



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION III  
2443 WARRENVILLE ROAD, SUITE 210  
LISLE, ILLINOIS 60532-4352

June 26, 2023

David P. Rhoades  
Senior Vice President  
Constellation Energy Generation, LLC  
President and Chief Nuclear Officer (CNO)  
Constellation Nuclear  
4300 Winfield Road  
Warrenville, IL 60555

SUBJECT: LASALLE COUNTY STATION – QUADRENNIAL FIRE PROTECTION TEAM  
INSPECTION REPORT 05000373/2023011 AND 05000374/2023011

Dear David P. Rhoades:

On June 8, 2023, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at LaSalle County Station and discussed the results of this inspection with John Van Fleet, Site Vice President, and other members of your staff. The results of this inspection are documented in the enclosed report.

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

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,

A handwritten signature in black ink, appearing to read "Caty E. Nolan".

Signed by Nolan, Catherine  
on 06/26/23

Caty E. Nolan, Chief  
Engineering Branch 2  
Division of Operating Reactor Safety

Docket Nos. 05000373 and 05000374  
License Nos. NPF-11 and NPF-18

Enclosure:  
As stated

cc w/ encl: Distribution via LISTSERV®

Letter to David P. Rhoades from Caty E. Nolan dated June 26, 2023.

SUBJECT: LASALLE COUNTY STATION – QUADRENNIAL FIRE PROTECTION TEAM  
INSPECTION REPORT 05000373/2023011 AND 05000374/2023011

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

Docket Numbers: 05000373 and 05000374

License Numbers: NPF-11 and NPF-18

Report Numbers: 05000373/2023011 and 05000374/2023011

Enterprise Identifier: I-2023-011-0032

Licensee: Constellation Nuclear

Facility: LaSalle County Station

Location: Marseilles, IL

Inspection Dates: May 22, 2023 to June 08, 2023

Inspectors: M. Abuhamdan, Reactor Inspector  
B. Jose, Senior Reactor Inspector  
L. Rodriguez, Senior Reactor Inspector

Approved By: Caty E. Nolan, Chief  
Engineering Branch 2  
Division of Operating Reactor Safety

Enclosure

## **SUMMARY**

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting a Quadrennial Fire Protection Team Inspection at LaSalle County Station, 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.

### **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.

## 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) (3 Samples)

The inspectors verified that components and/or systems will function as required to support the credited functions stated for each sample. Additional inspection considerations are located in the fire hazards analysis (FHA) or safe shutdown analysis (SSA).

- (1) Unit 1 Emergency Diesel Generator (EDG)
- (2) Unit 1 Reactor Core Isolation Cooling (RCIC) System
- (3) Unit 1 Residual Heat Removal (RHR) Pump A

### Fire Protection Program Administrative Controls (IP Section 03.02) (2 Samples)

The inspectors verified that the selected control or process is implemented in accordance with the licensee's current licensing basis. If applicable, ensured that the licensee's FPP contains adequate procedures to implement the selected administrative control. Verified that the selected administrative control meets the requirements of all committed industry standards.

- (1) Hot Work Control Program
- (2) Fire Impairments Program

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

The inspectors verified the following:

- a. Changes to the approved FPP do not constitute an adverse effect on the ability to safely shutdown.
- b. The adequacy of the design modification, if applicable.
- c. Assumptions and performance capability stated in the SSA have not been degraded through changes or modifications.
- d. The FPP documents, such as the Updated Final Safety Analysis Report, fire protection report, FHA, and SSA were updated consistent with the FPP or design change.
- e. Post-fire SSD operating procedures, such as abnormal operating procedures, affected by the modification were updated.

- (1) LF2020-005; Change to Fire Protection Report (FPR) for Frequency Extensions Evaluated in Support of Engineering Change (EC) 6333244
- (2) LF2021-001; Revise FPR, LaSalle National Fire Protection Association (NFPA) Code Deviation Summary Matrix

## **INSPECTION RESULTS**

No findings were identified.

## **EXIT MEETINGS AND DEBRIEFS**

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

- On June 8, 2023, the inspectors presented the Quadrennial Fire Protection Team Inspection results to John Van Fleet, Site Vice President, and other members of the licensee staff.

**DOCUMENTS REVIEWED**

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.21N.05	Calculations	L-002808	Fire Protection Hydraulic Model	0A
		VX-09	Battery Rooms Hydrogen Concentration	01/04/2011
	Corrective Action Documents	04423187	B.5.b Pump #1 Degraded Flow	05/12/2021
		04437330	U1 Diesel Generator Corridor Cable Tray Sprinkler Compressor Not Running	07/27/2021
		04357945	Multiple Spurious Fire Panel Trouble Alarms	07/21/2020
		04444667	0FP21 Could Not Maintain Water Pressure	09/04/2021
		04477360	Multiple Issues on A Diesel Fire Pump 0FP01 KA	02/10/2022
		04527227	Fire Protection (FP) Valves to Exceed 7 Day Technical Requirements Condition for Technical Requirements Manual (TRM) 3.7.J RA B.1 or B.2	10/06/2022
		04548783	FP Self Assessment Review of Completed Fire Protection Permits	01/17/2023
		Corrective Action Documents Resulting from Inspection	04680111	NRC Identified 1FP173 Packing Leak
	04680588		NRC Identified Oil Leak	05/25/2023
	04680654		NRC Identified - Documentation Gaps in Electrical Maintenance Work Package	05/25/2023
	04681346		NRC Identified - Piping Design Data Table Needs Updating	05/30/2023
	04682307		Procedure Enhancement Opportunity - NRC Identified	06/02/2023
	04682738		2023 NRC FP Audit - Enhancement to Fire Protection Report (FPR) Section H.4.2.9.1	06/05/2023
	04683058		Gap in Communication to Fire Brigade - NRC Identified	06/06/2023
	04683200		2023 NRC FP Audit - LOA-FX-101(201) Procedure Change Request Action	06/07/2023
	04683218		2023 NRC FP Audit - Hose Reel Removal Engineering Change (EC) New Fuel Area	06/07/2023
	Drawings	1E-1-4214AA	Schematic Diagram Remote Shutdown System "RS"	M
		1E-2-4214AA	Schematic Diagram Remote Shutdown System "RS" (C61)	J
		M-71FD	Flow Diagram for Fire Protection System	G
	Engineering	633168	86-10 Evaluation Supporting Removal of Fire Hoses from	0

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
	Changes		Hose Station	
		633169	Implement Fire Hose Removal Strategy	0
	Engineering Evaluations	L-003779	Multiple Spurious Operations (MSO) Scenario Analysis	0 and 0A
	Fire Plans	FZ 2I4	Reactor Building. 673'-4" Elevation U1 Low Pressure Core Spray (LPCS)/Reactor Core Isolation Cooling (RCIC) Pump Cubicle	3
	Miscellaneous	0-22-162-TRM	Fire Protection Impairment - Isolation of Fire Protection Line 0FPA7A-10"	12/07/2022
		FBP07	Emergency Response Training Fire Brigade Program - Hose Streams, Appliances, and Tools	10
		LES-FP-05 Attachment 1A for Zone 1-31	Test Group 1A Fire Detector Test Data Sheet for Zone 1-31	03/23/2023
	Procedures	ER-AA-600-1069	High Risk Fire Area Identification	4
		LEP-GM-173	General Electric Magne-Blast Switchgear Preventive Maintenance	10
		LMS-FP-15	Technical Requirements Manual Fire Hose Stations Inspection	26
		LOA-FX-101	Unit 1 Safe Shutdown with a Fire in the Control Room or Auxiliary Electrical Equipment Room	32
		LOP-FP-01	Fire Protection System Filling, Venting, Start-Up, Operation and Draining	25
		LOP-RX-04	Startup and Operation of RCIC from the Remote Shutdown Panel	15
		LOS-FP-M7	Fire Brigade Equipment Availability Check	4
		OP-AA-201-007	Fire Protection System Impairment Control	2
	Work Orders	01796898-01	LOS-RX-SR1 U1 RCIC All Modes	09/21/2017
		04627572	Technical Requirement Yard Loop Flow Test	08/16/2019
		04952598	Technical Requirement Yard Loop Flow Test	09/04/2021
		04974885-01	Fire Hose Station Inspection Rerack and Gasket Inspection	07/29/2021
		05224548-03	Perform Unit 1 Fire Zone Functional Test LES-FP-05 Att. 1A	03/23/2023

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		05274985-01	Perform LES-DC-106-2E Quarterly Emergency Light Inspection	10/25/2022
		05325849-01	Perform LES-DC-106-2B Quarterly Emergency Light Inspection	04/27/2023
		05331499-01	Perform LES-DC-106-2E, Quarterly Emergency Light Inspection	03/21/2023