



August 7, 2012
GDP 12-0032

ATTN: Document Control Desk
Ms. 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
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Paducah Gaseous Diffusion Plant (PGDP)

Docket No. 70-7001

Certificate No. GDP-1

**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 Ms. Liu:

The purpose of this letter is to respond to the subject request.

NRC Question

RAI 1

Revise the DFP to provide clarification on the means by which the licensee 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 (10 CFR 76.35 (n)).

10 CFR 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 at times when "the amount or types of materials at the facility change." Article 9.03 of the Cooperative Agreement states the following:

USEC Inc.
6903 Rockledge Drive, Bethesda, MD 20817-1818
Telephone 301-564-3200 Fax 301-564-3205 www.usec.com

NM 5501

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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 title to transferred materials from DOE 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.

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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.

USEC Response

DOE may only return transferred material under certain specific circumstances, including a termination of the RD&D program due to a failure to meet certain limited, specified criteria within the program or a material breach of the cooperative agreement by USEC. The funding provided through DOE's acceptance of DU is only sufficient to support the RD&D program through the end of November 2012 based on the budgeted spending. DU could only be returned if the program were terminated prior to that time. There are only two technical milestones that are required to be met during the timeframe of the program supported by DOE acceptance of DU. USEC has achieved the conditions required to meet both of these technical milestones. USEC has submitted documentation and is awaiting DOE confirmation regarding the first criterion, and is preparing the documentation for submission to DOE regarding the second. The return of DU to USEC by DOE is highly unlikely.

In the event of such a termination, USEC would submit a revised DFP and provide the required financial assurance. Sufficient funds would be available to provide the necessary collateral to obtain the required financial assurance for the returned DU. DOE must pay its share of all costs incurred prior to termination. The funds released by DOE's acceptance of DU are specifically provided to fund DOE's share of RD&D costs, so in the event of an early termination, after DOE's share of incurred costs has been covered, the funds remaining from DOE's acceptance of DU will be available to be used as needed to support financial assurance for any returned DU.

USEC funds anticipated to be used to fund its cost share of the RD&D program would also be available as a result of the early termination. USEC's share of cost for the portion of the RD&D program supported by DOE's acceptance of DU is approximately \$22 million. In addition, USEC has no restrictions on its ability to use cash on hand or available liquidity under its revolving credit facility to provide such additional cash collateral in that scenario. To the extent such additional funds would be required, for which there is no current indication, USEC would make them available at the time. As reported in its Form 10-Q filed with the Securities and Exchange Commission on August 1, 2012, USEC had \$229 million of cash on hand at the end of June 2012 (and available liquidity under its credit facility of over \$94 million) and anticipates ending the year with a cash balance of approximately \$200 million, after supporting its share of cost for the RD&D program for the entire year.

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USEC believes that the existing Section 4.0 of the DFP and Condition 14 of the Certificate of Compliance satisfies the 10 CFR 76.35 (n) requirement to adjust cost estimates and associated funding levels over the duration of the lease. USEC, however, by this response, will commit to submitting a DFP revision to NRC with the required financial assurance within 45 days of accepting title to nuclear material returned to USEC under Article 9.03 of the Cooperative Agreement.

NRC Question

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 CY 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 (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.

USEC Response

DOE/NRC Form 741 documenting the second transfer was provided to NRC by USEC letter GDP 12-0029 dated August 1, 2012.

It should be noted that this DOE/NRC Form 741 shows actual transfer to DOE of an additional

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159 MT of DU beyond that reflected in the DFP revision. This additional production was a result of a required purchase of power due to an earlier flood deferral. The DFP is based upon a production estimate made a year in advance. The amount of DU actually produced will normally vary more or less than the estimate depending on such factors as tails assay and power levels. The following table shows the DU amounts transferred to DOE and that retained by USEC.

Item	Quantity	Notes
Estimated quantity at the end of 2012	36,429 MTU	Estimate at end of 2011
Estimated DU generated in 2012	2,463 MTU	Estimate at end of 2011
Additional DU generated in 2012	159 MTU	Addtl. flood deferral power Feb - Apr
Transfer to DOE #1	-13,073 MTU	March 13, 2012 Transfer to DOE
Transfer to DOE #2	-7,988 MTU	June 13, 2012 Transfer to DOE
Transfer to DOE #3	-17,921 MTU	August 1, 2012 Transfer to DOE
Other Transfers	-5 MTU	Refed or sold
Net Balance USEC	64 MTU	Net USEC Balance
DOE Transfers + Addtl. DU generated	-38,823 MTU	As reported in DU Plan

Should you have any questions, please contact me at (301) 564-3250.

Sincerely,



Steven A. Toelle
Director, Regulatory Affairs

cc: J. Calle, Chief, Fuel Facility Inspection, NRC Region II
NRC Senior Resident Inspector, PGDP