



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

June 10, 2015

**LICENSEE:** Tennessee Valley Authority

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

**SUBJECT:** SUMMARY OF MAY 21, 2015, MEETING WITH TENNESSEE VALLEY AUTHORITY REGARDING THE PLANNED EXTENDED POWER UPRATE LICENSE AMENDMENT REQUEST FOR BROWNS FERRY NUCLEAR PLANT (TAC NOS. MF4851, MF4582, AND MF4853)

On May 21, 2015, a Category I public meeting was held between the U.S. Nuclear Regulatory Commission (NRC) and representatives of Tennessee Valley Authority (TVA, the licensee) at NRC Headquarters, One White Flint North, 11555 Rockville Pike, Rockville, Maryland. The purpose of the meeting was to discuss the topic of probabilistic risk assessment (PRA) as it relates to the planned Extended Power Uprate (EPU) at Browns Ferry Nuclear Plant, Units 1, 2, and 3 (Browns Ferry). The meeting notice and agenda, dated April 24, 2015, is available in the Agencywide Documents Access and Management System (ADAMS) at Accession No. ML15134A443. A list of attendees is enclosed.

The licensee presented informational slides at the meeting. The licensee's presentation document, which was provided prior to the meeting and attached to the meeting notice, is publicly available at ADAMS Accession No. ML15134A327. The licensee's presentation began with the planned schedule for submittal of the license amendment request (LAR), and anticipated dates for implementation of the EPU. The licensee intends to submit the LAR in October of 2015. If the LAR is approved, the licensee plans to implement the EPU in 2018 for Units 3 and 1, and in 2019 for Unit 2.

The licensee described the changes to the existing PRA models that were necessary to determine the changes in core damage frequency and large early release frequency for EPU conditions. The risk evaluation for Browns Ferry includes consideration of internal events, internal flooding, internal fires, seismic events, other external events, and shutdown risk. To perform its risk analysis for EPU conditions, the licensee considered the PRA impacts of physical modifications, procedure changes, setpoint adjustments, and operating conditions.

The licensee discussed its fire PRA model, which was developed to support its transition to National Fire Protection Association (NFPA) 805. The Browns Ferry LAR to transition to NFPA-805 is currently under NRC staff review. The NRC staff queried TVA regarding the dependency of the EPU LAR on the NFPA 805 LAR. The licensee responded that the EPU LAR is not dependent on the approval of the NFPA 805 LAR.

The licensee discussed the PRA peer reviews that have been performed. Previous peer reviews have been performed, resulting in a number of Facts and Observations (F&Os). The majority of the F&Os have been addressed. Additional peer reviews are scheduled to be completed in the summer of 2015 in order to disposition the remaining F&Os.

Overall, the licensee stated that the EPU transition will result in a small change in risk, mainly due to internal events and internal fires. The slight increase in risk will be primarily driven by an increase in decay heat, and a shortened time allowed for important operator actions, such as manual control of reactor level using high pressure systems, and manual depressurization of the reactor vessel. The EPU will have minimal impact on seismic risk, shutdown risk, and the risk of other external events such as high winds and tornados.

Members of the public were in attendance by telephone. Public Meeting Feedback forms were not received. During the public comment period, a member of the public asked whether, in developing the EPU PRA, the licensee considered the number of previous plant transients, such as scrams. The licensee responded that the PRA does account for the number of previous transients. Please direct any inquiries to Ms. Allison Dietrich at 301-415-2846 or [Allison.Dietrich@nrc.gov](mailto:Allison.Dietrich@nrc.gov), or to me at 301-415-1447 or [Farideh.Saba@nrc.gov](mailto:Farideh.Saba@nrc.gov).



Farideh E. Saba, Senior Project Manager  
Plant Licensing Branch II-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

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

Enclosure:  
List of Attendees

cc w/encl: Distribution via Listserv

LIST OF ATTENDEES

May 21, 2015, PUBLIC MEETING WITH TENNESSEE VALLEY AUTHORITY

BROWNS FERRY NUCLEAR PLANT, UNITS 1, 2, AND 3

PLANNED LICENSE AMENDMENT REQUEST REGARDING EXTENDED POWER UPRATE

<b>Name</b>	<b>Organization</b>
Allison Dietrich	NRC
Farideh Saba	NRC
Shana Helton	NRC
Candace Pfefferkorn	NRC
Jennifer Hauser	NRC
Harry Barrett	NRC
Todd Hilsmeier	NRC
George Lapinsky*	NRC
Gerard Doyle	TVA
Gary Chung	TVA
Dan Kearnaughan	TVA
Dan Green	TVA
Ed Schrull	TVA
Guy Ragan	TVA
Pete Donahue	TVA
Lance Christiansen*	TVA
Eric Browne*	TVA
Garry Morgan*	Public

\*Participated by phone

Enclosure

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**/RA/**

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OFFICE	LPL3-1/PM	LPL2-2/PM	LPL2-2/LA	APLA/BC	LPL2-2/BC	LPL2-1/PM
NAME	ADietrich	FSaba	BClayton	SRosenberg	SHelton	FSaba
DATE	6/5/15	6/5/15	6/4/15	6/8/15	6/9/15	6/10/15

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