

July 23, 2004

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

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: JULY 14, 2004, MEETING SUMMARY: MEETING WITH USEC INC.  
TO DISCUSS NUCLEAR CRITICALITY VALIDATION FOR USEC  
INC.'S PROPOSED AMERICAN CENTRIFUGE PLANT IN  
PIKETON, OHIO

On July 14, 2004, U.S. Nuclear Regulatory Commission (NRC) staff met with USEC Inc. (USEC) staff to discuss nuclear criticality validation for enriched uranium between five and 10 percent U-235 as USEC Inc.'s American Centrifuge Plant license application to be submitted in August 2004, will request authorization for uranium enriched up to 10 percent in U-235. I am attaching the meeting summary for your use. This summary contains no proprietary or classified information.

Docket: 70-7003

Attachment: Meeting Summary

cc: William Szymanski/DOE  
Dan Minter/SODI  
James Curtiss/W&S  
Rod Krich/LES  
Bob Taft/Governor, Ohio  
Bob Ney/Congressman, Ohio  
George Voinovich/Senator, Ohio  
Billy Spencer, Mayor of Piketon  
Harry Rioer, Pike Co. Commissioner  
Larry Scaggs, Seal Twp. Trustee  
Blaine Beekman, Pike Co. CoC Chair.  
Dan Minter, PACE  
Garry Hager, SPFPA/USEC

Michael Marriotte/NIRS  
Carol O'Claire/Ohio EMA  
Randall DeVault/DOE  
Peter Miner/USEC Inc.  
Mike DeWine/Senator, Ohio  
Rob Portman/Congressman, Ohio  
Rocky Brown, Mayor of Beaver  
Jim Brushart, Pike Co. Comm. Chair.  
Teddy West, Scioto Twp. Trustee  
Ted Wheeler, Pike County Auditor  
Kara Willis, Gov. Taft's Reg. 7 office  
Mary Glasgow, Cong. Portman

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## Meeting Summary

Date: July 23, 2004

Place: NRC Headquarters, Rockville Maryland

Attendees: See Attachment 1

Purpose:

The purpose of the meeting was to discuss nuclear criticality validation for uranium enriched to between 5 and 10 percent U-235 as USEC Inc.'s (USEC's) American Centrifuge Plant (ACP) license application to be submitted in August 2004, will request authorization for uranium enriched to 10 percent in U-235.

Discussion:

Following introductions, USEC made a presentation (see Attachment 2) describing its validation of the nuclear criticality computer code (SCALE 4.4a) as it applies to the ACP activities that could involve uranium with up to 10 percent U-235 enrichment. USEC indicated that the validation was based on 149 benchmark cases which included U-235 enrichment ranges from two to 30 percent. USEC used NUREG/CR-6698 "Guide for Validation of Nuclear Criticality Safety Calculational Methodology," January 2001, to validate the use of SCALE 4.4a for the ACP. USEC indicated that it had used ample conservatism in the areas of uncertainty and that this was documented in a validation report for the ACP. The U.S. Nuclear Regulatory Commission (NRC) asked whether it could review USEC's validation report in mid-August 2004 at USEC's Headquarters in Bethesda Maryland. USEC agreed to facilitate the NRC's request. As part of a Portsmouth Gaseous Diffusion Plant certificate oversight activity, the NRC had reviewed, and found acceptable, USEC's validation report for use of an earlier SCALE version for activities involving U-235 enrichments between five and 10 percent.

During the meeting, USEC indicated that it would not request the NRC for any other ACP pre-application meetings. USEC also indicated that it was on schedule for submitting the ACP license application next month.

**July 14, 2004  
MEETING WITH USEC INC.  
ATTENDEE LIST**

<b><u>NAME</u></b>	<b><u>AFFILIATION</u></b>	<b><u>E-MAIL ADDRESS</u></b>	<b><u>PHONE #</u></b>
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