



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

DIVISION OF  
CORPORATION FINANCE

April 25, 2013

Via E-mail

Kevin Kelly  
Chief Accounting Officer  
Synthesis Energy Systems, Inc.  
Three Riverway, Suite 300  
Houston, TX 77056

**Re: Synthesis Energy Systems, Inc.  
Registration Statement on Form S-3  
Filed April 5, 2013  
File No. 333-187760**

Dear Mr. Kelly:

We have limited our review of your registration statement to those issues we have addressed in our comments. 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 by amending your registration statement and providing the requested information. Where 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 registration statement and the information you provide in response to these comments, we may have additional comments.

Prospectus Cover Page

1. It appears that the offering is being conducted in reliance upon General Instruction I.B.6 of Form S-3. If true, please revise the prospectus cover page to disclose the calculation of the aggregate market value of your outstanding voting and nonvoting common equity pursuant to General Instruction I.B.6 and the amount of all securities offered pursuant to General Instruction I.B.6 during the prior 12 calendar month period. Refer to Instruction 7 to General Instruction I.B.6 of Form S-3.

Incorporation by Reference, page 3

2. Please revise the first bullet point to reflect September 27, 2012 as the actual filing date for your most recent Form 10-K.

Description of Debt Securities, page 8

3. In the first paragraph, you state that the senior debt securities “will be issued under one or more senior indentures” and the subordinated indentures will be issued “under one or more subordinated indentures.” Please note that pursuant to Section 309(a)(1) of the Trust Indenture Act of 1939, an indenture under which a security is to be issued is deemed qualified when the registration statement becomes effective as to such security; therefore the indenture must be included as an exhibit to the registration statement at time of effectiveness. Please file each form of the senior and subordinated indentures as an exhibit to the registration statement with your next pre-effective amendment. For additional guidance, refer also to Question 212.19 of the Securities Act Rules Compliance and Disclosure Interpretations, available on our website.
4. We note that you intend to file the Statement of Eligibility of Trustee on Form T-1 as an exhibit to a current report on Form 8-K. To the extent that you are relying on Section 305(b)(2) of the Trust Indenture Act of 1939 to designate the trustee on a delayed basis, you must separately file the Form T-1 under the electronic form type “305B2,” not as an exhibit to a Form 8-K that is incorporated by reference into the registration statement. Please confirm your understanding, and revise your footnote disclosure for Exhibit 25.1 as appropriate. Refer to Question 220.01 of the Trust Indenture Act of 1939 Compliance and Disclosure Interpretations, available on our website. Additionally, if you are relying on Section 305(b)(2), please include the undertaking required by Item 512(j) of Regulation S-K.

Exhibit 5.1

5. Please have counsel revise the last sentence in the last paragraph on page 1 of the legal opinion to eliminate, with respect to the company, the assumption of due authorization, execution, and delivery of all documents as inappropriate. For guidance please refer to Section II.B.3.a of Staff Legal Bulletin No.19 (CF), dated October 14, 2011.
6. Since with respect to the Securities other than Common Stock, counsel must opine on the state law of the jurisdiction governing the agreement or instrument pursuant to which they will be issued, please confirm that the laws of the State of Texas and the General Corporation Law of the State of Delaware, as the case may be, govern the senior and subordinated indentures, as well as the agreements or other instruments pursuant to which the warrants, the purchase contracts and the units will be issued. We may have additional comments following the review of your response.

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 Act of 1933 and all applicable Securities Act rules require. 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.

Kevin Kelly  
Synthesis Energy Systems, Inc.  
April 25, 2013  
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Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement please provide a written statement from the company acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

Please contact Jessica Dickerson, Staff Attorney, at (202) 551-3749 or Era Anagnosti, Staff Attorney, at (202) 551-3369 with any questions.

Sincerely,

/s/ Era Anagnosti

*for* Pamela Long  
Assistant Director

cc: Robert G. Reedy (*via e-mail*)  
Porter Hedges LLP