



October 28, 2008
GDP 08-0028

Mr. Michael Raddatz, Sr. Project Manager
Enrichment and Conversion Branch
Fuel Facility Licensing Directorate
Division of Fuel Cycle Safety and Safeguards
Office of Nuclear Material Safety and Safeguards
Attention: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

**Portsmouth Gaseous Diffusion Plant (PORTS)
Docket No. 70-7002; Certificate No. GDP-2
Response to Request for Additional Information on Amendment Request GDP 08-0020**

Dear Mr. Raddatz:

The purpose of this letter is to respond to your October 14, 2008 correspondence (TAC NO. L32459) requesting some additional information in regards to USEC's Certificate Amendment Request (CAR) described in GDP 08-0020, dated August 18, 2008.

USEC's response to your specific questions is provided in the attached enclosure.

Should you have any questions or require additional information, please contact me at (301) 564-3250. There are no new commitments in this submittal.

Sincerely,

Steven A. Toelle
Director, Regulatory Affairs

Reference: Correspondence from Michael Raddatz (NRC) to Steven A. Toelle (USEC), dated October 14, 2008, Request For Additional Information on Certificate Amendment Request (GDP 08-0020), Revision To Technical Safety Requirement Table 3.2.2-1, ON-Site Functional Staffing Requirements (TAC NO. L32459)

Enclosure: Response to Request for Additional Information on USEC's Certificate Amendment Request GDP 08-0020

cc: D. Hartland, Sr. Fuel Facility Inspector, NRC Region II
J. Henson, Chief, Fuel Facility Inspection, NRC Region II

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Enclosure to GDP 08-0028

Response to Request for Additional Information on
USEC's Amendment Request GDP.08-0020

**Response to Request for Additional Information on
USEC's Amendment Request GDP 08-0020**

NRC Question RP-1:

In accordance with 10 CFR 20.1501, explain what surveillance and monitoring will continue to occur after a facility is placed in "cold shutdown." In the description of "cold shutdown," it is unclear whether all gaseous UF₆ will be removed to a negative level prior to ceasing monitoring and surveillance. Please clarify the time frame for removing hazards from the process when placing it in "cold shutdown" and discontinuing monitoring and surveillance. Also clarify what is meant by "negative" level.

USEC's Response:

USEC intends to remain in compliance with appropriate CFR, TSR, SAR, etc. requirements whether or not there is a cascade operator stationed at all times in the facility through effective work force utilization. As such, the Radiation Protection program as described in SAR 5.3 will be maintained in "cold shutdown" facilities still leased to USEC.

As a point of clarity, the CAR statement related to ceasing the performance of surveillance and maintenance after a facility is placed in "cold shutdown" was specifically directed to those activities determined to have been necessary for ensuring the ability to restart the cascade cells and not actions required to maintain regulatory compliance. Gaseous UF₆ in the cold shutdown cascade cells is reduced to a UF₆ negative or "negative" level. SAR 3.1.1.4.1.4 defines a UF₆ negative as a condition in which a reduction of the UF₆ concentration for a given system has been evacuated and/or diluted to less than 20 parts per million (ppm) at a system pressure of 1.0 psia or less than an equivalent concentration, based on system pressure. As noted in the CAR, all the cell equipment in a cascade facility will have been moved into Mode VI (cold shutdown status) prior to not maintaining an operator at all times in the facility.

In addition to the cell equipment being at a UF₆ negative any solid uranium deposits will have been reduce to quantities below an individually always safe mass.

NRC Question RP-2:

The amendment request states that this primarily affects only the X-330 and X-333 process facilities, yet the proposed Table 3.2.2-1 includes Mode VI as an operation mode for the X-342, X-343, and X-344 facilities as well. What is the plan for those additional facilities for which mode VI is listed?

**Response to Request for Additional Information on
USEC's Amendment Request GDP 08-0020**

USEC Response:

The situation of having a facility in which an operational mode "shutdown" that requires continual operator presence only exists for the X-326, X-330 and X-333 cascade facilities. For the X-342, X-343 and X-344 facilities, Mode VII addresses the shutdown condition of the facilities.

NRC Question RP-3:

You state that this change will be effective when all building cell operating equipment has been shutdown. Please provide a list of other types of activities that will continue to take place within these buildings after continuous operator presence is no longer required.

USEC Response:

The majority of future activities will be related to the ultimate preparation of the facility for de-leasing as requested by DOE. USEC at this time can only speculate as to the full scope of these activities. However, in general, such activities could involve risk mitigation of uranium contamination and HF in cascade equipment, mitigation of hazardous material (e.g. lube oil, PCBs, etc.) and mitigation of security risks associated with classified materials. USEC has plans to remove as necessary shutdown equipment as operating spares for use at the Paducah plant.