



DIVISION OF
CORPORATION FINANCE

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

September 7, 2010

Bart Demosky
Chief Financial Officer
Suncor Energy Inc.
112 – 4th Avenue S.W.
Calgary, Alberta, Canada T2P 2V5

**Re: Suncor Energy Inc.
Form 40-F for Fiscal Year Ended December 31, 2009
Filed March 5, 2010
Response letter dated July 19, 2010
File No. 1-12384**

Dear Mr. Demosky:

We have reviewed your response and have the following 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 within ten business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. 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 filing and the information you provide in response to these comments, we may have additional comments.

Form 40-F for Fiscal Year Ended December 31, 2009

Annual Information Form

Reserves estimates, page 27

Reserves Evaluation Process and Controls, page 27

1. We note your response to comment 4 in our letter dated June 15, 2010. Please disclose the qualifications of the technical persons at Suncor who are primarily responsible for overseeing the preparation of reserves estimates.

Summary of Oil and Gas Reserves After Royalties, page 31

2. We note your response to prior comment 3 in our letter dated June 15, 2010. Please expand your disclosures to provide the following additional information or tell us how you believe your current disclosure is sufficient.
 - a. Item 1203(b) of Regulation S-K requires that you disclose material changes in proved undeveloped reserves, including PUDs converted into proved developed reserves. Your discussion should not be limited to PUDs converted into proved developed reserves, and combined disclosures for proved undeveloped and proved developed reserves are insufficient. Your response points us to the disclosure under the heading “In-Situ” on page 30 of your filing, where you state that approximately 28 MMbbls were moved from proved undeveloped to proved developed. We note that your chart on page 32 indicates that PUDs increased by 273 MMbbls, with oil and NGL increasing by 108, SCO decreasing by 181 MMbbls, and bitumen increasing by 346 MMbbls. Expand your disclosure to provide a greater understanding of the circumstances surrounding the increases and decreases in PUDs not explained by the 28 MMbbls that were converted to proved developed.
 - b. Discuss investments and progress made during the year to convert proved undeveloped reserves to proved developed reserves, including, but not limited to, capital expenditures. See Item 1203(c) of Regulation S-K.
 - c. With regard to your response concerning Item 1203(d) of Regulation S-K, please provide to us the time frame within which the in-situ proved undeveloped reserves that have not been converted to proved developed reserves within five years will be moved to the proved developed category.
 - d. We note that 100% of your proved “Oil Sands – Mining” reserves have been categorized as proved developed. Please explain how you have determined that all of these reserves meet the definition of proved developed as required by Regulation S-X, Rule 4-10(a)(6)(ii), and that additional development costs will not be incurred to obtain access to the reserves, such as additional costs to remove overburden. Refer also to Regulation S-X, Rule 4-10(a)(7).

Schedules E, F and G

3. We note your response to comment 5 in our letter dated June 15, 2010. Please disclose in the third party engineering reports the weighted average prices from the total company reserve report.
4. We note your response to comment 7 in our letter dated June 15, 2010, and we reissue the comment. We note your reference in your response to Sproule’s consent regarding your

use of the report. However, statements in the Sproule report under the heading “Exclusivity” suggest a limited audience and a limit on investor reliance, including the statement in the report that “[t]his report is solely for the information of Suncor and for the information and assistance of its independent public accountants in connection with their review of, and report upon, the financial statements of Suncor,” and the statement in the report that the report “should not be used, circulated or quoted for any other purpose without the express written consent of the undersigned or except as required by law.” Please revise.

5. We note your response to comment 8 in our letter dated June 15, 2010. Please omit the reference to “generally accepted engineering and evaluation principles” in the third party engineering reports.
6. We note your response to comment 9 in our letter dated June 15, 2010. Please tell us the primary economic assumptions used by RPS Energy. In addition, please provide a sample of your proposed disclosure.

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 Exchange Act of 1934 and all applicable Exchange 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.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- 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
- 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.

Bart Demosky
Suncor Energy Inc.
September 7, 2010
Page 4

You may contact Sandra Eisen at (202) 551-3864 or Brad Skinner, Senior Assistant Chief Accountant, at (202) 551-3489 if you have questions regarding comments on the financial statements and related matters. Please contact Parker Morrill at (202) 551-3696 or Laura Nicholson at (202) 551-3584 with any other questions.

Sincerely,

H. Roger Schwall
Assistant Director