



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

CNL-19-046

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

Browns Ferry Nuclear Plant, Units 1, 2, and 3
Renewed Facility Operating License Nos. DPR-33, DPR-52, and DPR-68
NRC Docket Nos. 50-259, 50-260, and 50-296

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

Watts Bar Nuclear Plant, Units 1 and 2
Facility Operating License Nos. NPF-90 and NPF-96
NRC Docket Nos. 50-390 and 50-391

Subject: **TENNESSEE VALLEY AUTHORITY - HYDROLOGIC ENGINEERING
CENTER RIVER ANALYSIS SYSTEM (HEC-RAS) PROJECT MILESTONE
STATUS UPDATE AND COMMITMENT CHANGES**

Reference: TVA letter to NRC, "Tennessee Valley Authority - Hydrologic Engineering
Center River Analysis System (HEC-RAS) Project Milestones," dated
June 22, 2016 (ML16175A518)

By letter dated June 22, 2016, Tennessee Valley Authority (TVA) provided NRC with dates for several project deliverables associated with the ongoing HEC-RAS external flood modeling project (referenced letter). The HEC-RAS external flood modeling project was the subject of an April 4, 2016 public meeting to discuss technical details and a resolution plan for TVA's HEC-RAS external flood modeling issues. In the referenced letter, TVA committed to provide updates on the status of the specific project deliverables on a six-month frequency.

The purpose of this letter is to provide the sixth written update regarding the status of the project milestones consistent with the commitment made in the referenced letter.

There has been no change in milestone status since the update provided by letter dated December 27, 2018 (ML18361A803).

**TABLE 1
 PROJECT DELIVERABLE SUBMITTAL MILESTONES**

	Project Deliverable	Submittal Milestone
1	Browns Ferry Mitigating Strategies Assessment (MSA)	Complete
2	Sequoyah MSA	Complete
3	Watts Bar MSA	Complete
4	Watts Bar Focused Evaluation (FE)	August 2019
5	Sequoyah FE	August 2019
6	Browns Ferry FE	August 2019
7	Sequoyah Hydrology License Amendment Request (LAR)	July 2019
8	Watts Bar Hydrology LAR	August 2019

The calculations, analyses, and evaluations being performed in support of Tasks 4 - 8 are fundamentally based on precipitation values in Topical Report TVA-NPG-AWA16, "TVA Overall Basin Probable Maximum Precipitation and Local Intense Precipitation Analysis, Calculation CDQ0000002016000041." This topical report was submitted to NRC for review by letter dated September 20, 2016. Resolution of several technical issues from NRC's review was achieved by revisions to the topical report. Topical Report TVA-NPG-AWA16, Revision 1, was submitted by letter dated June 22, 2018.

The NRC recently completed the review of the revised updated precipitation calculation. The review and conclusions drawn from the review are documented in a Safety Evaluation that was provided by NRC letter dated March 18, 2019 (ML19010A212). The revised precipitation data is being used as input into TVA's hydraulic models to determine the resulting flood levels at the three nuclear sites. Accordingly, the milestone dates for Tasks 4 - 8 reflect the required work and TVA's current estimate for completion of the corresponding analyses and evaluations in support of these tasks.

The projected milestones for the submittal of the Sequoyah and Watts Bar Hydrology LARs will be discussed with the NRC Project Manager.

TVA is also revising the regulatory commitments made for Browns Ferry, Sequoyah, and Watts Bar to provide revised warning time analyses using the updated precipitation data for each site. These commitments were made for Browns Ferry, Sequoyah, and Watts Bar in their respective Flood Mitigation Strategies Assessments (Tasks 1, 2, and 3) by separate letters dated December 27, 2016 (ML16363A386, ML16363A382, and ML16363A381, respectively).

The commitment revisions for Watts Bar and Sequoyah reflect that the warning time analysis for each site will be provided within the respective Focused Evaluations (Tasks 4 and 5) instead of the Hydrology License Amendment Requests (Tasks 7 and 8). This makes the Watts Bar and Sequoyah commitments consistent with the Browns Ferry commitment. For Browns Ferry, the commitment revision reflects a change in the completion date only (Task 6).

TVA will provide the seventh status update on these project deliverable submittal milestones by October 31, 2019, consistent with the commitment made in the referenced letter.

The revised regulatory commitments contained in this letter are provided in the Enclosure.

If additional information is needed regarding this update, please contact Russell Thompson at (423) 751-2567.

Respectfully,



E. K. Henderson
Director, Nuclear Regulatory Affairs

Enclosure: Revised Regulatory Commitments

cc: (Enclosure)

- NRR Director - NRC Headquarters
- NRC Regional Administrator - Region II
- NRC Project Manager - Browns Ferry Nuclear Plant
- NRC Project Manager - Sequoyah Nuclear Plant
- NRC Project Manager - Watts Bar Nuclear Plant
- NRC Senior Resident Inspector - Browns Ferry Nuclear Plant
- NRC Senior Resident Inspector - Sequoyah Nuclear Plant
- NRC Senior Resident Inspector - Watts Bar Nuclear Plant

ENCLOSURE

REVISED REGULATORY COMMITMENTS

1. TVA will provide a revised WBN warning time analysis using updated precipitation data to the NRC within the Focused Evaluation described in the HEC-RAS Project Milestones letter dated June 22, 2016. The current completion date for the Focused Evaluation is August 31, 2019.
2. TVA will provide a revised SQN warning time analysis using updated precipitation data to the NRC within the Focused Evaluation described in the HEC-RAS Project Milestones letter dated June 22, 2016. The current completion date for the Focused Evaluation is August 31, 2019.
3. TVA will provide a revised BFN warning time analysis using updated precipitation data to the NRC within the Focused Evaluation described in the HEC-RAS Project Milestones letter dated June 22, 2016. The current completion date for the Focused Evaluation is August 31, 2019.