



DIVISION OF
CORPORATION FINANCE

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

January 3, 2011

John K. Welch
President and Chief Executive Officer
USEC Inc.
Two Democracy Center
6903 Rockledge Drive
Bethesda, Maryland 20817

**Re: USEC Inc.
Form 10-K for the Fiscal Year Ended December 31, 2009
Filed March 1, 2010
Form 10-Q for the Fiscal Quarter Ended September 30, 2010
Filed November 3, 2010
File No. 1-14287**

Dear Mr. Welch:

We have reviewed your filings, and your response letter dated October 7, 2010, 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 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, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

Form 10-Q for the Fiscal Quarter Ended September 30, 2010

Risk Factors, page 50

We are required to meet certain milestones under the 2002 DOE-USEC Agreement..., page 58

1. We note your disclosure regarding the milestones under the 2002 DOE-USEC Agreement, and the remedies that the Department of Energy may exercise in the event of your failure to reach such milestones. With a view toward disclosure, please tell us the status of the milestones to (1) secure firm financing commitment(s) for the construction of the commercial American Centrifuge Plant (November 2010) and (2) begin commercial American Centrifuge Plant operations (August 2010). For example, please tell us whether you have renegotiated such milestones with the Department of Energy.

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.

Please contact Parker Morrill at (202) 551-3696 or Laura Nicholson at (202) 551-3584 with any questions.

Sincerely,

H. Roger Schwall
Assistant Director