



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

DIVISION OF
CORPORATION FINANCE

July 16, 2015

Stanton E. Ross
President and Chief Executive Officer
Infinity Energy Resources, Inc.
11900 College Blvd., Suite 310
Overland Park, KS 66210

**Re: Infinity Energy Resources, Inc.
Registration Statement on Form S-1
Filed June 19, 2015
File No. 333-205081**

Dear Mr. Ross:

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. If 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. Please note that we will not be in a position to accelerate the effectiveness of your registration statement until our comments relating to your Form 10-K for the fiscal year ended December 31, 2014 have been resolved.
2. We note you are registering for resale 57,720,000 shares of common stock. Given the size of the offering relative to the number of shares outstanding, please provide us with a detailed analysis as to why you believe the transaction is appropriately characterized as a secondary offering that is eligible to be made under Rule 415(a)(1)(i), rather than a primary offering in which the selling shareholders are actually underwriters selling on your behalf. See Compliance & Disclosure Interpretation 612.09, available on our website at <http://www.sec.gov/divisions/corpfin/guidance/securitiesactrules-interps.htm>, for guidance in distinguishing secondary offerings from primary offerings.

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:

- 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 Anuja A. Majmudar, Attorney-Advisor, at (202) 551-3844 or Norman von Holtendorff, Senior Counsel, at (202) 551-3237 with any questions.

Sincerely,

/s/H. Roger Schwall

H. Roger Schwall
Assistant Director