

April 17, 2015

Mr. Joseph W. Shea
Vice President, Nuclear Licensing
Tennessee Valley Authority
1101 Market Street, LP 3D-C
Chattanooga, TN 37402-2801

SUBJECT: NUCLEAR REGULATORY COMMISSION PLAN FOR THE AUDIT OF TENNESSEE VALLEY AUTHORITY'S FLOOD HAZARD REEVALUATION REPORT SUBMITTALS RELATING TO THE NEAR-TERM TASK FORCE RECOMMENDATION 2.1-FLOODING 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 (TAC NOS. MF6034, MF6035, MF6036, MF6032, MF6033, MF5857 AND MF5858)

Dear Mr. Shea

This letter documents the U.S Nuclear Regulatory Commission (NRC) staff's plan to perform a regulatory audit of Tennessee Valley Authority's (TVA) Flood Hazard Reevaluation Report (FHRR) submittals related to the Near-Term Task Force Recommendation 2.1-Flooding. The audit will be conducted over multiple sessions and the first one to be held is a webinar session on April 22, 2015. This technical audit will be performed consistent with NRC Office of Nuclear Reactor Regulation, Office Instruction LIC-111, "Regulatory Audits," dated December 29, 2008, (Agencywide Documents Access and Management System (ADAMS) Accession No. ML082900195). The NRC staff will develop an audit summary report to document its observations and conclusions within 90 days of the completion of the audit.

The audit will provide the NRC with a better understanding of the similarities and differences between the Watts Bar Nuclear Plant, Units 1 and 2 (WBN), Unit 1 hydrology License Amendment Request submitted by letter dated July 19, 2012 (ADAMS Accession No. ML122360173) and subsequent supplements in relation to the corresponding NRC Safety Evaluation issued by letter dated January 28, 2015 (ADAMS Accession No. ML15005A314) and the WBN, Units 1 and 2 FHRR submittal. In addition, the staff seeks to gain a better understanding of the similarities/differences between the WBN FHRR submittal and the Sequoyah Nuclear Plant, Units 1 and 2 (Sequoyah) and Browns Ferry Nuclear Plant, Units 1, 2, and 3 (Browns Ferry) FHRR submittals. The audit is intended to support staff reviews of FHRRs and the subsequent issuance of a Staff Assessment. Additional information is provided below.

The enclosed audit plan outlines the process that will allow the NRC staff to identify additional information potentially necessary for licensees to supplement their FHRRs, and resolve any potential technical concerns. The details of this audit have been discussed with Mr. Russell Thompson of your staff.

J. Shea

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If you have any questions, please contact me at (301) 415-3809 or by e-mail at Juan.Uribe@nrc.gov.

Sincerely,

/RA/

Juan Uribe, Project Manager
Hazards Management Branch
Japan Lessons-Learned Division
Office of Nuclear Reactor Regulation

Enclosure:
Audit Plan

cc w/encl: Distribution via Listserv

J. Shea

- 2 -

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| NAME | JUribe | SLent | RKuntz | MShams | JUribe |
| DATE | 04/16/2015 | 04/16/2015 | 04/17/2015 | 04/17/2015 | 04/16/2015 |

OFFICAL RECORD COPY

NRC PLAN FOR THE AUDIT OF TENNESSEE VALLEY AUTHORITY'S
FLOOD HAZARD REEVALUATION REPORT SUBMITTALS RELATED TO
THE NEAR-TERM TASK FORCE RECOMMENDATION 2.1-FLOODING 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;

BACKGROUND AND AUDIT BASIS:

By letter dated March 12, 2012, the U.S. Nuclear Regulatory Commission (NRC) issued a request for information to all power reactor licensees and holders of construction permits in active or deferred status, pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR), Section 50.54(f) "Conditions of license" (hereafter referred to as the "50.54(f) letter"). The request was issued in connection with implementing lessons-learned from the 2011 accident at the Fukushima Dai-ichi nuclear power plant, as documented in The Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident. Recommendation 2.1 in that document recommended that the staff issue orders to all licensees to reevaluate seismic and flooding for their sites against current NRC requirements and guidance. Subsequent Staff Requirements Memoranda associated with Commission Papers SECY 11-0124 and SECY-11-0137, instructed the NRC staff to issue requests for information to licensees pursuant to 10 CFR 50.54(f).

By letter's dated March 12, 2015, Tennessee Valley Authority (TVA) submitted its Flood Hazard Reevaluation Reports (FHRRs) for Browns Ferry Nuclear Plant, Units 1, 2, and 3 (BFNP, Browns Ferry) (Agencywide Documents Access and Management System (ADAMS) Accession No. ML15072A130) Sequoyah Nuclear Plant, Units 1 and 2 (SQN, Sequoyah) (ADAMS Accession No. ML15071A462), Watts Bar Nuclear Plant, Units 1 and 2 (WBN, Watts Bar) (ADAMS Accession No. ML15071A262). The NRC staff has begun its review of the aforementioned submittals and plans to conduct a regulatory audit of TVA to inform its development of the submittals, identify any similarities/differences with past work completed and ultimately aid in its review of licensees' FHRRs.

REGULATORY AUDIT SCOPE AND METHODOLOGY:

The area(s) of focus for the regulatory audit is the information contained in the WBN, SQN and BFNP FHRR submittals, and all associated and relevant supporting documentation used in the development of the aforementioned documents including, but not limited to, methodology, process information, calculations, computer models, etc. The audit will be conducted and completed over several meetings that are to be determined, as necessary.

Enclosure

INFORMATION AND OTHER MATERIAL NECESSARY FOR THE REGULATORY AUDIT:

For the first Audit, the information to be reviewed includes a background presentation (and supporting documentation) that describes the similarities and differences between the Watts Bar, Unit 1 hydrology License Amendment Request submitted by letter dated July 19, 2012 and associated supplements in relation to the corresponding NRC Safety Evaluation issued by letter dated January 28, 2015, and the WBN, Units 1 and 2 FHRR submittal. The first meeting will also review relevant information that documents the similarities/differences between the WBN FHRR submittal and the Sequoyah and Browns Ferry FHRR submittals.

For subsequent Audits, the information to be audited will include more detailed models, calculations, parameter selection and/or assumptions used in developing the FHRRs. Specific information to be audited will be communicated to your staff prior to the second audit and will be updated in the audit plan.

NRC AUDIT TEAM:

| Title | Team Member |
|------------------------|--------------------|
| Team Leader, NRR/JLD | Juan Uribe |
| Branch Chief, NRO/DSEA | Chris Cook |
| Technical Lead | Stephen Breithaupt |
| Technical Support | Yuan Cheng |
| Technical Support | Michael Willingham |

LOGISTICS:

The first audit will be conducted via webinar session on April 22, 2015. Meeting information details have been provided to your staff. The second audit meeting will be scheduled during the first meeting and the audit plan will be updated accordingly.

Time Charge Information: The auditors will charge their time in HRMS to:

| Site | TACs |
|--------------|--------------|
| Sequoyah | MF6032, 3 |
| Browns Ferry | MF6034, 5, 6 |
| Watts Bar | MF5857, 8 |

These are fee billable TACs.

DELIVERABLES:

Audit team members are requested to provide a written outline of recommendations and observations for input to the lead auditor for exit meeting development.

The NRC team will develop an audit summary report to convey the audit results. The report will be placed in ADAMS within 90 days of the completion of the audit, and will be publicly available. The audit team members are requested to provide their input to the audit team leader within 14 days following completion of each audit session.

The information discussed in these audits may be included, fully or in part, in the development of the NRC technical staff assessments as a result of the FHRR reviews.