January 27, 2006
AET 06-0019

Mr. Jack R. Strosnider
Director, Office of Nuclear Material Safety and Safeguards
Attention: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

American Centrifuge Plant
Docket Number 70-7004
Submittal of Additional Clarifying Information Related to Decommissioning Funding for the American Centrifuge Plant (TAC Nos. L32306, L32307, and L32308)

Dear Mr. Strosnider:

Pursuant to a telephone conference call held with the U.S. Nuclear Regulatory Commission staff on January 20, 2006, USEC Inc. hereby submits additional clarifying information related to the incremental decommissioning funding for machine costs for the American Centrifuge Plant as Enclosure 1 of this letter.

If you have any questions regarding this matter, please contact Peter J. Miner at (301) 564-3470.

Sincerely,

S. A. Toelle

Steven A. Toelle
Director, Nuclear Regulatory Affairs

cc: Y. Faraz, NRC HQ
B. Smith, NRC HQ

Enclosures: As Stated

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NMSS01

Enclosure 1 of AET 06-0019

Additional Clarifying Information Related to Decommissioning Funding

machines and UF_6 tails, which constitutes a major portion of the decommissioning liability, will be provided incrementally as centrifuges are built/installed and UF_6 tails generated. Full funding for decommissioning of the facilities will be provided in the initial executed financial assurance instrument.

This exemption is justified for the following reasons: 1) It is authorized by law because there is no statutory prohibition on incremental funding of decommissioning costs. 2) The requested exemption will not endanger life or property or the common defense and security for the following reasons: the unique modular aspects of the American Centrifuge technology allow enrichment operations to begin well before the full capacity of the plant is reached. Thus, the decommissioning liability for centrifuge machines and UF_6 tails is incurred incrementally as more centrifuge machines are added to the process, until full capacity of the facility is reached; at which point the UF_6 tails are generated at a relatively constant rate throughout the life of the plant. As such, requiring full funding for decommissioning liability, to include centrifuge machines and UF_6 tails disposition, incurred over the lifetime of the plant, at the time of initial license issuance, produces an unnecessary financial burden on the licensee.

Furthermore, incremental funding of decommissioning costs, to include centrifuge machines and UF_6 tails disposition, is justified based upon USEC's commitments to update the cost estimates and provide a revised funding instrument for decommissioning annually, prior to operation at full capacity, and after full capacity has been reached to annually adjust the cost estimate for UF_6 tails disposition and to adjust all other decommissioning costs periodically, and no less frequently than every three years. In addition, the relative stability of the factors, which are utilized to generate the UF_6 tails volumes, allows actual inventory values to be provided for prior periods of operation and reliable estimates for the upcoming periods of operation. The NRC has previously accepted an incremental approach to decommissioning funding costs for the United States Enrichment Corporation's operation of the GDPs. 3) Finally, granting this exemption is in the public interest for the same reasons as stated above and will facilitate deployment of gas centrifuge enrichment technology by eliminating an unnecessary financial burden on the licensee.

The following exemption from the requirements of 10 CFR 70.24 addressing criticality monitoring is identified in Section 3.10.6 of the ISA Summary and discussed in Section 5.4.4 of this License Application. Exemption is required for criticality monitoring of the UF_6 cylinder storage yards.

- 10 CFR 70.24, *Criticality Accident Requirements*, requires that licensees authorized to possess special nuclear material in a quantity exceeding 700 g of contained ^{235}U shall maintain in each area in which such licensed special nuclear material is handled, used, or stored, a monitoring system capable of detecting a criticality that produces an absorbed dose in soft tissue of 20 rads of combined neutron and gamma radiation at an unshielded distance of two meters from the reacting material within one minute.

10.10.4 Funding Arrangements

Per the exemption request in Section 1.2.5 of this license application, the financial assurance for a portion of the decommissioning costs to include disposition of centrifuge machines and UF_6 tails will be provided incrementally as centrifuges are built/installed and UF_6 tails generated. The modular aspect of the American Centrifuge technology allows enrichment operations to begin well before the full capacity of the plant is reached. Thus, the decommissioning liability for centrifuge machines and UF_6 tails is incurred incrementally as more centrifuge machines, and associated equipment, are added to the process, until such time as full capacity of the facility (i.e., 3.5 million SWU) is achieved. Once full capacity of the facility is achieved, the UF_6 tails are generated at a relatively constant rate throughout the life of the plant.

Full funding for decommissioning of the facilities will be provided in the initial executed financial assurance instrument. To ensure adequate financial assurance is in place as centrifuge machines, and associated equipment, are added to the process and placed into operation, USEC will update the cost estimates and provide a revised funding instrument to NRC annually prior to operation at full capacity. Once full capacity of the facility is achieved, USEC will annually adjust the cost estimate for UF_6 tails disposal and all other decommissioning costs will be adjusted periodically, and no less frequently than every three years. In this way, financial assurance will be made available as the decommissioning liability is incurred. This exemption is justified based on the unique modularity aspects of centrifuge technology that allow enrichment operations to begin well before the full capacity of the plant is reached. In addition, the NRC has accepted an incremental approach to funding disposal cost of tails for the GDPs. Financial assurance will be provided in the form of a surety method or other guarantee method as required by 10 CFR 70.25(f). The selected guarantee method is described in the DFP, included as part of this license application. In the DFP, methods are described for periodic adjustments in the cost estimate and resulting necessary adjustments to the funding method.

Period of Operation: The License Application seeks authorization to operate for a period of 30 years.

Decommissioning Costs: USEC has prepared a site-specific decommissioning cost estimate for the decommissioning of the ACP and disposal of the UF_6 tails. This cost estimate utilizes current information regarding the activities and associated costs of decommissioning the 3.5 million SWU plant.

The estimate and associated funding mechanisms will be adjusted over time, in accordance with the applicable provisions of 10 CFR Part 70 as described in Section 5.0 of this plan.

Decommissioning Funding: As set forth in this DFP, USEC presently intends to utilize a surety bond to provide reasonable assurance of the availability of decommissioning funds when needed. This funding mechanism is intended to satisfy the provisions of 10 CFR Part 70 with respect to decommissioning financial assurance for license applicants. However, as described in Section 1.0 of this plan, USEC may choose to utilize alternate financial assurance funding methods. As described in Section 10.10.4 of the License Application for the American Centrifuge Plant, the financial assurance for a portion of the decommissioning costs to include the disposition of centrifuge machines and UF_6 tails will be provided incrementally as centrifuges are built/installed and UF_6 tails generated. Full funding for decommissioning of the facilities will be provided in the initial executed financial assurance instrument. In this way, financial assurance will be made available as the decommissioning liability is incurred.

3.0 DECOMMISSIONING COST ESTIMATE

Pursuant to 10 CFR 70.25(e) and the guidance provided by the NRC in NUREG-1757, *Consolidated NMSS Decommissioning Guidance*, USEC has evaluated the estimated costs of decommissioning the ACP. These estimated costs involve plant decommissioning costs and tails disposal costs. The plant will be decommissioned such that the facilities may be released for unrestricted use. The estimated costs for decommissioning are patterned after NRC guidance in Appendix A of NUREG-1757 Volume 3, as set forth in the tables contained in Appendix C and D of this DFP and noted below (Note: To maintain consistent table sequence numbers with those presented in NUREG-1757, Appendix A, Tables 3.1 through 3.3 are not used):

- Facility Description Summary (Table C3.4 and Table C3.4A)
- Number and Dimensions of Facility Components (Table C3.5 and Table C3.5A)
- Planning and Preparation (Table C3.6)
- Decontamination or Dismantling of Radioactive Facility Components (Table C3.7)
- Restoration of Contaminated Areas on Facility Grounds (Table C3.8)
- Final Radiation Survey (Table C3.9)