



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

June 16, 2021

LICENSEE: Dominion Energy Virginia

FACILITY: Surry, Units 1 and 2

SUBJECT: SURRY UNITS 1 AND 2 - MAY 20, 2021, SUMMARY REGARDING  
PRE-APPLICATION MEETING TO DISCUSS PLANNED LICENSE  
AMENDMENT REQUESTS

On May 20, 2021, an Observation Meeting was held between the U.S. Nuclear Regulatory Commission (NRC) and representatives of Dominion Energy Virginia (Dominion Energy, the licensee). The purpose of the meeting was for Dominion Energy to provide planned amendments for Surry Power Station, Units 1 and 2. The planned amendments would modify the licensing basis for the turbine building (TB) and the fuel handling trolley support structures (FHTSS) relative to tornado effects. The meeting notice and agenda dated May 7, 2021, are available in Agencywide Documents Access and Management System (ADAMS) at Accession No. ML21130A055. The licensee's presentation is available in ADAMS at Accession No. ML21134A163. A list of participants is provided in the Enclosure.

The licensee discussed the current licensing basis, the deficiencies of the analyses, and the basis for the current operability of the TB and the FHTSS in relation to the tornado wind speed of 360 miles per hour (mph). The licensee presented information regarding the planned license amendment requests (LARs) to modify the licensing basis for the TB from tornado wind speed 360 mph to 250 mph using a deterministic method and for the FHTSS using a risk-informed approach to reduce the tornado wind speed from 360 mph to 210 mph. For both structures, the licensee presented its reason for the license amendment changes, the analytical methods used, details of the analysis performed, and the results.

In its Updated Final Safety Analysis Report (UFSAR), the licensee identified analyses deficiencies of the effects of tornado winds on the both the FHTSS and the TB steel superstructure. The licensee cannot demonstrate by analyses the structural integrities of the TB and the FHTSS under tornado wind speed of 360 mph from its UFSAR. The TB is a non-safety related structure, but there are safety-related systems, such as, service water system and recirculation system that are located at the basement elevation of the TB. The FHTSS is a safety related structure. Dominion Energy presented a new deterministic analytical approach for the TB under tornado wind speed of 250 mph, and a new risk-informed approach for the FHTSS to determine minimal risk of fuel damage in the spent fuel pool (SFP) due to possible collapse of the FHTSS under tornado wind speeds. The NRC staff suggested that the licensee should consider submitting separate LARs-for both structures, because the analytical approach for analyzing the effect of the tornado wind speeds are different. In response, the licensee acknowledged that's one approach Dominion Energy has been discussing internally.

Regarding the FHTSS, the licensee is proposing to use a risk-informed approach to support the proposed licensing basis change, using Regulatory Guide 1.174, Revision 3, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis," dated January 2018 (ADAMS Accession No. ML17317A256). To address risk quantification, the licensee proposed to compare core damage frequency changes to the frequency of uncovered fuel in the FHTSS. The NRC staff suggested that the risk comparison would make more sense if, instead of core damage frequency, the licensee would consider changes in large early release frequency and a high-level consequence analysis. Also, the NRC staff stated that all 5 principles of risk-informed decision-making should be fully addressed in the Dominion Energy's submittal.

The licensee plans to submit its license amendment request by the end of the third quarter of calendar year (CY) 2021 and request approval in the third quarter of CY 2022.

No members of the public were in attendance. No regulatory decisions were made in the meeting.

Please direct any inquiries to me at 301-415-5897 or [Vaughn.Thomas@nrc.gov](mailto:Vaughn.Thomas@nrc.gov).

*/RA/*

Vaughn Thomas, Project Manager  
Plant Licensing Branch II-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos.: 50-280 and 50-281

Enclosure:  
List of Attendees

cc: Listserv

LIST OF PARTICIPANTS  
MAY 20, 2021 PRE-APPLICATION PUBLIC CONFERENCE CALL  
WITH  
DOMINION ENERGY VIRGINIA  
PROPOSED LICENSED AMENDMENT REQUEST FOR THE  
TURBINE BUILDING AND THE FUEL BUILDING

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Milton Valentin	U.S. Nuclear Regulatory Commission
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John Ma	U.S. Nuclear Regulatory Commission
Ata Istar	U.S. Nuclear Regulatory Commission
Stephanie Delvin-Gill	U.S. Nuclear Regulatory Commission
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PRE-APPLICATION MEETING TO DISCUSS PLANNED LICENSE  
AMENDMENT REQUESTS DATED JUNE 16, 2021

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**ADAMS Accession No.: ML21159A093**

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DATE	06/08/2021	06/15/2021	6/16/2021
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