

March 12, 2007(4:40pm)

OFFICE OF SECRETARY  
RULEMAKINGS AND  
ADJUDICATIONS STAFF

**UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION**

**BEFORE THE ATOMIC SAFETY AND LICENSING BOARD**

**In the Matter of**

**USEC INC.**

**(American Centrifuge Plant)**

**Docket No. 70-7004-ML**

**ASLBP No. 05-838-01-ML**

**March 12, 2007**

**APPLICANT'S PRE-FILED TESTIMONY CONCERNING HEARING TOPIC HTS-8  
(ACCIDENT ANALYSIS)**

- Q1. Please state your name, current position, and by whom you are employed.
- A1. My name is Peter J. Miner ("PJM"). My current position is Director, Regulatory and Quality Assurance for the American Centrifuge Plant ("ACP"). My current employer is USEC Inc. ("USEC" or "Applicant").
- A1. My name is Gregory S. Corzine ("GSC"). My current position is Nuclear Safety Manager for the ACP. My current employer is USEC Inc.
- A1. My name is Gene L. Pyzik ("GLP"). My current employer is WSMS Mid-America, LLC ("WSMS"), which serves as a consultant to the Applicant. My current position is Senior Safety Analyst/WSMS Site Lead for the ACP project.
- A1. My name is Jason E. Bolling ("JEB"). My current employer is USEC Inc. My current position is Senior Nuclear Criticality Safety ("NCS") Engineer for the ACP project.
- Q2. Please describe your professional qualifications.
- A2. (PJM) I hold a Master of Science degree in Environmental, Safety and Health Management from the University of Findlay, and a Bachelor of Science degree in

Mathematics from the University of Massachusetts. A copy of my professional qualifications is provided in USEC Exhibit #1.

A2. (GSC) I hold Bachelor of Science (1985) and Master of Science (1988) degrees in Nuclear Engineering from University of Cincinnati. I have been employed by USEC Inc. since June of 2003. I have over 18 years of experience in the nuclear power and nuclear fuel cycle industries. A copy of my professional qualifications is provided in USEC Exhibit #1.

A2. (GLP) I hold a Bachelor of Science in Mechanical Engineering from the University of Toledo, and a Master of Science in Environmental Management from the University of Findlay. I have been employed by WSMS since 2001. I have over 24 years of experience in the nuclear power and nuclear fuel cycle industries. A copy of my professional qualifications is provided in USEC Exhibit #1.

A2. (JEB) I hold a BSE in Nuclear Engineering from University of Michigan, and an MSE in Engineering Management from Ohio University. I have been employed at the Portsmouth Gaseous Diffusion Plant, since October, 1991. I have over 15 years of experience in the nuclear fuel cycle industry. A copy of my professional qualifications is provided in USEC Exhibit #1.

Q3. On whose behalf are you testifying?

A3. (PJM, GSC, GLP, JEB) I am testifying on behalf of the Applicant, USEC Inc.

Q4. Please describe your involvement in the ACP License Application.

A4. (PJM) I am USEC's Director of Regulatory and Quality Assurance for the development of the ACP License Application.

A4. (GSC) I am USEC Inc.'s Nuclear Safety Manager for the ACP License Application.

- A4. (GLP) As WSMS ACP Site Lead, I was responsible for supporting the development of the ACP Integrated Safety Analysis ("ISA") in the area of accident analysis.
- A4. (JEB) I supported the licensing efforts for the ACP in the area of nuclear criticality safety.
- Q5. Please describe your responsibilities with respect to the ACP License Application?
- A5. (PJM) I served as Project Manager for the development of the ACP License Application, ISA, Environmental Report, and supporting documents. I have provided coordination and oversight of development activities for technical subjects, drafted inputs to various functional areas, and reviewed and edited the documents. I also coordinated the development of the Applicant's responses to requests for additional information ("RAIs") from the U.S. Nuclear Regulatory Commission ("NRC").
- A5. (GSC) As Nuclear Safety Manager, I was responsible for developing and maintaining the ACP ISA. I oversaw initial development of the ACP ISA and the ACP License Application chapters addressing the ISA, Fire Safety, and Nuclear Criticality. Also, I oversaw the development of certain responses to NRC RAIs for the ACP License Application.
- A5. (GLP) I supported development of the accident analysis contained in ISA Summary Chapters 4-7 and associated appendices. I also helped develop responses to certain RAIs, supported revision of accident analyses, and am currently serving as ISA Co-Team Coordinator.
- A5. (JEB) I was the primary author of Chapter 5 (Nuclear Criticality Safety) of the ACP License Application. As such, I was responsible for the nuclear criticality safety analysis of the ACP, including the development of credible criticality accident scenarios for the

ISA. I also served on the ISA review team as a subject matter expert on NCS and UF<sub>6</sub> processing and handling. Additionally, I was primary author of the responses to RAIs on NCS issues associated with fissile material operations, criticality accident alarm systems, reactivity code validation, and the NCS program.

Q6. In an Order (Establishing a Modified Case Schedule; Issuing Questions and Identifying Hearing Topics) dated February 6, 2007, the Atomic Safety and Licensing Board (“ASLB” or “Board”) identified a series of hearing topics on which the Board has required testimony and presentations from the NRC Staff. The Staff submitted its pre-filed testimony on March 5, 2007. See “NRC Staff Testimony Related to HTS-8: Accident Analysis” (March 5, 2007). Have you reviewed the Staff’s testimony regarding Hearing Topic HTS-8?

A6. (PJM, GSC, GLP, JEB) Yes.

Q7. In its February 6, 2007, Order, the ASLB expressly authorized the Applicant to submit supplemental pre-filed testimony for the purpose of clarifying and/or supplementing the Staff’s pre-filed testimony. See February 6 Order at 3 n.4. Do you wish to provide any supplemental testimony with respect to HTS-8 at this time?

A7. (PJM, GSC, GLP, JEB) No. We concur in the Staff’s testimony regarding this hearing topic, with one qualification. In Answer 13 of its pre-filed testimony (page 17, line 12), the Staff refers to a “factor of 1000.” This phrase should read “factor of approximately 180.” The Applicant has notified the NRC Staff of this error, and the Staff has indicated that it will correct its pre-filed testimony accordingly. Finally, USEC is prepared to respond orally to any questions germane to HTS-8 that the Board may direct to the Applicant during the evidentiary hearing.

Q8. Does this conclude your testimony with respect to HTS-8?

A8. (PJM, GSC, GLP, JEB) Yes.

In accordance with 28 U.S.C. § 1746, I state under penalty of perjury that the foregoing is true and correct:

  
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Peter J. Miner

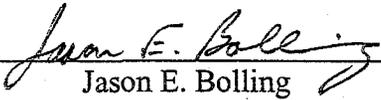
03/07/07  
Date

  
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Gregory S. Corzine

3/7/07  
Date

  
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Gene L. Pyzik

3-7-07  
Date

  
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Jason E. Bolling

3-7-07  
Date