



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

May 10, 2023

Mr. Daniel G. Stoddard
Senior Vice President and Chief Nuclear Officer
Innsbrook Technical Center
5000 Dominion Blvd.
Glen Allen, VA 23060-6711

**SUBJECT: SURREY POWER STATION, UNITS 1 AND 2 – AUDIT PLAN RE: LICENSE
 AMENDMENT REQUEST FOR REVISION OF THE EMERGENCY PLAN TO
 SUPPORT RELOCATION OF THE TECHNICAL SUPPORT CENTER (EPID
 L-2022-LLA-0167)**

Dear Mr. Stoddard:

By letter dated November 18, 2022 (Agencywide Documents Access and Management System Accession No. ML22322A182), Virginia Electric and Power Company (Dominion Energy Virginia, the licensee) submitted a license amendment request (LAR) to revise the Emergency Plan for Surry Power Station (SPS), Units 1 and 2. Specifically, the LAR proposed to relocate the Technical Support Center (TSC) from its current locations adjacent to the Main Control Room (MCR) to the building outside the Protected Area (PA) that were used previously as the site Local Emergency Operations Facility (LEOF).

The U.S. Nuclear Regulatory Commission (NRC) staff has determined the need for a regulatory audit to be conducted in accordance with Office of Nuclear Reactor Regulation Office Instruction LIC-111, "Regulatory Audits" (ML19226A274), for the NRC staff to examine the licensee's non-docketed information with the intent to gain a better understanding of the LAR, to verify information, and to identify information that may require docketing to support the basis of the NRC staff's licensing decision.

The audit will be conducted from June 14 to June 15, 2023. The enclosed audit plan was discussed with your staff on May 10, 2023. Any subsequent changes to logistical aspects of the audit will be coordinated with and communicated to your staff.

If you have any questions, please contact me by telephone at (301) 415-2481 or by e-mail at ed.miller@nrc.gov.

Sincerely,

/RA/

G. Edward Miller, Project Manager
Plant Licensing Branch 2-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-280 and 50-281

Enclosure:

- (1) Audit Plan
- (2) Appendix A - Surry Power Station
TSC Walkthrough Checklist

cc: Listserv



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REGULATORY AUDIT PLAN
FOR THE AMENDMENT REQUEST TO REVISE THE EMERGENCY PLAN
TO SUPPORT RELOCATING THE TECHNICAL SUPPORT CENTER
AT SURRY POWER STATION, UNITS 1 AND 2
DOCKET NOS. 50-280 AND 50-281

1.0 BACKGROUND

By letter dated November 18, 2022 (Agencywide Documents Access and Management System Accession No. ML22322A182), Virginia Electric and Power Company (Dominion Energy Virginia, the licensee) submitted a license amendment request (LAR) to revise the Emergency Plan for Surry Power Station (SPS), Units 1 and 2. Specifically, the LAR propose to relocate the Technical Support Center (TSC) from its current location adjacent to the Main Control Room (MCR) to a building outside the Protected Area (PA) that was previously used as the site Local Emergency Operations Facility (LEOF).

The U.S. Nuclear Regulatory Commission (NRC) staff has determined the need for a regulatory audit to be conducted in accordance with Office of Nuclear Reactor Regulation Office Instruction LIC-111, "Regulatory Audits" (ML19226A274), for the NRC staff to examine the licensee's non-docketed information with the intent to gain a better understanding of the LAR, to verify information, and to identify information that may require docketing to support the basis of the NRC staff's licensing decision.

2.0 REGULATORY AUDIT BASIS

The NRC staff (i.e., audit team) will perform the audit to support its evaluation of whether the licensee's request meets the of standards of section 50.47, "Emergency plans," of Title 10 of the *Code of Federal Regulations* and the requirements of Appendix E to 10 CFR Part 50, "Emergency Planning and Preparedness for Production and Utilization Facilities."

3.0 REGULATORY AUDIT SCOPE AND METHODOLOGY

The audit team will review the licensee's proposed TSCs using the functional capabilities of NUREG-0696, Final Report, "Functional Criteria for Emergency Response Facilities" (ML051390358), and NUREG-0737, Supplement 1, "Clarification of TMI [Three Mile Island] Action Plan Requirements" (ML102560009), to determine if the licensee needs to submit any additional information contained in the analyses performed in support of the requested change to support or develop conclusions for the NRC staff's safety evaluation.

4.0 INFORMATION AND OTHER MATERIAL NECESSARY FOR THE REGULATORY AUDIT

In the LAR, Attachment 1, "Description and Assessment of the Proposed Change," the licensee stated that it proposes to relocate the TSC from its current location adjacent to the MCR to the building outside the PA previously used as the site LEOF. This change proposes alternative means of performing TSC functions than those identified in the NUREG-0696 and NUREG-0737, Supplement 1, guidance related to facility location.

The NRC staff requests the licensee to have the facilities readily available and accessible for the staff's review via a walkdown of the existing TSC and the proposed TSC, and representatives from operations, engineering, facilities, and emergency preparedness available during the visit should specific questions arise.

Based on the review of the proposed TSC, the NRC staff will determine whether it needs to request any additional information submitted on the docket for the staff to complete the review of the requested changes in the LAR.

5.0 TEAM ASSIGNMENTS

The audit team will consist of the following NRC staff:

- Michael Norris, Team Leader and Senior Emergency Preparedness Specialist
- Kenneth Mott, Emergency Preparedness Specialist
- John Klos, Project Manager

6.0 LOGISTICS

The audit will be conducted on June 14-15, 2023, via a walkdown of the current TSC and the proposed new TSC. The staff requests a small conference room to accommodate the team for any needed discussions.

7.0 SPECIAL REQUESTS

The audit team would like access to conduct a walkdown of the current TSC and the proposed new TSC. The NRC staff will use Appendix A, "Surry TSC Walkthrough Checklist," in its evaluation during the facilities walkthrough.

This walkthrough will focus on the proposed TSC information provided by Dominion Energy Virginia in its LAR as it relates to the applicable TSC guidance contained in NUREG-0696 and NUREG-0737. This walkthrough will provide the NRC staff with detailed information related to the NRC staff's evaluation of Dominion Energy Virginia's proposed TSC relocation application.

8.0 DELIVERABLES

An audit summary will be prepared within approximately 60 days of the completion of the audit. If the NRC staff identifies information during the audit that is needed to support its regulatory decision, the NRC staff will issue a separate request for additional information to the licensee.

Appendix A

Surry Power Station TSC Walkthrough Checklist

Location

- ☐ The new location will be approximately eight (8) minutes walking distance from the Main Control Room (MCR).
- ☐ Responding from the Administration Building to the new Technical Support Center (TSC) location does not require traversing through Protected Area (PA) security access locations as is currently the case.
- ☐ The walking time from the Administration Building to the new TSC location is approximately five (5) minutes.

Size

- ☐ The new proposed TSC size is approximately 3,400 square feet, which assures a minimum of 75 square feet of working space per person for the 20 TSC Emergency Response Organization (ERO) positions.
- ☐ TSC layout replicates the layout of the current TSC facility.
- ☐ The TSC consist of a TSC Operations Floor and separate rooms for Operations Support, Technical Support, Dose Assessment, and NRC personnel.
- ☐ The TSC contains a breakroom and bathroom facilities to support long-term operation of the facility.
- ☐ Library space is provided in the TSC, with adequate space for the storage of plant records and historical data.
- ☐ The equipment room for housing the TSC support systems/equipment to include Local Area Network (LAN) and communications network switches.

Structure

- ☐ The proposed new TSC (former Local Emergency Operations Facility [LEOF]) structure is made of 12-inch-thick reinforced concrete exterior walls, roof, and a 24-inch-thick mat/slab.

Habitability

- ☐ TSC ventilation system filter bank will be located in the penthouse of the new facility in an unoccupied space that is separated from the ground level by a 12-inch-thick concrete slab.
- ☐ The existing hatch between the penthouse and the ground level of the new TSC (occupied space) will be permanently sealed with a 12-inch concrete plug to prevent radiation exposure to the occupied TSC space below.
- ☐ The TSC filter bank consists of a high-efficiency particulate air (HEPA) filter in series with a high efficiency gas adsorption (HEGA) filter with a nominal flow rate of 1000 cubic feet per minute (cfm).
- ☐ The TSC's HEGA filter temperature is monitored by a heat detector. If a flame is detected, the CO₂ (carbon dioxide) suppression system floods CO₂ into the duct mounted filter housing to extinguish the flame.

- A radiation monitoring system (RMS) to provide continuous indication of the dose rate and airborne radioactivity in the TSC.
- Protective equipment shall be provided to allow TSC personnel to continue to function during the presence of low-level airborne radioactivity or radioactive surface contamination. Note: The license amendment request (LAR) states protective clothing to support personnel travel between the TSC and MCR is not necessary. The audit activities are intended to confirm this assertion.

Communications

- The communications capabilities available in the TSC include dedicated voice communications to the MCR, Operations Support Center (OSC), Corporate Emergency Response Center (CERC), Virginia Emergency Operations Center (VEOC), Primary Remote Assembly Area, Security Shift Supervisor and Radiation Protection Supervisor; Dominion Energy Emergency Notification System (DEENS); Station private branch exchange (PBX); General Office off premises exchange (OPX) lines; commercial lines; public address intercom; radio system; and NRC lines (Emergency Notification System (ENS), Health Physics Network (HPN), Reactor Safety Counterpart Link (RSCL), Protective Measures Counterpart Link (PMCL), Management Counterpart Link (MCL), LAN access).

TSC Power Supplies

- The proposed new TSC receives normal power from utility power, backup power from a dedicated 200 kW/250 KVA diesel generator, and a 50 KVA uninterruptable power supply (UPS) with a 15-minute battery.

Technical Data, Data Systems, and Data System Equipment SC Power Supplies

- The proposed new TSC will not contain the dedicated plant computer system (PCS) hardware but will continue to use PCS data in the same way as the current TSC via workstations connected to the Station LAN via secure connections.
- TSC LAN switches have two (2) fiber uplink ports connected to the Administrative Building Computer Room network which is powered from utility power and backed up by a UPS and a dedicated diesel generator.
- The proposed new TSC will continue to be provided with the required data inputs, data storage, data retrieval, and data trending capabilities to evaluate incident sequence, determine mitigating actions, evaluate damage, determine plant status during recovery operations, and perform the TSC function.

Records Availability and Management

- The proposed new TSC will contain a complete set of controlled drawings, technical manuals, and other records.
- The proposed new TSC will contain controlled copies of selected manuals, procedures, drawings, and other documents as designated by the Nuclear Records Department Management directives.

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AMENDMENT REQUESTS TO SUPPORT RELOCATION OF THE TECHNICAL
SUPPORT CENTER (EPID L-2022-LLA-0167) DATED MAY 10, 2023

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