptable financing to be obtained;
  - if/how the lack of acceptable financing will impact the joint venture; and
  - if/how the lack of acceptable funding may impact your future operations.

YIMA Project and North American Coal, pages 14 and 15

13. In regard to YIMA and North American Coal, please revise future filings to provide more specific information regarding the actual steps and the anticipated timing of each step necessary to form and continue each joint venture/development project. Please also address if/how not successfully completing each step could impact your future operations.

Expiration of Development Agreement with CONSOL Energy, page 15

14. In regard to the expiration of the development agreement with CONSOL Energy, please tell us and revise future filings to address the reasons why a formal joint venture agreement was not entered into and if/how not entering into such an agreement has impacted or may impact your future operations.

Outlook, page 15

15. Please address the recent global economic downturn and its current and expected future impact on your operations, financial position and liquidity. Additionally, please expand your liquidity discussion to address the expected impact to current and future cash flows and how you expect recent economic events to impact your sources and uses of liquidity.

Form 10-K/A for the Fiscal Year Ended June 30, 2008

General

16. In future filings where you are not incorporating by reference Part III information that is included in your proxy statement, please ensure that this information is also fully described in any amendment to your annual report.

Item 10. Directors, Executive Officers and Key Employees, page 1

17. In future filings, please state the period Donald Bunnell has served as a director.

Item 13. Certain Relationships and Related Transactions, and Director Independence, page 15

18. In future filings, please describe your policies and procedures for the review, approval, or ratification of any transaction required to be reported under Item 404(a) of Regulation S-K. Please refer to Item 404(b) of Regulation S-K.

Form 10-K/A for the Fiscal Year Ended June 30, 2008 and  
Definitive Proxy Statement on Schedule 14A filed January 7, 2009

Corporate Governance

19. We note your statement that historically you have not had a formal policy concerning stockholder recommendations to the Nominating and Governance Committee (or its predecessors), other than the provisions contained in your bylaws. In future filings, please disclose whether there are any differences in the manner in which the Nominating and Governance committee evaluates nominees for director based on whether the nominee is recommended by a stockholder. Discuss provisions in your bylaws as applicable. See Item 407(c)(2)(vi) of Regulation S-K.

Compensation Discussion and Analysis

20. In future filings, please disclose the companies you use to benchmark your compensation. If you have benchmarked different elements of your compensation against different benchmarking groups, please identify the companies that comprise each group. Please refer to Item 402(b)(2)(xiv) of Regulation S-K.
21. In future filings, please disclose where you target each element of compensation against the peer companies and where actual payments fell for each named executive officer within targeted parameters. To the extent actual compensation was outside a targeted percentile range, please explain why.
22. In future filings, please disclose the elements of individual performance you consider when deciding to increase or decrease the base salaries of your executive officers pursuant to Item 402(b)(2)(vii) of Regulation S-K.
23. In future filings, please provide quantitative disclosure of the terms of the necessary targets or performance objectives to be achieved in order for your executive officers to earn their incentive compensation. Please disclose the targets or provide a detailed supplemental analysis supporting your conclusion that disclosure of targets is not required because it would result in competitive harm such that you may exclude it under Instruction 4 to Item 402(b) of Regulation S-K. Please note that to the extent disclosure of the quantitative or qualitative performance-related factors would cause competitive harm, you are required to discuss how difficult it will be for you to achieve the target levels or other factors.
24. In future filings, please disclose the factors used to determine the long-term equity incentive compensation award for each of the named executive officers.

Potential Payments upon Termination or Change of Control

25. In future filings, please disclose the extent to which any change of control or termination payments are wholly or partially conditioned on non-compete, non-solicitation and other negative covenants. Refer to Item 402(j)(4) of Regulation S-K.
26. In future filings, please consider reformatting the disclosure to provide information about the potential payouts in tabular format that shows the maximum payouts in the applicable circumstances. Columns of the table could be presented for payments owed for employee termination for good reason, employer termination for cause, payments upon termination for change in control, and other events you describe. Such a presentation might make the disclosure concise and more accessible, and would allow you to consolidate and simplify associated text. See Section VI of Release No. 33-8732A, which refers to the use of tabular presentations or bullet lists for complex material, wherever possible.

Summary Compensation Table

27. In future filings, please include the “grants of plan based awards” table and the “option exercises and stock vested” table, as applicable, pursuant to Items 402(d) and (g) of Regulation S-K.

\* \* \*

Please respond to these comments 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 responses to our comments 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.

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 all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. Since the company and its management are 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 connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in their filings;
- 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

Mr. David Eichinger  
Synthesis Energy Systems, Inc.  
February 4, 2009  
Page 7

- 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.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

You may contact Sherry Haywood, Staff Attorney, at (202) 551-3345 if you have any questions regarding comments on legal matters. If you have any questions regarding comments on financial statements or related matters, 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