



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

November 12, 2020

LICENSEE: Virginia Electric and Power Company (VEPCO)  
FACILITY: Surry, Units 1 and 2  
SUBJECT: SURRY UNITS 1 AND 2 - OCTOBER 14, 2020, SUMMARY  
REGARDING PRE-APPLICATION MEETING REGARDING THE USE  
OF FRAMATOME FUEL (EPID L-2020-LRM-0095)

On October 14, 2020, a Category 1 public teleconference call was held between the U.S. Nuclear Regulatory Commission (NRC) and representatives of Virginia Electric and Power Company (VEPCO) regarding Surry Power Station, Units 1 and 2. The purpose of the meeting was to discuss the planned license amendment requests to implement (LARs) to implement Framatome at Surry, Units 1 and 2, and to seek approval of (1) the deterministic design limit for the VIPRE-D/BU-I code/correlation pair, (2) a Framatome realistic large break loss of accident analysis, (3) the Framatome fuel thermo-mechanical performance analysis, and (4) the statistical DNB [Departure from Nucleate Boiling] design limit for the AGORA fuel. The licensee also discussed its planned exemption request for the batch use of M5 fuel cladding and a planned spent fuel pool criticality analysis.

The public meeting notice and agenda dated October 1, 2020 (Agencywide Documents Access and Management System (ADAMS) under Accession No. ML20275A330) are available in the NRC Public Meeting website. A list of participants is provided in Enclosure 1.

#### Public Conference Call

During the meeting, VEPCO representatives gave an overview of the proposed LARs to implement Batch Framatome Fuel at Surry, Units 1 and 2 and its strategy for submitting the LARS. VEPCO began discussions with first providing the impetus for Fuel Transition. Dominion Energy seeks to resolve two issues with the proposed transition to AGORA Fuel: (1) AGORA M5™ cladding has a claimed lower hydrogen uptake which would improve performance under accident conditions and (2) AGORA fuel product claims that it will provide Dominion Energy greater security of supply and commercial competitiveness.

A brief submittal strategy was then provided by VEPCO for the Deterministic Design Limit (DDL) LAR. Their plan is to submit, for approval, the new Appendix E to Generic Fleet Report DOM-NAF-2-P-A which will contain qualification of VIPRE-D/BWU-I code/correlation pair and its associated Deterministic Design Limit (DDL). The DDL LAR is expected to contain three attachments: (1) Appendix E to DOM-NAF-2-P [Proprietary], "Qualification of the Framatome BWU-I CHF Correlation in the Dominion Energy VIPRE-D Computer Code," (2) Description of Framatome BWU-I CHF Correlation and VIPRE-D/BWU-I Database & Test Assemblies and VIPRE-D/BWU-I Benchmarking & Qualification Results and (3) Appendix E to DOM-NAF-2-NP

[Non-Proprietary], "Qualification of the Framatome BWU-I CHF Correlation in the Dominion Energy VIPRE-D Computer Code." VEPCO plans to submit the DDL LAR on the docket by Mid-November 2020.

The scope and content for AGORA VQP LAR was also provided by VEPCO. VEPCO stated the LAR is expected to contain twelve attachments, such as, a discussion of the Technical Specifications (TS) changes, proposed TS pages, a description of the fuel assembly design, and the technical basis for adding Appendix E to DOM-NAF-2-P to the Core Operating Limit Report (COLR) list of methodologies. The batch implementation of AGORA VQP LAR is planned to be submitted by VEPCO, for approval, by the end of Quarter 1 (Q1) 2021.

The Surry Spent Fuel Pool (SFP) Criticality Analysis LAR will also be submitted by VEPCO for approval by the end of Q2 2021. VEPCO estimated the review of the DDL LAR to be 12 months and both the VQP and SFP Criticality LARs to be 18 months, respectively.

No regulatory decisions were made in the meeting.

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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

OCTOBER 14, 2020, PRE-APPLICATION PUBLIC CONFERENCE CALL

WITH

DOMINION ENERGY VIRGINIA

REGARDING THE USE OF FRAMATOME FUEL

**U. S. Nuclear Regulatory Commission Staff**

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Chris Clemens

SUBJECT: SURRY UNITS 1 AND 2 - OCTOBER 14, 2020, SUMMARY REGARDING  
PRE-APPLICATION MEETING REGARDING THE USE OF FRAMATOME  
FUEL (EPID L-2020-LRM-0095) DATED NOVEMBER 12, 2020

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**ADAMS Accession Nos.:**

**ML20309A667 (Package)**

**ML20275A330 (Meeting Notice)**

**ML20309A591 (Meeting Slides)**

**ML20296A407 (Meeting Summary)**

**\*via e-mail**

**NRC-001**

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