



January 6, 2006
AET 06-0001

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
Submission of Additional Clarifying Information Related to Material Compatibility and Initial
Conditions for the American Centrifuge Plant (TAC Nos. L32306, L32307, and L32308)

Dear Mr. Strosnider:

Pursuant to a conference calls held with the U.S. Nuclear Regulatory Commission staff on December 14 and 21, 2005, USEC Inc. hereby submits additional clarifying information related to the topics of material compatibility and establishment of initial conditions, respectively, 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,

Steven A. Toelle
Director, Nuclear Regulatory Affairs

cc: Y. Faraz, NRC HQ
N. Garcia-Santos, NRC HQ
B. Smith, NRC HQ
W. Troskoski, NRC HQ

Enclosures: As Stated

N/11/25/01

Enclosure 1 of AET 06-0001
Additional Clarifying Information
(Non-Proprietary)

Enclosure 1 of AET 06-0001

The following provides USEC Inc.'s (USEC) responses for the December 14 and 21, 2005 conference calls conducted with the NRC to discuss the topics of Material Compatibility and Initial Conditions, respectively, for the American Centrifuge Plant.

- 1) Provide the technical basis for the material selection of components in systems subject to UF_6 and HF. Specifically:
 - Specifications of the materials to be used
 - The expected corrosion/erosion rates
 - Expected life of components
 - References/technical standards used in the selection process (specific ASTM, USEC references, etc.)

USEC Response

Sections 3.0, 3.6, and 3.15 of the Integrated Safety Analysis (ISA) Summary have been revised and Section 3.14 entitled "Materials of Construction" has been added to the ISA Summary to discuss materials of construction and compatibility. The types of materials expected to be used where UF_6 is being processed, along with anticipated corrosion and erosion rates, expected component life cycles, and the associated USEC references are identified.

Changed pages are being provided by USEC letter AET 06-0002.

- 2) Describe the methodology for wet air inleakage prevention, monitoring, and correction.

USEC Response

Section 3.8.8 entitled "Inleakage Control" has been added to the ISA Summary to discuss inleakage prevention, control, monitoring, and corrective actions.

Changed pages are being provided by USEC letter AET 06-0002.

- 3) Provide a clearer discussion of how Initial Conditions are established for the ISA.

USEC Response

Section 4.4.2.1 of the ISA Summary has been revised to clarify how Initial Conditions are established and credited within the ISA and define the baseline for the analyses.

Changed pages are being provided by USEC letter AET 06-0002.

Information contained within
Does not contain
Export Controlled Information

Reviewer: D.A. Hupp
Date: January 5, 2006