

July 1, 2003

LICENSEE: Tennessee Valley Authority

FACILITY: Browns Ferry Nuclear Plant, Units 1, 2, and 3

SUBJECT: SUMMARY OF JUNE 10, 2003, MEETING REGARDING THE ALTERNATIVE SOURCE TERM (AST) FOR BROWNS FERRY PLANT, UNITS 1, 2, AND 3 (TAC NOS. MB5733, MB5734, AND MB5735)

### Background

On June 10, 2003, the U.S. Nuclear Regulatory Commission (NRC) staff met with Tennessee Valley Authority's (TVA's or the licensee's) representatives at the NRC Headquarters in Rockville, Maryland. The objective of the meeting was to discuss TVA's potential request for an exemption from Title 10 of the *Code of Federal Regulations*, Part 50, Appendix A, General Design Criterion (GDC) 41, for the standby liquid control (SLC) system in support of the AST application dated July 31, 2002, as supplemented by letters dated December 9, 2002, February 12, 2003, and March 26, 2003. The meeting was classified as a Category 1 meeting. Attachment 1 is a list of attendees, and Attachments 2 and 3 are copies of TVA's handout distributed during the meeting. Attachment 2 contains TVA's agenda for the meeting.

### Discussion

In its license amendment application for a full-scope AST, TVA credited the SLC system for pH control in the suppression pool, which is consistent with previous NRC staff approvals of AST amendments. In addition, TVA requested elimination of the charcoal adsorber filter testing requirements for the standby gas treatment and control room emergency ventilation filter systems. During the meeting, the licensee provided information to support its position for crediting the SLC system for accident mitigation using the criteria in Regulatory Guide 1.183, Section 5.1.2, and GDC 41. They stated that the SLC system is classified as a special safety system in that, among other things, it is subject to the augmented quality assurance program, the technical specifications require periodic verification of component performance, and the SLC system is powered by different safety-related sources and a loss of offsite power or a single power failure will not prevent the operation of the system. The proposed exemption from GDC 41 would release TVA from the requirement to apply the single-failure criterion to the injection line containment isolation check valves and control circuitry. The licensee stated that the SLC system design, the existing administrative controls, and the demonstrated system reliability are adequate to meet the underlying purpose of GDC 41.

The licensee addressed the NRC staff's comments regarding the overall reliability of the SLC system, the failure history of the piston check valves in the SLC system, the conservative radiological dose analyses in support of the exemption, the reliability of the hand switch in the control room, and the valve location with respect to the reactor vessel and other components. The licensee provided a handout (Attachment 3) that shows a cross section of the piston check valve. In addition, the licensee agreed to include in its exemption request the SLC fault tree

analysis from the probabilistic risk assessment analysis, provide an isometric that shows the valve locations and the injection lines with respect to the reactor vessel and other components, and provide detailed responses to the above comments.

TVA plans to submit the exemption request in the near future, and will withdraw the request to eliminate the charcoal adsorber filter testing requirements for the standby gas treatment and control room emergency ventilation filter systems.

#### Conclusion

The NRC staff did not make any regulatory decisions during the meeting, and will review TVA's submittals in a timely manner.

#### Comments from members of the public

Following the conclusion of the business meeting and in response to the NRC staff's request, the members of the public who were in attendance indicated that they had no comments.

Please direct any inquiries regarding this meeting to me at 301-415-1496 or [KNJ@NRC.GOV](mailto:KNJ@NRC.GOV).

Sincerely,

*/RA/*

Kahtan N. Jabbour, Senior Project Manager, Section 2  
Project Directorate II  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket Nos. 50-259, 50-260, and 50-296

Attachments: As stated

cc w/atts: See next page

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Project Directorate II  
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**Meeting Summary: ML031820439**

Package: ML031820450  
Attachment 2: ML031820710  
Attachment 3: ML031820754  
Meeting Notices: ML031500174 & ML031480841

OFFICE	PDII-2/PM	PDII-2/LA	PDII-2/SC
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DATE	6/30/2003	6/ 30/2003	7/01/2003

**ATTENDANCE LIST**

**NUCLEAR REGULATORY COMMISSION STAFF MEETING**

**WITH TENNESSEE VALLEY AUTHORITY**

**AT NRC HEADQUARTERS**

**ALTERNATIVE SOURCE TERM FOR BROWNS FERRY PLANT, UNITS 1, 2, AND 3**

**JUNE 10, 2003**

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R. Wright  
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J. Metcalf (Polstar)

**Members of the Public**

G. Broadbent (Entergy/Grand Gulf)  
M. Eades (Energy Northwest)

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