

April 27, 2004

MEMORANDUM TO: Joseph G. Giitter, Chief
Special Projects Branch
Division of Fuel Cycle Safety
and Safeguards, NMSS

THRU: Brian W. Smith, Chief **/RA/**
Gas Centrifuge Facility Licensing Section
Special Projects Branch
Division of Fuel Cycle Safety
and Safeguards, NMSS

FROM: Yawar H. Faraz, Senior Project Manager **/RA/**
Gas Centrifuge Facility Licensing Section
Special Projects Branch
Division of Fuel Cycle Safety
and Safeguards, NMSS

SUBJECT: APRIL 15, 2004, MEETING SUMMARY: USEC INC.'S PROPOSED
LICENSE APPLICATION FOR IT'S AMERICAN CENTRIFUGE PLANT

On April 15, 2004, U.S. Nuclear Regulatory Commission (NRC) staff held an open meeting with United States Enrichment Corporation (USEC) Inc. staff to discuss USEC Inc.'s license application which is anticipated to be submitted to the NRC in August 2004, for a commercial gas centrifuge uranium enrichment facility known as the American Centrifuge Plant (ACP). USEC Inc. intends to construct and operate the ACP at the Portsmouth Gaseous Diffusion Plant (PGDP) site in Piketon, Ohio. I am attaching a meeting summary for your use. DOE officials and a reporter from McGraw-Hill, also attended the meeting.

Docket: 70-7004

Attachment: Meeting Summary

cc: William Szymanski/DOE	Michael Marriotte/NIRS
Dan Minter/SODI	Carol O'Claire/Ohio EMA
James Curtiss/W&S	Randall DeVault/DOE
Rod Krich/LES	Peter Miner/USEC Inc.
Bob Taft/Governor, Ohio	Mike DeWine/Senator, Ohio
Bob Ney/Congressman, Ohio	Rob Portman/Congressman, Ohio
George Voinovich/Senator, Ohio	

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OFFICIAL RECORD COPY

Meeting Summary

Date: April 15, 2004

Place: U.S. Nuclear Regulatory Commission (NRC) Offices; Rockville, Maryland

Attendees: See Attachment 1

Purpose:

The purpose of this open meeting, which was requested by USEC Inc., was to generally discuss the scope and content of USEC Inc.'s license application that is expected to be submitted in August 2004, for a commercial gas centrifuge uranium enrichment facility, the American Centrifuge Plant (ACP). USEC Inc. plans to seek a license to construct and operate the ACP at the Portsmouth Gaseous Diffusion Plant (PGDP) site in Piketon, Ohio. Department of Energy (DOE) officials and a reporter from McGraw-Hill also attended the meeting. No classified or proprietary information was discussed at the meeting.

Discussion:

Following introduction of individuals attending the meeting (Attachment 1), NRC indicated that the effectiveness of its one year review of USEC Inc.'s Lead Cascade application, which was completed in January 2004, was largely due to the high quality of the application. In its presentation (Attachment 2), USEC Inc. indicated that, like the Lead Cascade application, its ACP application will be of high quality. Concerning any responses for NRC's requests for additional information, USEC Inc. stated that it would provide timely and full responses. Although USEC Inc. will seek a license for a 3.5 million separate work unit (SWU) per year plant, its Environmental Report, which will be submitted with the license application, will discuss the impacts of a 7 million SWU per year plant. This will allow efficiencies to be incorporated in any future licensing or environmental permitting processes in the event that USEC Inc. decides to expand the ACP beyond its 3.5 million SWU per year capacity.

At the meeting, USEC Inc. provided an overall status of its gas centrifuge program. USEC Inc. stated that it had made significant progress and anticipates fully deploying the 3.5 million SWU per year ACP in Piketon by 2010, about a year ahead of the schedule outlined in the June 2002 agreement between DOE and USEC Inc. USEC Inc. projects the ACP to cost about \$1.5 billion to construct. At its K-1600 facility in the East Tennessee Technology Park (ETTP) in Oak Ridge, Tennessee, where USEC Inc. intends to individually test centrifuge rotors and other components, most of the systems were operational and rotors are in the process of being balanced. At its Lead Cascade facility in Piketon, Ohio, construction activities are ongoing.

After the business portion of the meeting, in response to a question from the reporter from McGraw Hill, USEC Inc. indicated that it plans to have the first centrifuge operational in the Lead Cascade by late 2005. The reporter asked the NRC whether it would need any data from Lead Cascade operations before granting any license for the ACP. The NRC responded that no such information should be needed to allow the NRC to make a safety determination for the ACP, as the ACP application should contain the needed safety information and USEC Inc. will be obtaining only operational data from the Lead Cascade.

USEC Inc. stated that it expects NRC's existing understanding and knowledge of the gas centrifuge technology to allow the NRC to conduct its ACP application review efficiently and effectively within 24 months. In response to a question from the NRC, USEC Inc. expects roughly half of the ACP license application and Environmental Report (ER) to be similar to the Lead Cascade application. USEC Inc. also presented a graph which showed, in general, that large portions of the Lead Cascade application documents will form the basis for the ACP application. The NRC agreed that its Lead Cascade review will add significant efficiencies to the ACP review and that it will make every effort to support a 24-month review schedule. However, the NRC pointed out that preparation of an Environmental Impact Statement for the ACP instead of an Environmental Assessment and the conduct of a mandatory hearing for the ACP may challenge the requested 24-month ACP review schedule.

USEC Inc. indicated that in addition to local and regional elected officials, an overwhelming majority of the local population strongly supports the proposed ACP. USEC Inc. brought with them to the meeting, three boxes containing over 8,000 form letters of support for the proposed ACP, mostly from Southern Ohio and Northern Kentucky residents.

Since, for the ACP, USEC Inc. will be seeking a Special Nuclear Material (SNM) license for up to ten percent U-235, the NRC alerted USEC Inc. that it would have to address the dearth of nuclear criticality experimental benchmarks between five and ten percent U-235. The NRC indicated that the need to address this issue did not arise for the Lead Cascade, as the amount of SNM that USEC Inc. is authorized to possess in the Lead Cascade is relatively small from the standpoint of criticality safety. USEC Inc. suggested that this issue should be discussed in a pre-application meeting. USEC Inc. expects to request pre-application meetings at NRC Headquarters in the June/July 2004, time-frame to discuss its proposed Integrated Safety Analysis Summary (ISA Summary), ER documents, and nuclear criticality safety for the ACP.

USEC Inc. stated that the only liquid UF_6 operations to be conducted at the ACP will be to sample UF_6 or transfer UF_6 from one cylinder to another. USEC Inc. will use electrically heated autoclaves to perform these operations. USEC Inc. will feed UF_6 into the cascade by subliming the UF_6 from the solid phase to the gaseous phase and withdraw product and tails by desubliming the UF_6 from gas to solid.

When asked about how USEC Inc. intends to address the disposition of the depleted UF_6 (tails) generated by the ACP, USEC Inc. responded that it would handle ACP's tails similar to its handling of tails that have been generated by the Paducah Gaseous Diffusion Plant and the Portsmouth Gaseous Diffusion Plant in accordance with the agreements it has with DOE. The NRC alerted USEC Inc. that, as the ACP will be subject to the National Environmental Policy Act (NEPA), USEC Inc. will need to address in its Environmental Report all environmental impacts of the ACP including any environmental impacts from the dispositioning of the tails to be generated by the ACP.

In response to a question, USEC Inc. indicated that it intends to finalize and make available to the NRC, a financial assurance plan for the ACP about six months prior to issuance of any license. The NRC cautioned USEC Inc. that, as the ACP application review process would involve a mandatory hearing, any major delays in submitting this information after the license application is submitted could impact the review schedule.

In response to a question, USEC Inc. indicated that the ISA Summary will contain a classified appendix. USEC Inc. intends to also prepare an unclassified (redacted) version of that appendix for the NRC. USEC Inc. added that, in addition to the classified portion of the ISA Summary, as was the case for the Lead Cascade facility, all non-classified portions of the ACP's ISA Summary will likely need to be withheld from public disclosure as it would contain Export Control Information.

The NRC informed USEC Inc. of the quarterly management meetings that it intends to arrange after the ACP's application is submitted to discuss the status of NRC's ongoing review and any issues that may have arisen. The NRC also informed USEC Inc. that it intends to arrange a public meeting near the ACP site, in late June or July, 2004, to inform the local population and any interested members of the public about the function of the NRC and of the review process the NRC will employ for the ACP.

Concerning the Lead Cascade facility, the NRC asked USEC Inc. to ensure that all activities that could adversely impact the Lead Cascade facility after introduction of UF₆ in the Lead Cascade, such as any radiologically contaminated equipment cutting and cleaning operations in the building that houses the Lead Cascade, are addressed in the appropriate Lead Cascade license documents. The NRC also asked USEC Inc. to address in the appropriate Lead Cascade license documents any adverse impacts DOE's proposed tails deconversion plant may have on the Lead Cascade.

NRC Action Items:

Arrange public meeting in late June or July, 2004, near the site.

Attachments: 1. Attendee list
2. Meeting handout

Attendee List

Page 1 of 3

<u>NAME</u>	<u>ORGANIZATION</u>	<u>E-MAIL ADDRESS</u>	<u>PHONE NO.</u>
Yawar Faraz	NRC	yhf@nrc.gov	(301)415-8113
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Trent Wertz	USEC	wertzt@usec.com	(301)564-3324
Ted Manes	USEC	manest@usec.com	(301)564-3336
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Dan Stout	USEC	stoutd@usec.com	(301)564-3350
Tamara Powell	NRC	tdp@nrc.gov	(301)415-5095

Attachment 1

<u>NAME</u>	<u>ORGANIZATION</u>	<u>E-MAIL ADDRESS</u>	<u>PHONE NO.</u>
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Linda Gunter	DOE/NE	(by phone)	
Dale Jackson	DOE/ORO	(by phone)	
Terri Slack	DOE/ORO	(by phone)	
James Hutson	ATI	(by phone)	
Asad Chowdhry	CNWRA	(by phone)	