



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

June 25, 2020

LICENSEE: Tennessee Valley Authority

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

SUBJECT: SUMMARY OF JUNE 8, 2020, PARTIALLY CLOSED MEETING WITH
TENNESSEE VALLEY AUTHORITY TO DISCUSS A PLANNED LICENSE
AMENDMENT (EPID L-2020-LRM-0023)

On June 8, 2020, the U.S. Nuclear Regulatory Commission (NRC) staff held a partially closed meeting with representatives of the Tennessee Valley Authority (the licensee) to discuss a planned license amendment request (LAR) regarding the use of ATRIUM-11 fuel at Browns Ferry Nuclear Plant, Units 1, 2, and 3 (Browns Ferry). The meeting was partially closed to allow for the discussion of proprietary information. The meeting notice and agenda for this meeting, dated May 21, 2020, are available at Agencywide Documents Access and Management System (ADAMS) Accession No. ML20142A445. The licensee's slides for the meeting are available at ADAMS Accession No. ML20156A281. A list of attendees is enclosed. No regulatory decisions were made at this meeting.

The licensee's presentation described its approach for transitioning to the use of ATRIUM-11 fuel at Browns Ferry. The licensee stated that Framatome advanced methods would be needed to support the use of ATRIUM-11 fuel and that the LAR would propose the incorporation of those methods into the Browns Ferry technical specifications. Based on the licensee's evaluations, no other changes to the technical specifications would be needed to support the transition. The licensee stated that the LAR would be based on previous, similar requests for Brunswick Steam Electric Plant, Units 1 and 2, and Susquehanna Steam Electric Station, Units 1 and 2. The licensee stated that its LAR would address the requests for additional information received for the two precedent requests. In addition, the licensee stated that the LAR would include a request to adopt TSTF-564, Revision 2, "Safety Limit MCPR [Minimum Critical Power Ratio]" (ADAMS Accession No. ML18297A361). Separate from this LAR, the licensee stated that it intended to submit a LAR to revise the spent fuel pool criticality analysis to support the receipt and storage of ATRIUM-11 fuel in the Browns Ferry spent fuel pool racks. The NRC staff asked why the LAR would be separate from the ATRIUM-11 LAR, to which licensee responded that it had evaluated the need to submit the LAR and decided it was necessary based on a statement in the safety evaluation supporting the issuance of the Extended Power Uprate amendments that indicated that the spent fuel pool criticality analysis bounded ATRIUM-10XM fuel. Further, the licensee stated that, because the revised criticality analysis is only necessary to support the receipt and storage of ATRIUM-11, it views the two requests as being separate.

The licensee identified two outstanding issues related to the planned LAR that need to be resolved. The first issue is related to whether or not the NRC staff intended to perform confirmatory TRACE analyses. The NRC staff responded that these analyses are usually performed to support interactions with the Advisory Committee on Reactor Safeguards and that

it needed to confirm whether that would be necessary for this LAR. The second issue relates to incorporation of an unapproved topical report addressing the Best-estimate Enhanced Option III (BEO-III) method to determine MCPR versus time. The topical report is currently under review by the NRC staff. The licensee's preferred approach would be to incorporate the generically approved topical report as a part of the LAR. However, if the topical report approval timing does not support that, the licensee stated that it would most likely submit the LAR incorporating the methodology of the draft topical report and provide site-specific justification for its use at Browns Ferry. In that scenario, the licensee could update the LAR to reference the approved topical report, should it get approved in a timely fashion.

The NRC staff asked the licensee whether it intended to submit a LAR to update the Browns Ferry source term to account for the use of ATRIUM-11, similar to what was done at one of the precedent sites. The licensee responded that it would review the need to update the source term in accordance with the regulations at Section 50.59, "Changes, tests and experiments," of Title 10 of the *Code of Federal Regulations*. Additionally, the NRC staff requested that the licensee include a discussion in the LAR of changes in the decay heat and any impacts to the containment analyses from the use of ATRIUM-11 fuel.

Representatives from Xcel Energy participated in the meeting as members of the public. No comments or public meeting feedback forms were received.

Please direct any inquiries to me at 301-415-6459 or Michael.Wentzel@nrc.gov.

/RA/

Michael J. Wentzel, Project Manager
Plant Licensing Branch II-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

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

Enclosure: List of Attendees

cc: Listserv

LIST OF ATTENDEES

JUNE 8, 2020, PARTIALLY CLOSED MEETING WITH TENNESSEE VALLEY AUTHORITY

REGARDING A PLANNED LICENSE AMENDMENT REQUEST

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

Name	Organization
Robert Beaton	U.S. Nuclear Regulatory Commission (NRC)
Elijah Dickson	NRC
Matthew Hamm	NRC
Scott Krepel	NRC
Robert Lukes	NRC
Mathew Panicker	NRC
Ahsan Sallman	NRC
Michael Wentzel	NRC
Brandon Wise	NRC
Tom Eichenberg	Tennessee Valley Authority (TVA)
Tracy Orf	TVA
Christine Setter	TVA
Greg Storey	TVA
Steve Mazurkiewicz	Framatome
Alan Meginnis	Framatome
Kris Mitchell	Framatome
Jeff Morris	Framatome
Doug Pruitt	Framatome
Earl Riley	Framatome
Robert Schnepf	Framatome
Dan Tinkler	Framatome
Jim Tolar	Framatome
Scott Tylinski	Framatome
Tony Will	Framatome
Richard Loeffler	Xcel Energy
Sean Martin	Xcel Energy

Enclosure

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TENNESSEE VALLEY AUTHORITY TO DISCUSS A PLANNED LICENSE
AMENDMENT (EPID L-2020-LRM-0023) DATED JUNE 25, 2020

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ADAMS Accession No. ML20162A153

***via e-mail**

OFFICE	NRR/DORL/LPL2-2/PM*	NRR/DORL/LPL2-2/LA*	NRR/DORL/LPL2-2/BC*	NRR/DORL/LPL2-2/PM*
NAME	MWentzel	BAbeywickrama	UShoop (KGreen for)	MWentzel
DATE	06/18/2020	06/10/2020	06/24/2020	06/25/2020

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