



DIVISION OF  
CORPORATION FINANCE

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

August 12, 2014

Via E-mail

Jon Christopher Boswell  
Chief Financial Officer  
Eco-Stim Energy Solutions, Inc.  
2930 W. Sam Houston Pkwy N., Suite 275  
Houston, Texas 77043

**Re: Eco-Stim Energy Solutions, Inc.  
Registration Statement on Form S-1  
Filed July 25, 2014  
File No. 333-197634**

Dear Mr. Boswell:

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.

General

1. You disclose in your filing that you are an emerging growth company as that term is used in the Jumpstart Our Business Startups Act of 2012. It also appears the company has filed several Form S-8s such as on October 28, 2005 and March 16, 2005. Please clarify whether any sales were made under these Form S-8s and explain why you believe the company qualifies as an emerging growth company. Alternatively, please revise your filing. Please refer to Jumpstart Our Businesses Act Frequently Asked Question No. 2.
2. Given the size of the offering relative to the number of shares presently outstanding held by non-affiliates as well as the nature of the offering, it appears this transaction could be a primary offering of your shares to the public, with the selling shareholders acting as a

conduit in a distribution to the public. Please provide us with a detailed analysis as to why the proposed offering is not a primary offering on your behalf and thus should be appropriately characterized as a transaction eligible to be made pursuant to Rule 415(a)(1)(i) under the Securities Act. We may have further comments after reviewing your response. Please refer to Question 612.09 of our Compliance & Disclosure Interpretations for Securities Act Rules, which can be found on our website.

ACM Financing, page 1

3. We note that the Convertible Note and ACM Option Agreement are convertible at \$6.00 per share. Indicate the market price of your common stock on May 28, 2014.

Selling Shareholders, page 62

4. Provide the information required by Item 507 of Regulation S-K for the selling stockholders. To the extent any of the selling shareholders are not natural persons, indicate the person(s) holding investment or investor power over those shares.
5. Disclose when or how the selling shareholders acquired, or may acquire, their shares.

Security Ownership of Certain Beneficial Owners and Management, page 64

6. Please identify the natural persons who have sole or shared voting or investment control over the shares held by the entities listed in this table.

Signatures, page II-7

7. Please revise your filing to have your principal financial officer, controller or principal accounting officer and at least a majority of your board of directors sign your filing. Please see Instruction 1 to the Signatures section of Form S-1.

Closing 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 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.

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:

Jon Christopher Boswell  
Eco-Stim Energy Solutions, Inc.  
August 12, 2014  
Page 3

- 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 Angie Kim at (202) 551-3535 or, in her absence, me at (202) 551-3740 with any questions.

Sincerely,

/s/H. Roger Schwall

H. Roger Schwall  
Assistant Director

cc: Via E-mail  
Matthew Wiener  
Vinson & Elkins LLP