

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

September 30, 2013

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 Facility Operating Licenses Nos. DPR-77 and DPR-79 NRC Docket Nos. 50-327 and 50-328

Watts Bar Nuclear Plant, Unit 1 Facility Operating License No. NPF-90 NRC Docket No. 50-390

Watts Bar Nuclear Plant, Unit 2 **Construction Permit No. CPPR-92** NRC Docket No. 50-391

Subject: Second Progress Update on Improved Flood Mitigation System Project

References: 1. Letter from TVA to NRC, "Commitment to Install Improved Flood Mitigation Systems," dated April 16, 2013

> 2. Letter from TVA to NRC, "Progress Update on Improved Flood Mitigation System Project," dated July 1, 2013

By letter dated April 16, 2013, the Tennessee Valley Authority (TVA) committed to install improved flood mitigation systems at the Sequovah Nuclear Power Plant (SQN), Units 1 and 2. and the Watts Bar Nuclear Plant (WBN), Units 1 and 2 (Reference 1). TVA committed to complete implementation of the improved flood mitigation systems at SQN and WBN by December 31, 2016. TVA also committed to provide periodic written updates regarding progress of the project. During a public meeting on June 27, 2013, TVA briefed the NRC regarding the status of the improved flood mitigation project and provided the first progress update on July 1, 2013 (Reference 2). TVA also committed in the first progress update (Reference 2), to develop a set of major tasks through TVA's engineering design and project controls processes and to discuss these major tasks as part of the periodic written progress updates.

The purpose of this letter is to provide the second written progress update regarding progress of the improved flood mitigation system project consistent with Commitment 2 in Enclosure 2 of the Reference 1 letter and Commitment 1 in Enclosure 1 of the Reference 2 letter.



U.S. Nuclear Regulatory Commission Page 2 September 30, 2013

During the June 27, 2013, public meeting and in the first update (Reference 2), TVA advised the NRC that engineering design and project controls for the project are being developed consistent with TVA's existing design and project management procedures. The Project Status Schedule, provided in Table 1 on page 3 of this letter lists the major tasks associated with the design and project controls developed to implement the flood mitigation system. Table 1 will be used to provide the overall status of the improved flood mitigation system project each quarter. The status of the Table 1 tasks from July 1, 2013 to September 20, 2013, is provided below.

- Task 2, Develop Project Plan, and Task 3, Perform Conceptual Design Phase, scheduled completion is revised from September 30, 2013, to October 30, 2013. The following actions have been completed:
 - a. Joint project team formed
 - b. Project Charter developed and comments are being resolved
 - c. Cost estimate and schedule has been developed for the Conceptual Design Phase
 - d. Project approval package for the Conceptual Design Phase has been prepared
 - e. The Project Approval Board (PAB) has granted authorization to fund the Conceptual Design Phase

A plan is being developed for Tasks 2 and 3 to maintain the scheduled completion of Task 4.

- Task 4, Perform Preliminary Design Phase, has begun. For Task 4, the following actions have been completed:
 - a. Design Criteria have been approved and issued for SQN and are under review for WBN
 - b. Statement of work for the Preliminary Engineering Phase is drafted and is expected to be released to the prospective bidders in October 2013
 - c. Procurement strategy has been developed for the Final Engineering and Implementation Phase Firm Fixed Price Design, Build, and Test

The following Task 4 actions are scheduled to be completed between September 21, 2013 and February 27, 2014:

- a. Develop 10% Design Package
- b. Vendor Selection for Design/Build Contract
- c. Detailed Cost and Schedule development
- d. Risk identification and risk mitigation planning
- e. Project Plans (Project Management, Communication, and Risk Management) National Environmental Policy Act (NEPA) screening

U.S. Nuclear Regulatory Commission Page 3 September 30, 2013

TVA noted in the June 27, 2013, public meeting and in Reference 2, that since issuance of the April 16, 2013 letter, potential design alternatives had emerged for a number of elements of the overall flood mitigation system design as described in Enclosure 1 of Reference 1. To date, progress in the following design areas has been made:

- 1. The SQN FLEX Equipment Storage Building is being designed to include the flood mode equipment.
- 2. For the flood mode equipment, dedicated diesel generators will be procured and installed in lieu of using the FLEX 3 MW diesels for power.

	Task	Scheduled Start	Scheduled Finish	Status
1	Team Organization Structure		05/29/13	Completed
2	Develop Project Plan	06/01/13	10/30/13	In-Progress
3	Perform Conceptual Design Phase	06/01/13	10/30/13	In-Progress
4	Perform Preliminary Design Phase	10/01/13	02/27/14	In-Progress
5	Conduct Engineering Design Phase	03/01/14	01/29/15	Not Started
6	Procure Long-Lead Items	11/01/13	01/29/15	Not Started
7	Implementation	02/28/15	12/15/16	Not Started
8	Project Closeout	12/16/16	09/30/17	Not Started

TABLE 1 PROJECT STATUS SCHEDULE (updates shown in bold type)

U.S. Nuclear Regulatory Commission Page 4 September 30, 2013

TVA will provide the third quarterly written progress update of the improved flood mitigation system project by December 31, 2013, consistent with Commitment 2 in Enclosure 2 of TVA's letter to NRC dated April 16, 2013.

There are no new regulatory commitments contained in this letter.

If you have questions regarding this update, please contact Kevin Casey at (423) 751-8523.

Respectfully,

W. Shea

Vice President, Nuclear Licensing

CC:

NRC Regional Administrator - Region II NRR Director - NRC Headquarters NRC Senior Resident Inspector - Sequoyah Nuclear Plant NRC Senior Resident Inspector - Watts Bar Nuclear Plant NRR Project Manager - Sequoyah Nuclear Plant NRR Project Manager - Watts Bar Nuclear Plant, Unit 1 NRR Project Manager - Watts Bar Nuclear Plant, Unit 1