



Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402

CNL-18-109

August 24, 2018

10 CFR 50.4

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Sequoyah Nuclear Plant, Units 1 and 2
Renewed Facility Operating License Nos. DPR-77 and DPR-79
NRC Docket Nos. 50-327 and 50-328

Subject: **Sequoyah Nuclear Plant, Units 1 and 2 – Fourth Periodic Schedule Update for Revision of Loss-of-Coolant Accident Mass and Energy Release Calculations Related to Containment Integrity Response Analyses**

- References:
1. TVA letter to NRC, "Sequoyah Nuclear Plant, Units 1 and 2 – Application to Modify Ice Condenser Technical Specifications to Address Revisions in Westinghouse Mass and Energy Release Calculation (SQN-TS-12-04)," dated July 3, 2013 (ML13199A281)
 2. TVA letter to NRC, CNL-16-049, "Sequoyah Nuclear Plant, Units 1 and 2 - Withdrawal of Application to Modify Ice Condenser Technical Specifications to Address Revisions in Westinghouse Mass and Energy Release Calculation (SQN-TS-12-04)," dated September 19, 2016 (ML16264A456)
 3. TVA letter to NRC, CNL-17-041, "Sequoyah Nuclear Plant, Units 1 and 2 – Periodic Schedule Update for Revision of Loss-of-Coolant Accident Mass and Energy Release Calculations Related to Containment Integrity Response Analyses," dated March 10, 2017 (ML17069A391)
 4. TVA letter to NRC, CNL-17-103, "Sequoyah Nuclear Plant, Units 1 and 2 – Second Periodic Schedule Update for Revision of Loss-of-Coolant Accident Mass and Energy Release Calculations Related to Containment Integrity Response Analyses," dated August 24, 2017 (ML17257A330)
 5. TVA letter to NRC, CNL-18-031, "Sequoyah Nuclear Plant, Units 1 and 2 – Third Periodic Schedule Update for Revision of Loss-of-Coolant Accident Mass and Energy Release Calculations Related to Containment Integrity Response Analyses," dated February 28, 2018 (ML1860A334)

In Reference 1, Tennessee Valley Authority (TVA) submitted license amendment request (LAR) SQN-TS-12-04 for Sequoyah Nuclear Plant (SQN), Units 1 and 2. The proposed changes were to revise SQN Units 1 and 2 Technical Specifications (TSs) 3/4.6.5, "Ice Condenser" (currently TS 3.6.12, "Ice Bed"), to increase the total ice weight from 2,225,880 pounds to 2,540,808 pounds to address a non-conservatism with respect to the required total ice weight.

In Reference 2, TVA withdrew LAR SQN-TS-12-04 and stated that a new LAR would be submitted, if necessary, using the revised SQN containment integrity response analyses. Reference 2 also committed to provide periodic schedule updates to the Nuclear Regulatory Commission (NRC) for revising the LOCA mass and energy release calculations and the associated SQN containment integrity response analyses every six months until the non-conservative TS condition is resolved.

In References 3, 4, and 5, TVA provided the first, second, and third six-month updates, respectively. The enclosure to this letter provides the fourth and final six-month update. Based on the results of the updated containment analysis, TVA has determined that the current SQN TS 3.6.12 Surveillance Requirements are conservative and adequate to ensure the operability of the SQN ice bed. As such, the TS changes proposed in Reference 1 are not required. The updated containment analysis will be adopted as the SQN analysis of record as a result of revising the Updated Final Safety Analysis Report (UFSAR) and associated TS Bases in accordance with TVA procedures for control of the UFSAR and TS Bases.

This letter serves as notification of the completion of the commitment in Reference 2. There are no new regulatory commitments contained in this submittal. Please address any questions regarding this submittal to Edward Schrull at (423) 751-3850.

Respectfully,



E. K. Henderson
Director, Nuclear Regulatory Affairs

Enclosure: Periodic Schedule Update for Revision of Loss-of-Coolant Accident Mass and Energy Release Calculations Related to Containment Integrity Response Analyses

cc: (w/Enclosure)

NRC Regional Administrator - Region II
NRC Senior Resident Inspector - Sequoyah Nuclear Plant
NRC Project Manager - Sequoyah Nuclear Plant

Enclosure

Periodic Schedule Update for Revision of Loss-of-Coolant Accident Mass and Energy Release Calculations Related to Containment Integrity Response Analyses

The table below includes the milestones for the revised loss-of-coolant accident (LOCA) mass and energy release calculations and associated containment integrity response analyses utilizing the new Westinghouse WCOBRA/TRAC model. All milestones have been completed.

Phase 1 Target Milestones		Schedule Date
1	Project Customer Kickoff	June 2016 (Complete)
2	Input Request Letter to TVA	August 2016 (Complete)
3	TVA issuance of analytical input summary (AIS)	September 2016 (Complete)
4	Completion of WCOBRA/TRAC Model	July 2017 (Complete)
5	Issuance of preliminary containment response results	November 2017 (Complete)
6	TVA issuance of Phase 2 guidance on margin allocation	February 2018 (Complete)
Phase 2 Target Milestones		Schedule Date
7	Issuance of draft LOCA M&E and Containment Integrity analysis report	March 2018 (Complete)
8	TVA reviews the draft Containment Integrity analysis report and provides owners review comments	April 2018 (Complete)
9	Issuance of final Containment analysis report plus FSAR, Accident Analysis Parameter Checklist, Technical Specification markups (if necessary) ¹	June 2018 (Complete) ²

1. As noted in the cover letter, TVA determined that no changes to the SQN Technical Specifications are required.

2. The original completion date for this milestone was May 2018. Due to resolution of TVA comments, the final report was not issued until June 15, 2018.