

From: Klos, John
Sent: Monday, February 3, 2020 11:03 AM
To: Wolfgramm, Desiree M.
Cc: Klos, John
Subject: RAI formal release Columbia TSTF 563 LAR, 30 day response period due March 3, 2020

Desiree,

By letter dated August 15, 2019, as supplemented by letter dated September 12, 2019, Energy Northwest, the licensee, submitted a license amendment request to revise Columbia Generating Station Technical Specifications (TS)¹.

The amendment revises the current instrumentation testing definitions of Channel Calibration and Channel Functional Test to permit determination of the appropriate frequency to perform the Surveillance Requirement (SR) based on the devices being tested in each step. The proposed changes are based on Technical Specifications Task Force (TSTF) Traveler TSTF-563, Revision 0, "Revise Instrument Testing Definitions to Incorporate the Surveillance Frequency Control Program," dated May 10, 2017². During the Nuclear Regulatory Commission (NRC) staff's review of the license amendment request, the NRC staff determined that more information was needed to complete the review.

Regulatory Analysis Basis

The regulation at 10 CFR 50.36(b) requires: Each license authorizing operation of a ...utilization facility ...will include technical specifications. The technical specifications will be derived from the analyses and evaluation included in the safety analysis report, and amendments thereto, submitted pursuant to [10 CFR] 50.34 ["Contents of applications; technical information"]. The Commission may include such additional technical specifications as the Commission finds appropriate.

The categories of items required to be in the TS are provided in 10 CFR 50.36(c). One such category is SRs, which are defined in 10 CFR 50.36(c)(3) as "requirements relating to test, calibration, or inspection to assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the limiting conditions for operation will be met."

STSB-RAI-1

The license proposes to delete the language, "so that the entire channel is tested," from the Channel Functional Test definition in Columbia TS. Columbia's Channel Functional Test definition states:

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, and 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.

Columbia's Channel Functional Test definition differs from that in the Standard Technical Specifications on which TSTF-563 is based. The Channel Functional Test definition in the Boiling Water Reactor (BWR)/4 and BWR/6 Standard Technical Specifications NUREG-1433 and 1434, Revision 4.0 states: (TSTF-563 Changes are shown in bold italics)

The 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 of all devices in the channel required for channel OPERABILITY. The CHANNEL FUNCTIONAL TEST may be performed by means of any series of sequential, overlapping, or total channel steps, *and each step must be performed within the Frequency in the Surveillance Frequency Control Program for the devices included in the step.*

The technical evaluation for the addition of the phrase in bold italics above is contained in the NRC staff's final safety evaluation of TSTF-563, Revision 0, and final model safety evaluation of TSTF-563, Revision 03. These safety evaluations do not describe nor provide a technical evaluation for any deletions of any kind contained in TSTF-563. The deletion of the language from Columbia's Channel Functional Test definition is a variation from TSTF-563.

Background:

In the letter dated September 12, 2019, Energy Northwest stated that deleting, "so that the entire channel is tested" from the definition of Channel Functional Test more closely aligns with the definition as described in TSTF-563 and as a point of clarification and consistent with the understanding expressed in TSTF-563 and the NRC Safety Evaluation, the requirement to perform a Channel Functional Test on the entire channel has not changed. The deletion of the language, "so that the entire channel is tested," from Columbia's Channel Functional Test appears to change the requirement to test the entire channel. Because Columbia's Channel Functional Test definition differs from the Standard Technical Specifications in that it does not contain the language to verify operability of, "all devices in the channel," it appears that the requirement to perform the Channel Functional Test on the entire channel may have changed and that the NRC staff model safety evaluation may not be applicable to this proposed change. Therefore, the NRC staff is requesting the following additional information be submitted.

Explain if the language in Columbia's Channel Functional Test that states, "including required alarm, interlock, display, and trip functions, and channel failure trips," describes the entire channel leaving nothing out and is equivalent to the language, "all devices in the channel," or alternatively provide the technical basis for removing the requirement to test the entire channel during the Channel Functional Test.

1Accession Numbers ML19227A397 and ML19255H995 in the Agencywide Documents Access and Management System (ADAMS).

2 ADAMS Accession Number ML17130A819.

This RAI is now formally released to Energy Northwest for response with a 30 day response due date from this email of March 3, 2020.

Any questions or concerns regarding this issue should be directed to my email below.

Thank you,

John Klos

DORL Callaway, Columbia Project Manager
U.S. NRC, Office of Nuclear Reactor Regulation,
Division of Operating Reactor Licensing, O9D22
NRC/NRR/DORL/LPL4, MS O9E3
Washington, DC 20555-0001
301.415.5136, John.Klos@NRC.gov

Hearing Identifier: NRR_DRMA
Email Number: 426

Mail Envelope Properties (BL0PR0901MB3251757D1B23DF12C029AD5FE3000)

Subject: RAI formal release Columbia TSTF 563 LAR, 30 day response period due March 3, 2020
Sent Date: 2/3/2020 11:03:00 AM
Received Date: 2/3/2020 11:03:01 AM
From: Klos, John
Created By: John.Klos@nrc.gov

Recipients:
"Klos, John" <John.Klos@nrc.gov>
Tracking Status: None
"Wolfgramm, Desiree M." <dmwolfgramm@energy-northwest.com>
Tracking Status: None

Post Office: BL0PR0901MB3251.namprd09.prod.outlook.com

Files	Size	Date & Time
MESSAGE	6053	2/3/2020 11:03:01 AM

Options
Priority: Normal
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date: