

**From:** Mahoney, Michael  
**Sent:** Monday, May 24, 2021 9:19 AM  
**To:** rdwells0@tva.gov  
**Cc:** Green, Kimberly  
**Subject:** Watts Bar Nuclear Plant, Unit 1 and 2 - Audit Plan For SG Water Level Change LAR (EPID L-2021-LLA-0032)  
**Attachments:** Audit Plan\_Watts Bar 2 - SG Water Level Change (L-2021-LLA-0032).pdf

Dear Mr. Wells,

By letter CNL-21-016, dated March 2, 2021 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML21061A347), Tennessee Valley Authority (TVA) submitted a license amendment request (LAR) to revise the Watts Bar Nuclear Plant, Unit 2, Technical Specifications, to change the steam generator (SG) water level requirement in TS Limiting Condition for Operation (LCO) 3.4.7.b, "RCS Loops - MODE 5, Loops Filled," and Surveillance Requirements (SR) 3.4.5.2, "RCS Loops - MODE 3," SR 3.4.6.3, "RCS Loops - MODE 4," and SR 3.4.7.2 from greater than or equal to ( $\geq$ ) 6% to  $\geq$  32%.

The US Nuclear Regulatory Commission staff is reviewing the proposed amendment and has determined that a regulatory audit is necessary to complete its review.

Attached, please find an audit plan containing the basis, scope, NRC staff, and logistics, for the audit.

If you have any questions, please let me know.

Thanks

**Mike Mahoney**

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REGULATORY AUDIT PLAN  
REGARDING LICENSE AMENDMENT REQUEST TO  
REVISE TECHNICAL SPECIFICATIONS TO CHANGE THE STEAM  
GENERATOR WATER LEVEL  
TENNESSEE VALLEY AUTHORITY  
WATTS BAR NUCLEAR PLANT, UNIT 2  
DOCKET NO. 50-391  
EPID NO. L-2021-LLA-0032

**1.0     BACKGROUND**

By application dated March 2, 2021 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML21061A347), the Tennessee Valley Authority (TVA; the licensee) submitted a license amendment request (LAR) for Watts Bar Nuclear Plant (Watts Bar), Unit 2.

The proposed amendment would amend the Watts Bar, Unit 2 Technical Specifications (TS) to change the steam generator (SG) water level requirement in Watts Bar, Unit 2 TS Limiting Condition for Operation (LCO) 3.4.7.b, "RCS Loops - MODE 5, Loops Filled" and Surveillance Requirements (SR) 3.4.5.2, "RCS Loops - MODE 3," SR 3.4.6.3, "RCS Loops - MODE 4," and SR 3.4.7.2 from greater than or equal to ( $\geq$ ) 6 percent (%) to  $\geq$  32%. The proposed change is needed to support the Watts Bar, Unit 2 Replacement SG (RSG) project.

The application references several analyses or documents that are not provided as part of the application or are not provided in the reference section. In order to confirm that the analyses and references support the requested licensing action, the staff of the U.S. Nuclear Regulatory Commission (NRC) plan to perform an audit of the listed documents in the Information Request section below. The NRC staff is continuing to review other aspects of the licensee's submittal and may identify the need for additional audit subjects by separate correspondence.

**2.0     REGULATORY AUDIT BASIS**

An audit was determined to be the most efficient approach toward a timely resolution of questions associated with this LAR review, because the NRC staff will have an opportunity to minimize the potential for further rounds of RAIs and ensure no unnecessary burden will be imposed by requiring the licensee to address issues that are no longer necessary to make a safety determination. The NRC staff is requesting an initial set of internal licensee information to be reviewed by the staff using an online electronic reading room. Upon completion of this audit, the NRC staff is expected to achieve the following.

1. Confirm internal licensee information which supports statements made in the LAR.
2. Determine whether the information included in the documents is necessary to be submitted to support a safety conclusion.

The audit information the NRC staff determines to be necessary to support the development of the NRC staff's safety evaluation will be requested to be submitted on the docket.

### **3.0 REGULATORY AUDIT SCOPE AND METHOD**

The audit is being conducted to confirm that the analyses and information identified below support the requested licensing action. The audit will be conducted as a desk audit (with teleconferences with the licensee, as needed), to review information made available on an online electronic reading room. The specific areas of focus for the regulatory audit are identified in the information request section, below.

### **4.0 INFORMATION REQUEST**

Please provide the following documents (via an online electronic reading room) for the staff to audit:

1. Drawings of the replacement steam generator (RSG) w/dimensions showing location of level taps and top of tubes.
2. The demonstrated accuracy calculation discussed in Section 3.3 of the LAR and any other calculations used to determine the 32% value.
3. Calculation(s) related to control rod withdrawal from subcritical that demonstrate appropriate acceptance criteria are met when the RSG water level is at 32% narrow range level.
4. Given the large change (6% to 32%) to the narrow range level in the proposed LAR, explain why the reactor trip on SG water level low-low setpoint doesn't change (Function 13 in Table 3.3.1-1 of TS, nominal trip setpoint 17% of narrow range span).

### **5.0 AUDIT TEAM**

The following are members of the NRC audit team:

- Michael Mahoney, Project Manager, NRR/DORL (Michael.Mahoney@nrc.gov)
- Robert Beaton, Nuclear Engineer, NRR/DSS (Robert.Beaton@nrc.gov)
- Norbert Carte, Senior Electronics Engineer, NRR/DEX (Norbert.Carte@nrc.gov)

Key licensee personnel involved in the development of the LAR should be made available for interactions on a mutually agreeable schedule to respond to any questions from the NRC staff.

### **6.0 LOGISTICS**

The audit will be conducted via electronic reading room, which is requested to be open from June 1 to 30, 2021.

An entrance call will be conducted as soon as practicable toward the beginning of the audit.

The electronic reading room or portal should employ measures to prevent the downloading, copying, or otherwise storing of any online portal documents by the NRC staff accessing the portal.

As necessary, clarification calls will be requested regarding the documents under audit.

## **7.0 DELIVERABLES**

The NRC team will develop an audit summary report to convey the results. The report will be placed in ADAMS within 90 days of the completion of the final audit session. The audit information the NRC staff determines to be necessary to support the development of the NRC staff's safety evaluation will be requested to be submitted on the docket.