



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

CNL-14-048

March 31, 2014

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: **Fourth 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 (ML13108A107)
  2. Letter from TVA to NRC, "Progress Update on Improved Flood Mitigation System Project," dated July 1, 2013 (ML13189A135)
  3. Letter from TVA to NRC, "Second Progress Update on Improved Flood Mitigation System Project," dated September 30, 2013 (ML13276A048)
  4. Letter from TVA to NRC, "Third Progress Update on Improved Flood Mitigation System Project," dated December 31, 2013

By letter dated April 16, 2013, the Tennessee Valley Authority (TVA) committed to install improved flood mitigation systems at the Sequoyah 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 the 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. TVA submitted the second progress update on September 30, 2013 (Reference 3) and the third progress update on December 31, 2013 (Reference 4).

The purpose of this letter is to provide the fourth written update regarding the 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.

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 December 14, 2013, to March 17, 2014, is provided below.

- Task 4, Perform Preliminary Design Phase is on schedule. Project Kickoff meetings with SQN and WBN were held on January 28, 2014 and February 27, 2014, respectively. The design vendor completed the draft failure modes and effects analysis (FMEA) on March 4, 2014. The results of the draft FMEA were reviewed by the TVA technical design oversight team on March 6, 2014.

The following Task 4 actions are scheduled for completion by April 30, 2014:

- a. Preparation of system functional calculations.
  - b. Preliminary system design/layout drawings.
  - c. Preliminary equipment sizing and Bill of Materials.
  - d. Budgetary cost estimate and schedule for Tasks 5, 6, and 7
- Task 5, Conduct Engineering Design Phase, is scheduled to start by May 1, 2014, following completion of the Task 4 as indicated in Table 1.

Task 8, Project Closeout, has been removed from Table 1. This task is for finalizing the project financial and demobilizing activities after implementation of the flood mitigation system and has no status or impact to completing the project.

**TABLE 1**  
**PROJECT STATUS SCHEDULE**

	<b>Task</b>	<b>Scheduled Start</b>	<b>Scheduled Finish</b>	<b>Status</b>
1	Team Organization Structure		05/29/13	Completed
2	Develop Project Plan		10/30/13	Completed
3	Perform Conceptual Design Phase		10/30/13	Completed
4	Perform Preliminary Design Phase	10/01/13	04/30/14	In-Progress
5	Conduct Engineering Design Phase	05/01/14	04/30/15	Not Started
6	Procure Long-Lead Items	01/07/15	10/21/15	Not Started
7	Implementation	05/01/15	12/30/16	Not Started

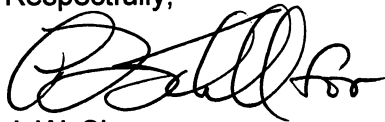
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TVA will provide the fifth quarterly written progress update regarding the improved flood mitigation system project by June 30, 2014, consistent with Commitment 2 in Enclosure 2 of TVA's letter to NRC dated April 16, 2013 (Reference 1).

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,

A handwritten signature in black ink, appearing to read 'J. W. Shea', written in a cursive style.

J. 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 2