



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

September 1, 2017

LICENSEE: Tennessee Valley Authority

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

SUBJECT: SUMMARY OF AUGUST 1, 2017, PRE-SUBMITTAL PUBLIC MEETING WITH TVA REGARDING A CLASS 1E UNBALANCED VOLTAGE RELAY LICENSING AMENDMENT REQUEST FOR BROWNS FERRY NUCLEAR PLANT, UNITS 1, 2, AND 3, SEQUOYAH NUCLEAR PLANT, UNITS 1 AND 2, AND WATTS BAR NUCLEAR PLANT, UNITS 1 AND 2

On August 1, 2017, a public meeting was held between the U.S. Nuclear Regulatory Commission (NRC) and representatives of Tennessee Valley Authority (TVA) in Rockville, Maryland. The purpose of this meeting was for TVA to discuss a planned license amendment request to address a generic design vulnerability in the electric power system (NRC Bulletin 2012-01).

During the meeting, TVA summarized its plan and approach using a set of presentation slides (see ADAMS Accession Number ML17212A843). The meeting notice and agenda, dated June 26, 2017, are available in ADAMS at Accession number ML17212B052. A list of attendees is enclosed

TVA stated that a combined license amendment request (LAR) will be submitted for Browns Ferry (BFN) Units 1, 2, and 3, Sequoyah (SQN) Units 1 and 2, and Watts Bar (WBN) Units 1 and 2 nuclear plants. Also, instead of specifically detecting and responding to the open phase condition (OPC) on the offsite power source, TVA will adopt a "bottom-up" approach that utilizes existing undervoltage protection circuits, with the addition of unbalance voltage protection relay schemes, and setpoint methodology to detect unbalanced voltage condition on the safety-related electrical buses. TVA stated that its proposed OPC protection system will ensure the availability of power to Class 1E load buses for any unbalanced voltage condition upstream, including the OPCs.

The NRC staff encouraged TVA to consider the following in the final LAR submittal to facilitate the staff review, in order to support the 1-year schedule to be requested by TVA:

- describe in the purpose of the LAR in light of the OPC issue and how TVA's LAR will address,
- provide detailed descriptions in the application, such as mark-up pages of the Final Safety Analysis Reports,

- because of the differences between the BFN, SQN and WBN stations, provide separate sections in the LAR to address each plant separately, in order to avoid confusion during the review. In fact, a separate LAR submittal for each plant was recommended,
- Branch Technical Position 8-9 and the Commission's Staff Requirement Memorandum (SECY-16-0068 dated March 9, 2017) should be clearly addressed, and
- include operating experience including post-modification tests information to confirm OPC is bounded by unbalanced voltage condition.

No regulatory decisions were made at the meeting. No Public Meeting Feedback forms were received.

Please direct any inquiries to me at 301-415-8480 or Andrew.Hon@nrc.gov.

For *Andrew Hon, E. Seb*

for Andrew Hon, 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, 50-327,
50-328, 50-390 and 50-391

Enclosure:
List of Attendees

cc w/enclosure: Distribution via Listserv

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ADAMS Accession Nos.: Summary ML17227A514, Notice ML17212B052, Slides ML17212A843

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