

U.S. Nuclear Regulatory Commission Public Meeting Summary

Meeting Title: Meeting between the U.S. Nuclear Regulatory Commission and Tennessee Valley Authority regarding Tennessee Valley Authority's request for clarification on the following question: "When the Spent Fuel Pool and Reactor Cavity pool water volumes are cojoined during refueling operation (Pool divider gate removed), is the Regulatory Guidance provided in Regulatory Guide 1.13 and Standard Review Plans 9.1.2 and 9.1.4 applicable to the contiguous volume of water?" (Docket No. 99902056)

Meeting Identifier: 20241419, Agencywide Document Access Management System Accession No.: ML24330A103

Date of Meeting: Thursday, December 5, 2024

Location: Teams Meeting/Teleconference

Type of Meeting: Observation meeting

Purpose of the Meeting:

The purpose of this meeting was to have technical discussions between Nuclear Regulatory Commission (NRC) and Tennessee Valley Authority (TVA) staff on TVA's request for clarification on the following question: "When the Spent Fuel Pool and Reactor Cavity pool water volumes are cojoined during refueling operation (Pool divider gate removed), is the regulatory guidance provided in Regulatory Guide (RG) 1.13 and Standard Review Plans (SRPs) 9.1.2 and 9.1.4 applicable to the contiguous volume of water?"

Summary of Meeting

The NRC staff started the observation meeting with opening remarks, discussion of logistics and process, and introductions of the lead participants. The TVA Licensing Manager reiterated the topic for discussion, how an applicant should address potential inadvertent drawdown of water levels between the connected pools for a construction permit (CP) application.

NRC and TVA staff discussed the implications of adequate shielding in a spent fuel pool and reactor cavity with respect to the Regulatory Positions C-6 (Drainage Prevention) and C-10 (Pool Cooling) in RG 1.13, and TVA shared a schematic figure from NUREG-1275, Volume 12 showing a generic spent fuel pool/reactor cavity. The NRC staff noted that RGs and SRPs help show how regulatory conformance may be achieved, but they are not requirements. Compliance with 10 CFR Part 50, Appendix A, *General Design Criterion (GDC) 61—Fuel storage and handling and radioactivity control* and *GDC 63 – Monitoring fuel and waste storage* would need to be shown in a CP application. The NRC staff emphasized the need to demonstrate adequate margins for cooling and shielding in licensing basis documents, and for the application to specify what is being credited for different accident scenarios. Staff emphasized that they would review the details of the design during the technical review.

Slides/References: There were no slides used for the meeting, but publicly available documents were shared on the screen to facilitate discussions. The following documents were

shared during the discussions: RG 1.13, 10 CFR Part 50 Appendix A GDC 61, SRPs 9.1.2 and 9.1.4, and NUREG-1275.

Action Items/Next Steps: TVA understood that a CP application for the Clinch River Nuclear Site will need to be in compliance with GDC 61 and GDC 63.

NRC participants: Michelle Hayes, Milton Valentin, Raul Hernandez, Ed Stutzcage, Angelo Stubbs, Gordon Curran, Allen Fetter and Sean Gallagher

TVA attendees: Brian McDermott, Ray Schiele, Michele Moorrees, Scott Owen, Edward Schulte, Kelvin Montague, Thomas Kelvington, Phillip John, William Ryan, and Dakota Huddleston

GEH attendees: Richard Montgomery, George Wadkins, and George Malone,

Public participants: Jerzy Chrzanowski, Redmond Zheng, Andrew Brenner, and Arunabh Lath