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

August 28, 2013

10 CFR 2.202
10 CFR 50.4

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

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

Subject: **First Six-Month Status Report in Response to the March 12, 2012, Commission Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation (Order Number EA-12-051) for Sequoyah Nuclear Plant**

References:

1. NRC Order Number EA-12-051, "Issuance of Order to Modify Licenses with Regard to Reliable Spent Fuel Pool Instrumentation," dated March 12, 2012 (ML12054A679)

2. NRC Interim Staff Guidance JLD-ISG-2012-03, "Compliance with Order EA-12-051, Reliable Spent Fuel Pool Instrumentation," Revision 0, dated August 29, 2012 (ML12221A339)

3. NEI 12-02, "Industry Guidance for Compliance with NRC Order EA-12-051, 'To Modify Licenses with Regard to Reliable Spent Fuel Pool Instrumentation,'" Revision 1, dated August 2012 (ML12240A307)

4. Letter from TVA to NRC, "Tennessee Valley Authority (TVA) - Initial Status Report in Response to the March 12, 2012, Commission Order Modifying Licenses with Regard to Requirements for Reliable Spent Fuel Pool Instrumentation (Order Number EA-12-051)," dated October 29, 2012 (ML12307A105)

5. Letter from TVA to NRC, "Tennessee Valley Authority (TVA) - Overall Integrated Plan in Response to the March 12, 2012, Commission Order Modifying Licenses with Regard to Requirements for Reliable Spent Fuel Pool Instrumentation (Order Number EA-12-051) for Sequoyah Nuclear Plant," dated February 28, 2013 (ML13063A011)

A001
NRR

On March 12, 2012, the Nuclear Regulatory Commission (NRC) issued an order (Reference 1) to Tennessee Valley Authority (TVA). Reference 1 was immediately effective and directs TVA to install reliable spent fuel pool level instrumentation (SFPLI). Specific requirements are outlined in Attachment 2 of Reference 1.

Reference 1 required submission of an initial status report 60 days following issuance of the final interim staff guidance (Reference 2) and an overall integrated plan pursuant to Section IV, Condition C. Reference 2 endorses industry guidance document Nuclear Energy Institute (NEI 12-02), Revision 1 (Reference 3) with clarifications and exceptions identified in Reference 2. Reference 4 provided the TVA initial status report regarding SFPLI strategies. Reference 5 provided the TVA Sequoyah Nuclear Plant, Units 1 and 2 overall integrated plan.

Reference 1 requires submission of a status report at six-month intervals following submittal of the overall integrated plan. Reference 3 provides direction regarding the content of the status reports. The purpose of this letter is to provide the first six-month status report pursuant to Section IV, Condition C.2 of Reference 1 that delineates progress made in implementing the requirements of Reference 1. The enclosed report provides an update of milestone accomplishments since submittal of the overall integrated plan, including any changes to the compliance method or schedule.

The enclosure describes the plans that TVA will use to meet the regulatory requirements outlined in Attachment 2 of Reference 1, but does not identify any additional actions to be taken by TVA. Therefore, this letter contains no regulatory commitments.

If you have any question regarding this submittal, please contact Kevin Casey at (423) 751-8523).

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 28th day of August 2013.

Respectfully,

J. W. Shea
Vice President, Nuclear Licensing

Enclosure:

Tennessee Valley Authority Sequoyah Nuclear Plant's First Six-Month Status Report in Response to the March 12, 2012, Commission Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation (Order Number EA-12-051)

cc: See Page 3

cc: (Enclosure):

NRR Director - NRC Headquarters
NRO Director - NRC Headquarters
NRC Regional Administrator - Region II
NRC Project Manager - Sequoyah Nuclear Plant
NRC Senior Resident Inspector - Sequoyah Nuclear Plant

ENCLOSURE

TENNESSEE VALLEY AUTHORITY SEQUOYAH NUCLEAR PLANT'S FIRST SIX-MONTH STATUS REPORT IN RESPONSE TO THE MARCH 12, 2012, COMMISSION ORDER MODIFYING LICENSES WITH REGARD TO RELIABLE SPENT FUEL POOL INSTRUMENTATION (ORDER NUMBER EA-12-051)

ENCLOSURE

1 Introduction

Sequoyah Nuclear Plant (SQN) developed an Overall Integrated Plan (Reference 1 in Section 8 of this Enclosure), documenting the requirements to install reliable spent fuel pool level instrumentation (SFP LI), in response to Reference 2. This attachment provides an update of milestone accomplishments since submittal of the Overall Integrated Plan, including any changes to the compliance method or schedule.

2 Milestone Accomplishments

The following milestone(s) have been completed since the development of the Overall Integrated Plan (Reference 1), and are current as of July 30, 2013.

- A design kickoff meeting has been completed
- Response to SQN Request for Additional Information is complete (Reference 3).

3 Milestone Schedule Status

The following updates the milestone schedule to support the Overall Integrated Plan. This section provides the activity status of each item, and the expected completion date noting any change. The dates are planning dates subject to change as design and implementation details are developed.

The milestone target completion dates do not impact the order implementation date.

Milestone	Target Completion Date	Activity Status	Revised Target Completion Date
Submit 60 Day Status Report	10/29/2012	Complete	
Submit Overall Integrated Plan	02/28/2013	Complete	
Submit 6 Month Updates:			
Update 1	08/28/2013	Complete	
Update 2	02/28/2014	Not Started	
Update 3	08/28/2014	Not Started	
Update 4	02/28/2015	Not Started	
Update 5	08/28/2015	Not Started	
Update 6	02/28/2016	Not Started	
Update 7	08/28/2016	Not Started	
RAI Response	08/16/2013	Complete	
Modifications:			
Unit 1 Design Engineering	07/08/2014	Design started	10/14/2014
Unit 1 Installation	05/28/2015[1]	Not Started	02/26/2015
Unit 2 Design Engineering	07/08/2014	Design started	10/14/2014
Unit 2 Installation	12/31/2015[1]	Not Started	02/26/2015
Procedures:			
Create Procedures[2]	10/31/2014	Not Started	
Training:			
Develop Training Plan[2]	10/31/2014	Not Started	
Training Complete[2]	04/30/2015	Not Started	
Full Site SFP LI Implementation	05/28/2015	Not Started	
Submit Completion Report	06/28/2015	Not Started	

Notes: 1. The original target completion dates for implementation for Units 1 and 2 corresponded to the completion of the second refueling outage of the respective unit following submittal of the February 28, 2013 integrated plan. Implementation of the SFPLI is currently scheduled to be performed on-line as indicated by the revised target completion dates.
2. These milestones were not included in the February 28, 2013, Overall Integrated Plan.

4 Changes to Compliance Method

The primary and backup instrument channel battery life was anticipated to exceed 96 hours in the February 2013 Integrated Plan. A preliminary battery life calculation has been completed. TVA is updating the anticipated battery life to 84 hours to provide margin for issues that may arise during the design process.

There are no other changes to the compliance method as documented in the Overall Integrated Plan (Reference 1).

5 Need for Relief/Relaxation and Basis for the Relief/Relaxation

Sequoyah Nuclear Plant (SQN) expects to comply with the order implementation date and no relief/relaxation is required at this time.

6 Open Items from Overall Integrated Plan and NRC Evaluation

The following tables provide a summary of the open items documented in the Overall Integrated Plan or the NRC Evaluation and the status of each item.

Overall Integrated Plan Open Item	Status
OI-1) TVA will complete an instrument channel uncertainty calculation and document instrument channel accuracy and calibration requirements.	Engineering and vendor documentation are in progress. This will complete on the Design Engineering milestone shown above.
OI-2) TVA plans to utilize Guided Wave Radar technology. Confirm final technology selection after contracts are complete.	Engineering and vendor documentation are in progress. This will complete on the Design Engineering milestone shown above.
OI-3) Confirm that the sensor cable and light weight at the bottom of sensor cable will not damage the SFP liner from impact during seismic event.	Engineering and vendor documentation are in progress. This will complete on the Design Engineering milestone shown above.
OI-4) After detailed engineering design is complete, confirm that SFP level channel components and cable routing will be contained within seismic structures such that the installation will comply with the reasonable protection guidance of NEI 12-06.	Engineering and vendor documentation are in progress. This will complete on the Design Engineering milestone shown above.

NRC Evaluation Open Item	Status
None	N/A

7 Potential NRC Evaluation Impacts

There are no potential impacts to the NRC Evaluation identified at this time.

8 References

The following references support the updates to the Overall Integrated Plan described in this enclosure.

1. Letter from TVA to NRC, "Tennessee Valley Authority (TVA) - Overall Integrated Plan in Response to the March 12, 2012, Commission Order Modifying Licenses with Regard to Requirements for Reliable Spent Fuel Pool Instrumentation (Order Number EA-12-051) for Sequoyah Nuclear Plant," dated February 28, 2013.

2. NRC Order Number EA-12-051, "Issuance of Order to Modify Licenses with Regard to Reliable Spent Fuel Pool Instrumentation," dated March 12, 2012.

3. Letter from TVA to NRC, "Response to NRC Request for Additional Information Regarding Overall Integrated plan for Reliable Spent Fuel Pool Instrumentation (Order No. EA-12-051) (TAC Nos. MF0764 and MF0765)," dated August 16, 2013.