



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

January 31, 2023

Q. Shane Lies  
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 – PHASE 4 POST-APPROVAL LICENSE  
RENEWAL INSPECTION REPORT 05000315/2023010 AND 05000316/2023010

Dear Q. Shane Lies:

On January 13, 2023, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Donald C. Cook Nuclear Plant. On January 17, 2023, the NRC inspectors 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 black ink, appearing to read "Néstor J. Feliz Adorno".

Signed by Feliz-Adorno, Nestor  
on 01/31/23

Néstor J. Feliz Adorno, Chief  
Engineering & Reactor Projects Branch  
Division of Operating 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 Q. Shane Lies from Néstor J. Félix Adorno dated January 31, 2023

SUBJECT: DONALD C. COOK NUCLEAR PLANT – PHASE 4 POST-APPROVAL LICENSE  
RENEWAL INSPECTION REPORT 05000315/2023010 AND 05000316/2023010

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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: 05000315/2023010 and 05000316/2023010

Enterprise Identifier: I-2023-010-0021

Licensee: Indiana Michigan Power Company Nuclear Generation Group

Facility: Donald C. Cook Nuclear Plant

Location: Bridgman, MI

Inspection Dates: January 09, 2023 to January 13, 2023

Inspectors: A. Dahbur, Senior Reactor Inspector  
M. Domke, Reactor Inspector  
E. Magnuson, Reactor Inspector

Approved By: Néstor J. Félix Adorno, Chief  
Engineering & Reactor Projects Branch  
Division of Operating Reactor Safety

Enclosure

## **SUMMARY**

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting a Phase 4 Post-Approval License Renewal 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.

## **OTHER ACTIVITIES – TEMPORARY INSTRUCTIONS, INFREQUENT AND ABNORMAL**

### 71003 - Post-Approval Site Inspection for License Renewal

The NRC conducted this Phase 4 Post -Approval Site Inspection for License Renewal in accordance with the License Renewal Inspection Program (LRIP). Per Inspection Manual Chapter 2516, the LRIP is the process used by NRC staff to verify the adequacy of Aging Management Programs (AMPs), Time Limited Aging Analyses (TLAAs), and other activities associated with an applicant's request to renew an operating license of a commercial nuclear power plant beyond the initial licensing period under Title 10 of the *Code of Federal Regulations* (CFR), Part 54, "Requirements for the Renewal of Operating Licenses for Nuclear Power Plants." This inspection evaluated the licensee implementation of aging management activities by reviewing the AMPs listed below.

### Post-Approval Site Inspection for License Renewal (7 Samples)

- (1) 15.1.6, Buried Piping Inspection Program
- (2) 15.1.11, Environmental Qualification of Electric Components Program
- (3) 15.1.14, Fire Water System Program
- (4) 15.1.22, Instrument Air Quality Program
- (5) 15.1.23, Non-EQ Inaccessible Medium-Voltage Cable Program
- (6) 15.1.24, Non-EQ Instrumentation Circuits Test Review Program
- (7) 15.1.42, Wall Thinning Monitoring Program

## **INSPECTION RESULTS**

No findings were identified.

## **EXIT MEETINGS AND DEBRIEFS**

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

On January 17, 2023, the inspectors presented the Phase 4 Post-Approval License Renewal Inspection results to Q. Shane Lies, 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
71003	Calculations	DIT-B-03569-O1	The Minimum Required Pipe Wall Thickness Value Based on Axial Loading for Select Unit-1 NESW Piping Segments Shown in Table-1	10/07/2014
		DIT-B-03570-O1	Minimum Required Pipe Wall Thickness Value Based on Axial Loading for Select Unit 2 NESW Piping Segments Shown in Table-1	01/26/2015
	Corrective Action Documents	AR 2011-10619	2-TK-39-DN Dew Point Greater than 34 Degrees F	09/19/2011
		AR 2011-8350	2-TK-39-DN Dew Point Not Meeting Acceptance Criteria	07/20/2011
		AR 2013-13007	U1 North Control Air Receiver Dewpoint Is High out of Spec	09/04/2013
		AR 2013-5789	1-NRI-32 Shorted Outer Shield near Detector Well	04/20/2013
		AR 2014-3138	U2 North Dry Air Receiver High Dewpoint	03/05/2014
		AR 2015-12751	PHB Tank and Tank Vent Line Coating Damaged/Disbonded	09/30/2015
		AR 2015-13346	Degraded Coating on AFW Discharge Piping Detailed Description	10/14/2015
		AR 2015-13632	12-DR-265 Excavation Backfilled with Open Inspection Preds	10/20/2015
		AR 2015-5381	2-XRV-11 Not Open to Regenerate Control Air Drying Tower	04/15/2015
		AR 2015-8078	U2 North Dry Air Receiver Dew Point High	06/16/2015
		AR 2016-1134	Buried Lake Township Water Line Coating/Pipe Degradation	01/28/2016
		AR 2016-2730	1-OME-122W, CAD Timer Not Advancing- Dewpoint 41 Deg F	03/30/2016
		AR 2016-2907	Plant Air Quality to Digital Positioners	03/14/2016
		AR 2016-8766	Coating Degradation on Buried Transformer Drain Piping	07/29/2016
		AR 2017-2160	U2 North Control Air Dewpoint High out-of-Spec	02/22/2017
		AR 2017-2511	2-TK-39-DN Dew Point Not Meeting Acceptance Criteria	07/05/2017
		AR 2017-6969	High Dew Point on 2-TK-39-DS (CA South Dry Air Receiver)	07/20/2017
		AR 2017-9689	Minor Surface Corrosion/Paint Degraded on 8" Condensate Pipe	09/29/2017
		AR 2018-10056	Control Air Dewpoint of 2-TK-39-DN above Acceptance Criteria	10/31/2018
		AR 2018-10698	Unit 2 Control Air Dryer Failure, 2-OME-122W	11/28/2018
		AR 2018-11453	3 inch Well Water Break	12/22/2018

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		AR 2018-2296	2-NRI-31 CHAR Test Indicates a Short at The Detector	03/03/2018
		AR 2018-8658	High out of Spec. Control Air dewpoint in 2-TK-39-DN	09/05/2018
		AR 2019-11684	CD Fuel Oil Storage Tank Recommended Future Repairs	10/21/2019
		AR 2020-6941	U2 Manual Reactor Trip and Auto Safety Injection	09/09/2020
		AR 2020-8047	Filters Do Not Literally Meet Implied LRA Requirements	10/09/2020
		AR 2020-8661	Update The SPV List and FMEA's for Charging & Spray Valves	10/15/2020
		AR 2020-8677	Sample U2 Containment Control Air Quality	10/15/2020
		AR 2021-10328	U2 PAC Oil Sample Port Misting Oil	12/21/2021
		AR 2021-1470	Water Leak at Access Road Just North of East Sewage Bldg	02/15/2021
		AR 2021-1660	Received Ann. 204, Drop 33 CNTMT Control Air Header Press Lo	02/24/2021
		AR 2021-6956	Control Air Dew Point > Acceptance Criteria at 2-TK-39-DN	08/11/2021
		AR 2021-8469	Evaluate Degraded Lead Paint Coating on Pipe	10/12/2021
		AR 2022-0089	Unit 2 PAC Oil Mist Eliminator Not Working	01/04/2022
		AR 2022-1386	U2 PAC Oil Misting Following Compressor Replacement	02/17/2022
		AR 2022-3335	Surface Rust on Piping	04/19/2022
		GT 2015-1005	Air Operated Valve Program Self Assessment	03/14/2016
		GT 2020-10439	NRC Information Notice 2020-04	12/23/2020
	Corrective Action Documents Resulting from Inspection	AR 2022-9895	Condition Adverse to Regulatory Compliance	12/06/2022
		AR 2023-0242	Oxidation on Air Dryer Piping	01/10/2023
		AR 2023-0243	Gasket Misaligned on 2-SI-14	01/10/2023
		AR 2023-0245	Conduit Contact above Control Air Dryer	01/10/2023
		AR 2023-0247	Corrosion on 2-HE-24 Inlet Line	01/10/2023
		AR 2023-0273	Correct Documentation and Edison DB for Non-Existent Manhole	01/11/2023
		AR 2023-0299	Incorrect Use of Westinghouse Document to Justify Condition	01/11/2023
	Engineering Changes	57371	Removal of Bellows, Protective Cover, and Weld Build Up for Containment Penetration 1-CPN-26	0
	Engineering Evaluations	11.68	Closed Head Sprinkler Sampling/Testing/Replacement Program Plan Basis Document and Proposed Closed Spray Head Sampling Plan	06/30/2022

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		11.72	Fire Water System Piping Internal Inspection Program	4
		11.77	D. C. Cook Nuclear Plant (CNP) Replacement Plan for The Unit 1 and Unit 2 Fire Protection Ring Header and MIC Mitigation Program	1
		COO-96475	Special Test of Selective Leaching Evaluation (4 components)	06/08/2017
		D.C-66895	Selective Leaching Analysis of Underground Fire Protection Valve	06/14/2022
		EQER 2011-005	EQ Evaluation of Class 1E Equipment for License Renewal installed at DC Cook Nuclear Plant, Units 1 and 2	12/27/2011
	Procedures	12-EHP-5022-001-001	FAC Inspection and Mitigation Program	21
		12-EHP-5030-CAR-001	Characterization Testing Program	14
		12-EHP-5070-UPTI-001	Underground Piping and Tank Integrity Program	13
		EH1-5054	Wall Thinning Monitoring Program	2
		EH1-5070-UPTI	Underground Piping and Tank Integrity Program	15
		FPE-5070-FP	Fire Protection Aging Management Program	7
		IHP-6040-064-001	Control Air Performance Monitoring	4
		PMI-2270	Fire Protection Program	43
	Work Orders	55433968	Non-EQ Instrumentation Circuits Test	01/20/2014
		5551213501	NNPF, Replace I-CPN-26 Assembly Piping	04/28/2022
		C10005974001	Inspect Manholes without Special Requirements	06/22/2022
		WO-55459734	2016 EDG Carbon and Copper Excavation	09/16/2016
		WO-55515707	Tank 47 (AB) Underground Diesel Tank Internal Inspection and UTT Examination October 2019	12/16/2019
		WO-55516301	Tank 47 (CD) Underground Diesel Tank Internal Inspection and UTT Examination October 2019	12/16/2019