



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

*NMS*  
*Portions - B. Smith - Ex 2*

July 6, 2006

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FROM: William M. Dean *[Signature]*  
Assistant for Operations, OEDO

SUBJECT: STATUS OF THE AMERICAN CENTRIFUGE LEAD CASCADE FACILITY AND AMERICAN CENTRIFUGE PLANT

The staff briefed Commissioner Merrifield on July 5, 2006, on the status of the USEC Inc., American Centrifuge Lead Cascade Facility and American Centrifuge Plant. Enclosed is a copy of the material used for the briefing.

Enclosure:  
As stated

Information in this record was deleted  
in accordance with the Freedom of Information  
Act, exemptions 2  
FOIA- 2006-0261

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## USEC, Inc American Centrifuge Lead Cascade Facility

### Background:

The American Centrifuge Lead Cascade Facility is a test and demonstration facility. The staff issued its 5-year operational license to USEC on February 24, 2004. The Lead Cascade will utilize up to 240 centrifuges. Only small samples of enriched uranium will be withdrawn. The Lead Cascade will be housed in an existing DOE Gas Centrifuge Enrichment Plant building at the Portsmouth gaseous diffusion plant in Piketon, Ohio. During operations, the LCF will employ about 50 workers. EX 2

On March 24, 2004, the NRC and DOE signed a Memorandum of Understanding (MOU) which delineates each Agency's roles and responsibilities concerning regulatory oversight of the Lead Cascade facility to avoid dual regulation. The MOU will also ensure that USEC's activities, to be conducted during centrifuge disassembly/assembly and operational phases of the Lead Cascade, have regulatory continuity.

### Operational Readiness Review:

- License requires that NRC complete an operational readiness review (ORR) before uranium hexafluoride is introduced into the cascade facility
- License also requires that the decommissioning funding plan financial assurance instruments be provided to NRC for review and approval. These are currently under review.
- A license amendment is also currently under review. The amendment revises items relied on for safety (IROFS) EX 2
- Licensee planned to introduce uranium hexafluoride into the cascade facility in June 2006
- NRC ORR effort began in March 2006 and was originally scheduled to be completed in May 2006
- Due to the nature and number of issues identified by NRC during the ORR, the licensee requested the NRC delay further ORR inspections to allow the licensee to ensure its readiness for the remaining inspections. The final ORR related inspection is scheduled for early July 2006
- Sixteen of eighteen designated program areas have been reviewed

Enclosure

- The results of the ORR will be documented in two reports. One of these reports will include the security and material control and accountability reviews and will not be publicly available. The other report will cover the remainder of the review areas and will be publicly available.
- Staff continue to coordinate regulatory oversight transition issues with DOE as described in the March 24, 2004, MOU

#### ORR Inspection Program Areas

Completed: Radiation Protection, Environmental Protection, Management Organization and Controls, Electrical/Instrumentation, Criticality Safety, Chemical Safety, Fire Protection, Emergency Preparedness, Records Management and Document Control, Training, Operations, Corrective Actions Program, Waste Management, Security, Material Control and Accountability, and Transportation

Remaining: Maintenance and Surveillance and Configuration Control

#### ORR Results

Twenty-five issues have been identified by NRC during the ORR inspections that have been completed to date. Both the licensee and the Region II office are tracking these issues to ensure they are resolved before the NRC authorizes the licensee to introduce uranium hexafluoride into the cascade facility. To date, thirteen of the twenty-five issues have been closed. These issues ranged from some procedures in a specific program area that were not completed and approved to a sole Item Relied On For Safety (IROFS) that could not perform its intended function.

EX. 2

#### ORR Delay

In preparation for the NRC's ORR, the licensee had developed an internal readiness review (IRR) process that was intended to keep the number of NRC ORR identified issues to a minimum. Because of the nature and number of NRC findings, in late April, the licensee asked

the NRC to delay the remainder of the ORR inspections until it had an opportunity to complete a more rigorous internal review of its readiness. The licensee informed Region II that they would not be ready to have some program areas inspected by the NRC ORR until the week of July 10, 2006.

Issues that contributed to the failure of the licensee's internal readiness review (IRR) process to identify issues identified by the NRC ORR:

1. The licensee's IRR process included a comprehensive list of the regulatory and license requirements. The licensee staff performed a quality assurance audit that confirmed that the required items were in place or were scheduled to be put in place. However, it appears that the licensee's process did not always include an assessment of the required item that confirmed it would perform as intended.
2. The licensee relied on the support of many Portsmouth Gaseous Diffusion Plant (GDP) staff and procedures to perform some required program functions, such as environmental monitoring or radiation protection. USEC, Inc assumed that if this program function was implemented as described under the USEC Portsmouth GDP certificate, then it would meet the requirements of their license. The NRC ORR identified several instances where the program as implemented for the GDP did not completely match the regulatory and performance requirements of the gas centrifuge license or there was an issue with the current status of an element of the program that did not comply with the regulatory or license requirements.

#### Regulatory Oversight Transition

In accordance with the March 24, 2004 MOU, the transition will occur following the NRC's ORR but prior to the introduction of uranium hexafluoride into the Lead Cascade Facilities unless NRC and DOE mutually agree to a different transition date.

Staff have maintained a dialogue with the DOE counterparts to ensure that DOE is aware of the status of the ORR. In some cases, DOE inspectors have accompanied NRC inspectors as they inspected areas of common interest (e.g., security, operations, training).

Region II staff met with DOE staff in Oak Ridge on June 22 to discuss additional details of the regulatory oversight transition as the ORR approaches its conclusion.

## **USEC Inc. American Centrifuge Plant**

### **Schedule:**

The staff originally planned to issue the Safety Evaluation Report (SER) in February 2006, however, open issues have remained and the projected date for issuing the SER is now August 2006. The Final Environmental Impact Statement (FEIS, NUREG-1834) was issued on May 19, 2006. The mandatory hearing will be conducted following issuance of the SER. There are no outstanding contentions in the contested hearing. The 30 month schedule contained in the Commission order would have a licensing decision made by February 2007.

### **Safety Review:**

SER delayed due to resolution of complex issues. One issue remains in the area of decommissioning funding (disposition of depleted uranium tails).

Additional issues affecting issuance of license:

- A memorandum of understanding (MOU) between NRC and DOE regarding regulatory oversight for the ACP must be completed prior to issuance of the license. DOE recently provided the staff comments on a draft MOU that had been previously provided. A meeting with DOE was recently held regarding the security aspects. A similar MOU is currently in effect for the Lead Cascade.

- As in the Lead Cascade licensing, the NRC cannot issue a license for the ACP until the USEC-DOE lease agreement for the ACP is signed and the NRC confirms that nothing in the lease would contradict the license.

### **Environmental Review:**

The staff published and printed the FEIS in April and has distributed copies to stakeholders. The official EPA Notice of Availability was issued on May 19, 2006. As appropriate, the staff will consider whether the recent Court of Appeals decision in the Diablo Canyon proceeding requires any further action in the context of the environmental review.

### **Licensing Hearing:**

The ASLB issued a ruling in early October 2005 in which it denied admissibility of the contentions raised by the two interveners, Geoffrey Sea and PRESS. The interveners appealed the ruling to the Commission later that month. The Commission recently ruled against both interveners, and, as a result, there are no outstanding contentions.

The mandatory hearing will be conducted following the issuance of the SER.

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**Public Meeting:**

Following the issuance of the SER, the staff will conduct a public meeting in Piketon, OH, to discuss the results of the environmental, safety, and safeguards reviews and the remaining actions in the schedule.

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