



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

REGION III
2443 WARRENVILLE ROAD, SUITE 210
LISLE, ILLINOIS 60532-4352

April 5, 2022

Mr. Joel P. Gebbie
Senior VP and Chief Nuclear Officer
Indiana Michigan Power Company
Nuclear Generation Group
One Cook Place
Bridgman, MI 49106

SUBJECT: DONALD C. COOK NUCLEAR PLANT – TRIENNIAL FIRE PROTECTION
INSPECTION REPORT 05000315/2022010 AND 05000316/2022010

Dear Mr. Gebbie:

On March 14, 2022, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Donald C. Cook Nuclear Plant and discussed the results of this inspection with you 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 cursive script that reads "Richard A. Skokowski".

Signed by Skokowski, Richard
on 04/05/22

Richard A. Skokowski, Chief
Engineering Branch 3
Division of Reactor Safety

Docket Nos. 05000315 and 05000316
License Nos. DPR-58 and DPR-74

Enclosure:
As stated

cc w/ encl: Distribution via LISTSERV®

Letter to Joel P. Gebbie from Richard A. Skokowski dated April 5, 2022.

SUBJECT: DONALD C. COOK NUCLEAR PLANT – TRIENNIAL FIRE PROTECTION
INSPECTION REPORT 05000315/2022010 AND 05000316/2022010

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

Docket Numbers: 05000315 and 05000316

License Numbers: DPR-58 and DPR-74

Report Numbers: 05000315/2022010 and 05000316/2022010

Enterprise Identifier: I-2022-010-0032

Licensee: Indiana Michigan Power Company

Facility: Donald C. Cook Nuclear Plant

Location: Bridgman, MI

Inspection Dates: January 10, 2022 to January 28, 2022

Inspectors: B. Daley, Senior Reactor Inspector
K. Fay, Reactor Inspector (Observer)
A. Shaikh, Senior Reactor Inspector

Approved By: Richard A. Skokowski, Chief
Engineering Branch 3
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 Donald C. Cook Nuclear 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.

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) (4 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) Centrifugal Charging Pumps
- (2) 2-QRV-251, Charging Flow Control Valve, 2-QMO-451 and 2-QMO-452, VCT Isolation Valves
- (3) East and West Diesel Driven Fire Pumps
- (4) Electric Motor Driven Fire Pump

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

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

- (1) NFPA 805 Monitoring Program (FPMP)

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

The inspectors reviewed the following changes to the plant's NFPA 805 program:

- (1) FPCE-2019-0031, Removal of Fire Hoses from the Power Block
- (2) FPCE-2020-0007, Lowering of the Refueling Water Storage Tank (RWST) Level Requirement

INSPECTION RESULTS

No findings were identified.

EXIT MEETINGS AND DEBRIEFS

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

- On March 14, 2022, the inspectors presented the triennial fire protection inspection results to Joel P. Gebbie, Senior VP and Chief Nuclear Officer and other members of the licensee staff.

DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.21N.05	Calculations	02-E-N-PROT-BKR-007	Unit 2 600V Switchgear Setting Breakers 21A6, 21C9, 21D9, 21D14	7
		12-E-N-PROT-RLY-001	4kV Electrical Protection Coordination Study	7
		12-E-N-PROT-TOL-MOV-001, Attachment F	Cutler Hammer C300 TOL Relay Heater Trip Curves	0
		Report No. R2527-001-001	Fire Protection Water Main Loop and Fire Pump Set Point Adequacy Determination	2
	Corrective Action Documents	AR 2019-9101	Observation from 2019 Fire Protection Triennial	09/26/2019
	Corrective Action Documents Resulting from Inspection	AR 2020-0770	12-E-N-PROT-RLY-001 Coordination Wording Enhancement	01/26/2022
		AR 2022-0854	Fire Protection Triennial Potential Violation on EEE	01/31/2022
	Drawings	OP-2-12001	Main Auxiliary One-Line Diagram Bus "A" and "B" Engineered Safety System (Train B)	57
		OP-2-12002	Main Auxiliary One-Line Diagram Bus "C" and "D" Engineered Safety System (Train A)	51
		OP-2-12010	MCC Aux One-Line 600V Bus 21A, 21B Engineered Safety System (Train B)	25
		OP-2-12012	MCC Aux One-Line 600V Bus 21A, 21B Engineered Safety System (Train B)	14
		OP-2-12031	MCC Aux One-Line 600V Bus 21C, 21D Engineered Safety System (Train A)	29
	Engineering Changes	02-E-N-DCP-MOV-680A	Motor Operated Valves 2-QMO-451 & 452 Motors Electrical Study	0
		FPCE-2019-0031	Removal of Fire Hoses from the Power Block	01/28/2020
		FPCE-2020-0007	Lowering of the RWST Level Requirement	07/08/2020
		ICP-01279	Add Thermal Overload Setpoint Information to the Plant Setpoint Document (PSPD) for the GL 89-10 MOVs and Other Equipment	1

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
	Miscellaneous	1V042-LTR-002	Jensen Hughes Review of DC Cook Fire Protection Response to FPTI-08	01/28/2022
		FSA	Fire Safety Analysis	0
		NFPA 805 FAQ 10-0059	NFPA 805 Monitoring Program	6
		R-1900-0024-001	Nuclear Safety Capability Assessment	1
	Procedures	12-IHP-4030-066-002	Fire Pump Performance and Starting Sequence Tests	1 and 3
		FPMP	NFPA 805 Monitoring Program Analysis	11
	Work Orders	WO 5527814	West Diesel Fire Pump PP-145W Diesel Inspect, Replace Parts as Needed	01/13/2020
		WO 55531520	Three Year Fire Protection Water System Unobstructed Flow Test	11/06/2019
		WO 55531521	Three Year Fire Protection Water System Unobstructed Flow Test	11/06/2019
		WO 55537847	Three Year Fire Protection Water System Unobstructed Flow Test	11/06/2019
		WO 55548954	East Diesel Driven Fire Pump PP-145E, Re-install Diesel Engine	07/21/2020
		WO 55555613	Replace Degraded Downstream Piping of Electric Fire Pump 12-PP-144	10/11/2021