

**From:** Kimberly Green  
**Sent:** Tuesday, June 11, 2024 9:36 AM  
**To:** Hughes, Shawna Marie; Baron, Jesse Shawn  
**Cc:** Wells, Russell Douglas  
**Subject:** Audit Plan Related to Review of the Sequoyah Nuclear Plant, Units 1 and 2, and Watts Bar Nuclear Plant, Units 1 and 2, LAR to Revise Technical Specification Table 3.3.2-1 Function 5 (EPID L-2023-LLA-0175)  
**Attachments:** Audit Plan for SQN and WBN LAR re TS Table 3.3.2-1 Function 5.docx

Dear Shawna Hughes and Jesse Baron:

By application dated December 18, 2023 (Agencywide Documents Access and Management System Accession No. ML23352A298), Tennessee Valley Authority submitted a license amendment request (LAR) to amend Facility Operating License Nos. DPR-77, DPR-79, NPF-90, and NPF-96 for Sequoyah Nuclear Plant (Sequoyah), Units 1 and 2, and Watts Nuclear Plant (Watts Bar), Units 1 and 2, respectively. The proposed amendments would revise Sequoyah, Units 1 and 2, and Watts Bar, Units 1 and 2, Technical Specification (TS) Table 3.3.2-1, "Engineered Safety Feature Actuation System Instrumentation," by adding a note for Functions 5a and 5b to state that the turbine trip function is not required when all turbine stop valves or all governor valves are incapable of opening. The LAR also proposes other changes to Watts Bar, Units 1 and 2, TS Table 3.3.2-1 notes f and h, respectively, to be consistent with the corresponding notes in Sequoyah, Units 1 and 2, TS Table 3.3.2-1 and Westinghouse Standard Technical Specifications (i.e., NUREG-1431, Revision 5).

The U.S. Nuclear Regulatory Commission staff is reviewing the proposed changes and has determined that a regulatory audit will aid its review of the LAR.

Attached, please find an audit plan containing the basis, scope, information needs, audit team members, logistics, and deliverable for this audit.

If you have any questions, please let me know.

Sincerely,

*Kimberly Green*  
Senior Project Manager  
Division of Operating Reactor Licensing  
U.S. Nuclear Regulatory Commission  
301-415-1627

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**From:** Kimberly Green

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Tracking Status: None

"Hughes, Shawna Marie" <smhughes@tva.gov>

Tracking Status: None

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Tracking Status: None

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**Expiration Date:**

REGULATORY AUDIT PLAN  
BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
TO SUPPORT THE REVIEW OF LICENSE AMENDMENT REQUEST  
TO REVISE TECHNICAL SPECIFICATION TABLE 3.3.2-1 RELATED TO  
FUNCTIONS 5A AND 5B  
TENNESSEE VALLEY AUTHORITY  
SEQUOYAH NUCLEAR PLANT, UNITS 1 AND 2  
WATTS BAR NUCLEAR PLANT, UNITS 1 AND 2  
DOCKET NOS. 50-327, 50-328, 50-390, AND 50-391

1.0 BACKGROUND

By application dated December 18, 2023 (Agencywide Documents Access and Management System Accession No. ML23352A298), pursuant to Section 50.90 of Title 10 of the *Code of Federal Regulations* (10 CFR), the Tennessee Valley Authority (TVA) submitted a license amendment request (LAR) to amend Facility Operating License Nos. DPR-77, DPR-79, NPF-90, and NPF-96 for Sequoyah Nuclear Plant (Sequoyah), Units 1 and 2, and Watts Nuclear Plant (Watts Bar), Units 1 and 2, respectively. The proposed amendments would revise Sequoyah, Units 1 and 2, and Watts Bar, Units 1 and 2, Technical Specification (TS) Table 3.3.2-1, "Engineered Safety Feature Actuation System Instrumentation," by addition a note for Functions 5a and 5b to state that the turbine trip function is not required when all turbine stop valves or all governor valves are incapable of opening. The LAR also proposes other changes to Watts Bar, Units 1 and 2, TS Table 3.3.2-1 notes f and h, respectively, to be consistent with the corresponding notes in Sequoyah, Units 1 and 2, TS Table 3.3.2-1 and Westinghouse Standard Technical Specifications (i.e., NUREG-1431, Revision 5).

The Nuclear Regulatory Commission (NRC) staff has determined that a regulatory audit of the supporting information for the LAR should be conducted in accordance with Office of Nuclear Reactor Regulation Office Instruction LIC-111, "Regulatory Audits" (ML19226A274).

2.0 REGULATORY AUDIT BASIS

A regulatory audit is a planned license- or regulation-related activity that includes the examination and evaluation of primarily non-docketed information associated with the LAR. An audit is conducted to gain understanding, to verify information, and to identify information that will require docketing to support the basis of a licensing or regulatory decision. An audit will assist the NRC staff in efficiently conducting its review and gaining insights to TVA's processes and procedures. Information identified during the audit that the NRC staff relies upon to make the safety determination must be submitted on the docket.

### 3.0 REGULATORY AUDIT SCOPE AND METHODOLOGY

NRC staff's objectives of the audit are the following:

- Confirm the NRC staff's understanding of the LAR.
- Gain a better understanding of the logic for the turbine valve signals and associated turbine trips and reactor trips and their implications for the LAR.
- Identify questions and requests that may become formal requests for additional information (RAIs) per NRR Office Instruction LIC-115, "Processing Requests for Additional Information" (ML21141A238).

### 4.0 INFORMATION AND OTHER MATERIAL NECESSARY FOR THE AUDIT

The NRC staff requests information or documents related to the following areas:

Item #	Audit Item
1	Current logic (e.g., diagrams) for turbine trip signal related to the closing of the turbine stop valves and turbine governor valves
2	Information (e.g., logic diagrams) related to the turbine trip signal that is generated from the safety-related reactor trip signal
3	Information (e.g., logic diagrams) related to the reactor trip signal as it relates the turbine trip signal and turbine stop valve indication signal
4	Any analyses or evaluations that considered anticipated operational occurrence(s)
5	Any analyses or evaluations that considered false turbine stop valve indication (valve indication is OPEN but valve is closed) but the reactor does not trip
6	Any analyses or evaluations that considered false turbine stop valve indication (valve indication is CLOSED but valve is open) and the reactor trips but turbine stop valves and governor valves are left open
7	Description of any proposed design changes needed to support the requested TS change (e.g., changes to logic) and continued compliance with relevant general design criteria.
8	Plant component ID listing for all turbine-related stop, throttle, governor, and control valves
9	Component description, including function, for reheat stop valves and interceptor valves
10	Information related to plant operations during Mode 1 with % RATED THERMAL POWER > 5% but < 50% (P-9 interlock) with all throttle valves, control valves, reheat stop valves, and interceptor valves in the CLOSED position
11	Information related to plant operations during Mode 1 with % RATED THERMAL POWER > 5 % and the P-14 interlock engaged (i.e., 2/3 steam generator water level above setpoint on one or more steam generators)

Additional information needs identified during the audit will be communicated to the designated point of contact.

The NRC will document the final audit items list as an enclosure to the audit report, which will be publicly available.

## 5.0 TEAM ASSIGNMENTS

The audit team will consist of the following NRC staff:

<b>Team Member</b>	<b>Division</b>	<b>Area of Responsibility</b>
Kimberly Green Kimberly.Green@nrc.gov	NRR/DORL/LPLII-2	Project Manager
David Nold David.Nold@nrc.gov	NRR/DSS/SCPB	Technical Review – systems
Ahsan Sallman Ahsan.Sallman@nrc.gov	NRR/DSS/SNSB	Technical Review – systems
Hang Vu Hang.Vu@nrc.gov	NRR/DEX/EICB	Technical Review – instrumentation
Tarico.Sweat Tarico.Sweat@nrc.gov	NRR/DSS/STSB	Technical Review – technical specifications

Key TVA personnel knowledgeable in the areas of interest should be made available for interactions, on a mutually agreeable schedule, to respond to any questions from the NRC staff.

## 6.0 LOGISTICS

To support the review schedule communicated to TVA when the NRC staff accepted the LAR for technical review, audit activities will be performed remotely and virtually using Microsoft Teams and an internet-based portal made available by TVA.

The internet-based portal should be populated with the documents requested in section 4.0 of this audit plan. The following conditions associated with the portal must be maintained while the NRC staff have access to the portal:

- The portal will be password-protected. A separate password will be assigned to each member of the NRC staff participating in the audit.
- The portal should prevent the NRC staff from printing, saving, downloading, or collecting any information directly from the online portal.
- Conditions of use of the portal will be displayed on the login screen and will require acknowledgment by each user.

Username, password, and other portal access information should be provided directly to members of the NRC audit team. The NRC licensing project manager will provide TVA with names and contact information of the NRC staff participating in the audit (section 5.0 above). All other communications should be coordinated through the NRC project manager.

NRC information requests and communications with TVA staff will be coordinated through the NRC's licensing project manager.

The virtual audit will commence after the internet-based portal is set up and the documentation addressing the items in section 4.0 of this audit plan is made available to the NRC staff. The audit will be conducted during a specified time that is mutually agreeable to the NRC staff and TVA. The NRC project manager will coordinate with the NRC staff and TVA for any teleconferences needed while the NRC staff is reviewing the documentation. The NRC project manager will inform TVA of the entrance and exit call dates when they are established. The NRC's project manager will inform TVA via routine communications when the NRC staff no longer needs access to the portal.

#### 7.0 DELIVERABLES

The NRC staff will issue an audit summary report within 90 days of the audit exit call. The staff may request additional information needed to complete the review of the LAR but will issue any such RAIs separately from audit-related correspondence in accordance with NRR Office Instruction LIC-115, "Processing Requests for Additional Information."