

August 6, 2012

Mr. Steven A. Toelle, Director  
Nuclear Regulatory Affairs  
U. S. Enrichment Corporation  
2 Democracy Center  
6903 Rockledge Drive  
Bethesda, MD 20817

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION RELATED TO THE  
DECOMMISSIONING FUNDING PROGRAM DESCRIPTION AND DEPLETED  
URANIUM MANAGEMENT PLAN AND FINANCIAL ASSURANCE FOR  
CALENDAR YEAR 2012, PADUCAH GASEOUS DIFFUSION PLANT  
(TAC NO. L32786)

Dear Mr. Toelle:

On June 28, 2012, United States Enrichment Corporation (USEC) submitted an updated Decommissioning Funding Program Description (DFP) and Depleted Uranium Management Plan (DU Plan) for calendar year (CY) 2012 for the Paducah Gaseous Diffusion Plant (PGDP). The submittal updated the USEC CY 2012 PGDP DFP and DU Plan, dated December 22, 2011 (Agencywide Documents Access and Management System [ADAMS] Accession Number ML12006A116), which was supplemented by a letter dated March 14, 2012 (ADAMS Accession Number ML120830027). The June 28, 2012, submittal states that the estimated cost for disposal of waste and disposition of depleted uranium decreased due to a Cooperative Agreement between USEC and the Department of Energy (DOE) to support continued development and demonstration of the American Centrifuge Cascade Demonstration Test Program. USEC submitted a copy of the Cooperative Agreement along with the DFP and DU Plan. The terms of the Cooperative Agreement provide for the transfer of "title to a certain amount of depleted uranium from the United States Enrichment Corporation (USEC) to DOE." Specifically, the June 28, 2012, submittal reflects a decrease in USEC's tails disposal liability of 26,505 metric tons of depleted uranium.

The U.S. Nuclear Regulatory Commission's (NRC's) staff reviewed USEC's June 28, 2012, revision to CY 2012 PGDP DFP and DU Plan for PGDP. Based on the review to date, the staff has identified that additional information is needed before final action can be taken on your submittal.

Your response to the request for additional information, specified in the enclosure, should be provided to the NRC within 10 business days from the date of this letter.

In accordance with Title 10 of the *Code of Federal Regulations*, Section 2.390 of the NRC's Rules of Practice, a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records System component of the NRC's ADAMS. ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

If there are any questions regarding this action, please contact me at 301-492-3217, or via e-mail to [Tilda.Liu@nrc.gov](mailto:Tilda.Liu@nrc.gov).

Sincerely,

**/RA/**

Tilda Y. Liu, Senior Project Manager  
Conversion, Deconversion  
and Enrichment Branch  
Division of Fuel Cycle Safety  
and Safeguards  
Office of Nuclear Material Safety  
and Safeguards

Docket No. 70-7001  
Certificate No. GDP-1

Enclosure:  
As stated

cc: w/enclosure  
Mr. Vernon Shanks, USEC-Paducah  
Paducah Gaseous Diffusion Plant  
PO Box 1410  
Paducah, KY 42001

Mr. Randall M. DeVault  
U.S. Department of Energy – Oak Ridge  
PO Box 2001  
Oak Ridge, TN 37832

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PO Box 2001  
Oak Ridge, TN 37832

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**REQUEST FOR ADDITIONAL INFORMATION REGARDING  
UNITED STATES ENRICHMENT CORPORATION'S  
CALENDAR YEAR 2012 DECOMMISSIONING FUNDING PROGRAM DESCRIPTION AND  
DEPLETED URANIUM MANAGEMENT PLAN AND FINANCIAL ASSURANCE  
PADUCAH GASEOUS DIFFUSION PLANT (TAC NO. L32786)**

**Request for Additional Information (RAI) 1**

**Revise the Decommissioning Funding Program (DFP) to provide clarification on the means by which the certificate holder will periodically adjust the cost estimate and associated funding levels over the life of the facility to account for decommissioning and disposition of materials that might be returned under Article 9.03 of the Cooperative Agreement (Title 10 of *Code of Federal Regulations* [10 CFR], Section 76.35 (n)).**

Title 10 CFR, Section 76.35 (n) states, "...The funding program must contain a basis for cost estimates used to establish funding levels and must contain means of adjusting cost estimates and associated funding levels over the duration of the lease...."

NUREG-1757, Volume 3, Appendix A, Section A.3, recommends that licensees provide an explanation in their DFP of "the means (i.e., the method and frequency) by which they will periodically adjust their cost estimates and associated funding levels over the life of their facilities," including times when "the amount or types of materials at the facility change." Article 9.03 of the Cooperative Agreement states the following:

In the event the total costs incurred for the [American Centrifuge Cascade Demonstration Test Program] are less than \$109,587,730, either due to termination of this Agreement or for other reasons, the total amount of DUF6 transferred to DOE under Article 8 will be adjusted on a pro rata basis to equal DOE's share of the total project costs incurred. Following termination or expiration of this Agreement, [USEC] must submit an accounting of costs incurred until the point of termination or expiration to DOE's Contracting Officer within ninety (90) days of the date of termination or expiration. Within thirty (30) days of the delivery of the accounting of the total costs of the project, DOE shall notify [USEC] of the need to return title to some or all of the Transferred Material and identify the cylinders to be returned. Only title to material previously transferred by [USEC] under Section 8.04 is eligible to be transferred back to [USEC]. [USEC] will notify DOE of any objection to the return of title to the cylinders identified within ten (10) days of receiving DOE's notice. DOE shall transfer and [USEC] shall accept title to such material on the later of (i) the eleventh day after [USEC]'s receipt of DOE's notice if no objection is delivered to DOE; (ii) the date DOE and [USEC] agree to the transfer; or (iii) the date any dispute is resolved under Article 21. In no event, however, shall any cylinders be returned after the date of de-lease of the Paducah Gaseous Diffusion Plant.

According to the terms, the Cooperative Agreement can be terminated for several reasons, including USEC's discovery that it is unable to provide its portion of the cost-share agreement under Article 9.02 of the Cooperative Agreement. In the cover letter accompanying USEC's June 28, 2012, submission, the licensee discusses the potential circumstance of the return of

Enclosure

title to transferred materials from the Department of Energy back to USEC and asserts that:

To the extent DOE returns some of the transferred material back to USEC under the Cooperative Agreement, that action would occur only in the event costs less than the full amount of the DU transferred to fund the RD&D program were incurred (such as the result of a failure to meet certain limited, specified criteria within the program and DOE's determination to cease providing its share of the funding). In that circumstance, the funds for DOE's share of the remaining RD&D activities, as well as USEC's share, would be available to support the financial assurance for any returned quantities of transferred material. USEC has more than adequate liquidity for its non-ACP operations and maintains a rigorous financial planning regimen to assure continued liquidity of the corporation. Any increase in decommissioning financial assurance anticipated from a return of Transferred Material would be factored into the company's financial plan well in advance of the requirement to assure the obligation could be met at the time of a revised DFP.

The staff does not find that this explanation provides a sufficient discussion of the means by which USEC will adjust the cost estimate and associated funding levels in the event that DOE returns transferred material to USEC under Article 9.03 of the Cooperative Agreement. First, under the Cooperative Agreement, neither DOE's share nor USEC's share of the funding for the American Centrifuge Cascade Demonstration Test Program are set aside or assured for any specific activity and there is no evidence to support an assertion that either funding source will be available in the future. Second, the assertion that USEC has adequate liquidity and a rigorous financial planning regimen, without further clarification and evidence, does not explain the means by which the licensee will adjust the cost estimate or the associated funding in the event that transferred materials were returned to USEC.

## **RAI 2**

**Submit DOE/NRC Form 741 documenting the second transfer (10 CFR 76.35 (n)).**  
**10 CFR 76.35 (n) states, "...The Corporation shall establish financial surety arrangements to ensure that sufficient funds will be available for the ultimate disposal of waste and depleted uranium, and decontamination and decommissioning activities which are the financial responsibility of the Corporation ...."**

As a result of USEC's decreased tails disposal liability, the updated cost estimate in the PGDP Calendar Year 2012 DFP decreases from \$151.9 million to \$6.0 million, a reduction of \$145.9 million. USEC submitted the following mechanisms to reflect the reduced financial assurance:

- (1) a Westchester Fire Insurance Company Surety Bond reduced from \$40.9 million to \$1 million;
- (2) a Safeco Insurance Company of American Surety Bond Rider reducing the amount of the Bond from \$27.7 million to \$1 million;
- (3) Argonaut Insurance Company Surety Bond Rider reducing the amount of the Bond from \$15 million to \$3.0 million;
- (4) an unchanged Westchester Fire Insurance Company Bond in the amount of \$1 million; and
- (5) an updated standby trust agreement reflecting USEC's acquisition of the surety bond riders.

In addition to the DFP, DU Plan, financial mechanisms, and Cooperative Agreement, USEC submitted its DOE/NRC Form 741 (Agencywide Documents Access and Management System Accession Number ML121910518), which was signed and dated June 14, 2012, documenting the first of two transfers of title to depleted uranium referenced under the Cooperative Agreement. The June 28, 2012, submission states that the second transfer of title will occur in early August 2012 or sooner, and that USEC will provide the NRC with DOE/NRC Form 741 documenting the second transfer at that time. As of July 31, 2012, the NRC has not received DOE/NRC Form 741 documenting the second transfer. In order to justify the reduction in financial assurance, submit DOE/NRC Form 741 documenting the second transfer as soon as reasonably practicable.