



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
245 PEACHTREE CENTER AVENUE N.E., SUITE 1200  
ATLANTA, GEORGIA 30303-1200

September 10, 2021

Ms. Cheryl A. Gayheart  
Regulatory Affairs Director  
Southern Nuclear Operating Co.  
3535 Colonnade Parkway  
Southern Nuclear Operating Co., Inc.  
Birmingham, AL 35243

SUBJECT: VOGTLE ELECTRIC GENERATING PLANT – TRIENNIAL FIRE PROTECTION  
INSPECTION REPORT 05000424/2021012 AND 05000425/2021012

Dear Ms. Gayheart :

On July 29, 2021, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Vogtle Electric Generating Plant. On July 29, 2021, the NRC inspectors discussed the results of this inspection with Mr. Jesse Thomas, Plant Manager, and other members of your staff. The results of this inspection are documented in the enclosed report.

No NRC-identified or self-revealing findings were identified during this inspection.

A licensee-identified violation which was determined to be of very low safety significance is documented in this report. We are treating this violation as a non-cited violation (NCV) consistent with Section 2.3.2 of the Enforcement Policy.

If you contest the violation or the significance or severity of the violation documented in this inspection report, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region II; the Director, Office of Enforcement; and the NRC Resident Inspector at Vogtle Electric Generating Plant.

This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at <http://www.nrc.gov/reading-rm/adams.html> and at the NRC Public Document Room in accordance with Title 10 of the *Code of Federal Regulations* 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

**/RA/**

Scott M. Shaeffer, Chief  
Engineering Branch 2  
Division of Reactor Safety

C. Gayheart

2

Docket Nos. 05000424 and 05000425  
License Nos. NPF-68 and NPF-81

Enclosure:  
As stated

cc w/ encl: Distribution via LISTSERV

SUBJECT: VOGTLE ELECTRIC GENERATING PLANT – TRIENNIAL FIRE PROTECTION  
INSPECTION REPORT 05000424/2021012 AND 05000425/2021012 Dated  
September 10, 2021

**DISTRIBUTION:**

M. Kowal, RII

S. Price, RII

L. Gibson, RII

PUBLIC

ADAMS ACCESSION NUMBER: **ML21253A142**

<input checked="" type="checkbox"/> SUNSI Review		<input checked="" type="checkbox"/> Non-Sensitive <input type="checkbox"/> Sensitive		<input checked="" type="checkbox"/> Publicly Available <input type="checkbox"/> Non-Publicly Available	
OFFICE	DRS/EB2	DRS/EB2	DRS/EB2	DRS/EB2	DRS/EB2
NAME	M. Singletary	L. Jones	P. Braaten	W. Monk	S. Shaffer
DATE	9/2/2021	9/2/2021	9/2/2021	9/2/2021	9/10/2021

OFFICIAL RECORD COPY

**U.S. NUCLEAR REGULATORY COMMISSION  
Inspection Report**

Docket Numbers: 05000424 and 05000425

License Numbers: NPF-68 and NPF-81

Report Numbers: 05000424/2021012 and 05000425/2021012

Enterprise Identifier: I-2021-012-0031

Licensee: Southern Nuclear Operating Co.

Facility: Vogtle Electric Generating Plant

Location: Waynesboro, GA

Inspection Dates: July 12, 2021 to July 29, 2021

Inspectors: P. Braaten, Senior Reactor Inspector  
L. Jones, Senior Reactor Inspector  
W. Monk, Senior Reactor Inspector  
M. Singletary, Reactor Inspector, Team Lead

Approved By: Scott M. Shaeffer, Chief  
Engineering Branch 2  
Division of Reactor Safety

Enclosure

## **SUMMARY**

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting a triennial fire protection inspection at Vogtle Electric Generating Plant, in accordance with the Reactor Oversight Process. The Reactor Oversight Process is the NRC's program for overseeing the safe operation of commercial nuclear power reactors. Refer to <https://www.nrc.gov/reactors/operating/oversight.html> for more information. A licensee-identified non-cited violation is documented in report section: 71111.21N.05.

### **List of Findings and Violations**

No findings or violations of more than minor significance were identified.

### **Additional Tracking Items**

None.

## **INSPECTION SCOPES**

Inspections were conducted using the appropriate portions of the inspection procedures (IPs) in effect at the beginning of the inspection unless otherwise noted. Currently approved IPs with their attached revision histories are located on the public website at <http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html>. Samples were declared complete when the IP requirements most appropriate to the inspection activity were met consistent with Inspection Manual Chapter (IMC) 2515, "Light-Water Reactor Inspection Program - Operations Phase." The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel to assess licensee performance and compliance with Commission rules and regulations, license conditions, site procedures, and standards. Starting on March 20, 2020, in response to the National Emergency declared by the President of the United States on the public health risks of the coronavirus (COVID-19), inspectors were directed to begin telework. In addition, regional baseline inspections were evaluated to determine if all or a portion of the objectives and requirements stated in the IP could be performed remotely. If the inspections could be performed remotely, they were conducted per the applicable IP. In some cases, portions of an IP were completed remotely and on site. The inspections documented below met the objectives and requirements for completion of the IP.

## **REACTOR SAFETY**

### 71111.21N.05 - Fire Protection Team Inspection (FPTI)

#### Structures, Systems, and Components (SSCs) Credited for Fire Prevention, Detection, Suppression, or Post-Fire Safe Shutdown Review (IP Section 03.01) (4 Samples)

The inspectors verified that the following systems credited in the approved fire protection program could perform their licensing basis function:

- (1) Unit 1 Chemical Volume Control System
- (2) Unit 2 Nuclear Service Cooling Water
- (3) 1-CB-LA-K, Fire Zone 95 water fire suppression pre-action sprinkler system
- (4) 1-CB-LA-L, Fire Zone 98 gaseous fire suppression system halon system

#### Fire Protection Program Administrative Controls (IP Section 03.02) (1 Sample)

The inspectors verified that the following fire protection program administrative controls were implemented in accordance with the current licensing basis:

- (1) Combustible Control Program

#### Fire Protection Program Changes/Modifications (IP Section 03.03) (2 Samples)

The inspectors reviewed the following changes to ensure that they did not constitute an adverse effect on the ability to safely shutdown post-fire and to verify that fire protection program documents and procedures affected by the changes were updated.

- (1) Surveillance Frequency Extensions
- (2) Penetration Seal Inspection Frequency

## INSPECTION RESULTS

Licensee-Identified Non-Cited Violation	71111.21N.05
<p>This violation of very low safety significance was identified by the licensee and has been entered into the licensee corrective action program and is being treated as a non-cited violation, consistent with Section 2.3.2 of the Enforcement Policy.</p>	
<p>Violation: A green Licensee Identified Violation of Vogtle Unit 1&amp;2 Operating License Condition 2.G was identified for the licensee's failure to implement corrective actions adequately as required by the approved fire protection program. Specifically, Procedure NMP-ES-035, Fire Protection Program, Version 6.1 Section 3.20, states:</p> <p><i>“Ensure that fire-protection-related problems (for example, condition reports) are sufficiently evaluated and that appropriate, timely corrective actions are implemented.”</i></p> <p><i>Contrary to above during a self-assessment review of the fire protection review the licensee identified two instances where appropriate corrective actions were not taken. In both instances the condition reports (CRs) were assigned to the Long-Term Asset Management process and subsequently dropped without the corrective actions being completed. CR 562463 was identified as a failure to address 16 unfused Class 1E battery ammeter cables and CR 699204 was written to address a non-compliance with NFPA 14- 1983’s hose station requirements. The licensee wrote two new CRs to reevaluate and address the missed actions, CR 10790361 and CR 10790449.</i></p> <p>Significance/Severity: Green. The finding was screened in accordance with NRC Inspection Manual Chapter (IMC) 0609, “Significance Determination Process,” Attachment 4, “Initial Characterization of Findings,” which determined that an IMC 0609, Appendix F, “Fire Protection Significance Determination Process,” Phase 1 screening check was required. The issue was determined to be of very low significance, GREEN, based on answering “Yes” to Step 1.3, “Does the fire finding have a low degradation rating?”</p> <p>Corrective Action References: CR 10790361, CR 10790449</p>	

## EXIT MEETINGS AND DEBRIEFS

The inspectors verified no proprietary information was retained or documented in this report.

- On July 29, 2021, the inspectors presented the triennial fire protection inspection results to Mr. Jesse Thomas and other members of the licensee staff.

**DOCUMENTS REVIEWED**

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.21N.05	Calculations	1380-0005-MD-01	Evaluation of MOV Pressure Boundaries and Operator Manual Actuation Capabilities for IN92-18 Hot-Short Events	Rev. 0
		X4C2301S310	VEGP SSEL and Safe Shutdown Fault Tree	Ver. 5.0
		X4C2301S311	VEGP Multiple Spurious Operations Analysis	Ver. 4.0
		X4C2301S311 - Attachment F	92-18 MOV Evaluation	Ver. 2
		X4C2301S316	Post Fire Safe Shutdown Compliance Strategy	Ver. 4.0
		X4G2301S317	Post Fire Safe Shutdown Manual Action Feasibility Study	Rev. 5
	Calibration Records	CR 10705004	Fire Protection Screening	4/24/2020
	Corrective Action Documents	CR 10705024	FP NRC FASA PMCR	4/24/2021
		CR 10705341	Procedure change to 29101-C	4/27/2020
		CR 10705350	Target NET Pressures Don't Match Pump Curve	4/27/2020
		CR 10705358	PMCR was not complete before closure	4/27/2020
		CR 10705360	Table 9.5.1-10 contains duplicated information	04/27/2020
		CR 10705545	2020 FP NRC FASA – Objective 1 – Non-compliances with NFPA72E-1978 Code of Record	04/28/2020
		CR 10706347	2020 FP NRC FASA – Objective 4 –NMP-ES-035-014 does not align with Fire Hazards Analysis	05/01/2020
		CR 10706693	2020 FP NRC FASA – Objective 1 & 2 – FSAR Requirements for Door Checks Deficiency	05/04/2020
		CR 10707319	2020 FP NRC FASA – Objective 3 – VEGP 1-2 SSD Calculations Enhancements	05/06/2020
		CR 10755274	Wood found Ceiling Level Unit 1 CB Level A Room 45	11/20/2020
		CR 10790361	FP NRC CISA 2021 – Untimely Corrective Actions Related to Unfused Battery Ammeter Cables	04/14/2021
		CR 10790362	FP NRC CISA 2021 – Missed Secondary Fire Zone in Fire Pre-Plan 92805-1	04/14/2021
	Corrective Action Documents Resulting from	CR 10812501	2021 NRC Fire Protection Inspection - Treated Wood in A44	7/13/2021
CR 10816136		RSDP Label Discrepancy	7/28/21	



Inspection Procedure	Type	Designation	Description or Title	Revision or Date
	Inspection			
	Drawings	1X4DB111	Chemical and Volume Control System No. 1204	Version 30.0
		2X4DB133-2	P&ID Nuclear Service Cooling Water System No. 1202	Version 57.0
		2X4DB174-1	P&ID Fire Protection Halon Systems No. 2302 & 2304	Version 4.0
	Engineering Evaluations	TE 1066463	Fire Protection FSAR Administration Changes	Version 1.0
		TE 614917	Fire Protection Action Plan	03/29/2013
	Miscellaneous		Remote Shutdown Equipment	Rev. 1.1
		05219-RPT-01	JH NFPA 72 CODE COMPLIANCE EVALUATIONS Plant Vogtle Units 1 & 2	12/21/2020
		LTAM V-14-0104	Wet Pipe Sprinkler System Overpressure Protection	11/13/2014
		LTAM V-17-0098	Battery Ammeter Cable Fuses for Secondary Fires	8/17/2017
		VEGP-FSAR-9A	9A-2-1 FHA Unit 2	Rev. 20
		VEGP-FSAR-9A	9A-1-1 FHA Unit 1	Rev. 19
	Procedures	17103A-C	Annunciator Response Procedure for Fire Alarm Computer	Ver. 44
		18038-1	Operation from Remote Shutdown Panels	Ver. 35.1
		18038-2	Operation from Remote Shutdown Panels	Ver. 28.2
		1X6AZ02-00115	INSTRUCTION MANUAL FOR ALTERNATE SHUTDOWN INDICATION SYSTEM	Ver. 7.0
		92025-C	FIRE PROTECTION SURVEILLANCE PROGRAM	Ver. 19.5
		NMP-ES-035	Fire Protection Program	Ver. 7.0
		NMP-ES-035-006	Fire Protection Program Impact Screen and Detailed Reviews	Ver. 13
		NMP-ES-035-014	Fleet Transient Combustible Controls	Version 5.0
		NMP-ES-035-015	Performance Based Evaluations for Fire Protection Surveillances	Ver. 4.0
		NMP-ES-035-016	Fleet Fire Barrier and Penetration Seal Program	Ver. 3
	Work Orders	29143-C	Fire Dampers - 18 Month Visual Inspection	03/25/2010
SNC974290		12 Month Fire Suppression System - Annual System Pump Test	Ver. 0	