



License Amendment Request to Revise Browns Ferry Technical Specifications to Adopt TSTF-205, “Revision of Channel Calibration, Channel Functional Test, and Related Definitions,” TSTF-563, “Revise Instrument Testing Definitions to Incorporate the Surveillance Frequency Control Program,” and Rescind Surveillance Requirement Changes

September 22, 2021

Agenda

Describe future license amendment request (LAR)

- Scope of the Request
- Variations from TSTF-205
- Variations from TSTF-563

LAR Schedule

Summary

Questions/Comments?

Scope of the Request

The scope of the LAR is:

- Adopt TSTF-563, “Revise Instrument Testing Definitions to Incorporate the Surveillance Frequency Control Program”
- Adopt TSTF-205, “Revision of Channel Calibration, Channel Functional Test, and Related Definitions”
- Rescind the consolidations of 18 SRs approved under Amendments 315, 338, and 298 for each unit

Scope of the Request (continued)

TSTF-563 allows the use of the Surveillance Frequency Control Program (SFCP) to different components within an instrument loop with different surveillance frequencies, rather than a single frequency for the loop as a whole. Revises the TS definitions for Channel Calibration and Channel Functional Test in NUREG-1433 Rev. 4

TSTF-205 revised the TS definitions of Channel Calibration, Channel Functional Test, and Logic System Functional Test in NUREG-1433 Rev. 1.

Accordingly, in order to adopt TSTF-563, TSTF-205 needs to be in the scope of the LAR.

Scope of the Request (continued)

1.1 Definitions (continued)

CHANNEL CHECK	A CHANNEL CHECK shall be the qualitative assessment, by observation, of channel behavior during operation. This determination shall include, where possible, comparison of the channel indication and status to other indications or status derived from independent instrument channels measuring the same parameter.
CHANNEL FUNCTIONAL TEST	A CHANNEL FUNCTIONAL TEST shall be the injection of a simulated or actual signal into the channel as close to the sensor as practicable to verify OPERABILITY, including required alarm, interlock, display, trip functions, and channel failure trips. The CHANNEL FUNCTIONAL TEST may be performed by means of any series of sequential, overlapping, or total channel steps so that the entire channel is tested.
CORE ALTERATION	CORE ALTERATION shall be the movement of any fuel sources, or reactivity control components within the reactor vessel with the vessel head removed and fuel in the vessel. The following exceptions are not considered to be CORE ALTERATIONS: a. Movement of source range monitors, local power range monitors, intermediate range monitors, traversing incore probes, or special movable detectors (including undervessel replacement); and b. Control rod movement, provided there are no fuel assemblies in the associated core cell. Suspension of CORE ALTERATIONS shall not preclude completion of movement of a component to a safe position.

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(continued)

of all devices in the channel required for channel OPERABILITY

and each step must be performed within the Frequency in the Surveillance Frequency Control Program for the devices included in the step

Scope of the Request (continued)

TSTF-425 SR Consolidation Rescissions

In Amendments 315, 338, and 298 the NRC approved TSTF-425 for use of the SFCP for the three Browns Ferry units. As part of the associated LAR, TVA proposed to consolidate 18 SRs for Channel Checks, Channel Calibrations, Channel Functional Tests, and Logic System Functional Tests, as they now had the common Frequency of “In accordance with the Surveillance Frequency Control Program.”

Scope of the Request (continued)

TSTF-425 SR Consolidation Rescissions

SRM Instrumentation
3.3.1.2

SURVEILLANCE REQUIREMENTS

NOTE

Refer to Table 3.3.1.2-1 to determine which SRs apply for each applicable MODE or other specified conditions.

SURVEILLANCE		FREQUENCY
SR 3.3.1.2.1	Perform CHANNEL CHECK.	12 hours
SR 3.3.1.2.2	<p>NOTES</p> <ol style="list-style-type: none"> Only required to be met during CORE ALTERATIONS. One SRM may be used to satisfy more than one of the following. <p>Verify an OPERABLE SRM detector is located in:</p> <ol style="list-style-type: none"> The fueled region; The core quadrant where CORE ALTERATIONS are being performed, when the associated SRM is included in the fueled region; and A core quadrant adjacent to where CORE ALTERATIONS are being performed, when the associated SRM is included in the fueled region. 	12 hours
SR 3.3.1.2.3	Perform CHANNEL CHECK.	24 hours

(continued)

(Deleted)

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Scope of the Request (continued)

TSTF-425 SR Consolidation Rescissions

This was viewed as a simplification that would promote consistency with the ITS Writer's Guide.

- Under-estimated the magnitude of effort to change Surveillance Instructions and Maintenance Plans that referenced the deleted SRs.
- Increased likelihood for human error for TS Instrument Functions that had different Frequencies within the SFCP, but now had the same SR number designation.

Scope of the Request (continued)

TSTF-425 SR Consolidation Rescissions

LAR proposes to restore the SR numbers to their pre-TSTF-425 LAR status, but with Frequencies “In accordance with the Surveillance Frequency Control Program.” This aspect of the LAR is considered to be administrative in nature.

Variations

TSTF-563 – No variations being taken.

TSTF-205 – No variations being taken for the TS changes.
Minor variations being taken for associated Bases changes.

Schedule



- Projected submittal in October 2021 with a requested approval within one year
- A 30-day implementation period is proposed

Summary

- LAR requests approval of adopting TSTF-205 and TSTF-563, and rescinding the SR consolidations made with the TSTF-425 LAR
- LAR is scheduled to be submitted in October 2021 with approval requested in one year, with implementation in 30 days

Questions/ Comments



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TVA

**TENNESSEE
VALLEY
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