



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

REGION III
2443 WARRENVILLE RD. SUITE 210
LISLE, IL 60532-4352

March 1, 2017

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

**SUBJECT: ANNUAL ASSESSMENT LETTER FOR DONALD C. COOK NUCLEAR POWER
PLANT, UNITS 1 AND 2 (REPORT 05000315/2016006; 05000316/2016006)**

Dear Mr. Gebbie:

The NRC has completed its end-of-cycle performance assessment of Donald C. Cook Nuclear Power Plant Units 1 and 2, reviewing performance indicators (PIs), inspection results, and enforcement actions from January 1, 2016, through December 31, 2016. This letter informs you of the NRC's assessment of your facility during this period and its plans for future inspections at your facility. The NRC concluded that overall performance at your facility preserved public health and safety.

The NRC determined the performance at Donald C. Cook Nuclear Power Plant, Units 1 and 2 during the most recent quarter was within the Licensee Response Column, the highest performance category of the NRC's Reactor Oversight Process (ROP) Action Matrix, because all inspection findings had very low safety significance (i.e., Green), and all PIs were within the expected range (i.e., Green). Therefore, the NRC plans to conduct ROP baseline inspections at your facility.

The enclosed inspection plan lists the inspections scheduled through December 31, 2018. The NRC provides the inspection plan to allow for the resolution of any scheduling conflicts and personnel availability issues. Routine inspections performed by resident inspectors are not included in the inspection plan. The inspections listed during the last twelve months of the inspection plan are tentative and may be revised. The NRC will contact you as soon as possible to discuss changes to the inspection plan should circumstances warrant any changes. This inspection plan does not include the plan for security-related inspections, which will be sent via separate, non-publicly available correspondence.

J. Gebbie

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In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 2.390 of the NRC's "Rules of Practice," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Please contact me at 630-829-9628 with any questions you have regarding this letter.

Sincerely,

/RA/

Kenneth Riemer, Chief
Branch 2
Division of Reactor Projects

Docket Nos. 50-315; 50-316
License Nos. DPR-58; DPR-74

Enclosure:
Inspection Plan

cc: Distribution via LISTSERV®

J. Gebbie

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Letter to Joel P. Gebbie from Kenneth Riemer dated March 1, 2017

SUBJECT: ANNUAL ASSESSMENT LETTER FOR DONALD C. COOK NUCLEAR POWER PLANT, UNITS 1 AND 2 (REPORT 05000315/2016006; 05000316/2016006)

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D.C. Cook
Inspection / Activity Plan
03/01/2017 - 12/31/2018

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			BI 50.59 - TRIENNIAL 50.59 INSPECTION		3
1, 2	04/03/2017	04/07/2017	IP 7111117T	Evaluations of Changes, Tests, and Experiments and Permanent Plant Modifications	
			BI RP - RADIATION PROTECTION BASELINE INSPECTION		1
1	03/27/2017	03/31/2017	IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	
			ENG LR - LICENSE RENEWAL U2 71003 INSPECTION		4
2	05/02/2017	05/13/2017	IP 71003	Post-Approval Site Inspection for License Renewal	
			BI EP - EP EXERCISE INSPECTION / PI VERIFICATION		2
1, 2	05/22/2017	05/26/2017	IP 7111401	Exercise Evaluation	
1, 2	05/22/2017	05/26/2017	IP 7111406	Drill Evaluation	
1, 2	05/22/2017	05/26/2017	IP 7111408	Exercise Evaluation – Scenario Review	
1, 2	05/22/2017	05/26/2017	IP 71151	Performance Indicator Verification	
			BI RP - RADIATION PROTECTION BASELINE INSPECTION		1
1	06/12/2017	06/16/2017	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1	06/12/2017	06/16/2017	IP 71124.04	Occupational Dose Assessment	
1	06/12/2017	06/16/2017	IP 71151	Performance Indicator Verification	
			BI HS - TRIENNIAL HEAT SINK INSPECTION		2
1, 2	06/19/2017	06/23/2017	IP 7111107T	Heat Sink Performance	
			BI RP - RADIATION PROTECTION BASELINE INSPECTION		1
1	07/10/2017	07/14/2017	IP 71124.05	Radiation Monitoring Instrumentation	
1	07/10/2017	07/14/2017	IP 71151	Performance Indicator Verification	
			BI PI&R - BIENNIAL PI&R INSPECTION		4
1, 2	07/10/2017	07/28/2017	IP 71152B	Problem Identification and Resolution	
			ENG BI - INSERVICE INSPECTION UNIT 1		1
1	09/13/2017	12/15/2017	IP 7111108P	Inservice Inspection Activities - PWR	
			BI RP - RADIATION PROTECTION BASELINE INSPECTION		1
1	10/16/2017	10/20/2017	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1	10/16/2017	10/20/2017	IP 71124.02	Occupational ALARA Planning and Controls	
1	10/16/2017	10/20/2017	IP 71151	Performance Indicator Verification	
			ENG BI - INSERVICE INSPECTION ON UNIT 2		1
2	03/01/2018	05/26/2018	IP 7111108P	Inservice Inspection Activities - PWR	
			BI EP - EP BASELINE INSPECTION / PI VERIFICATION		1
1, 2	03/12/2018	03/16/2018	IP 7111402	Alert and Notification System Testing	
1, 2	03/12/2018	03/16/2018	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	

This report does not include INPO and OUTAGE activities.
 This report shows only on-site and announced inspection procedures.

D.C. Cook
Inspection / Activity Plan
03/01/2017 - 12/31/2018

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			BI EP - EP BASELINE INSPECTION / PI VERIFICATION		1
1, 2	03/12/2018	03/16/2018	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
1, 2	03/12/2018	03/16/2018	IP 71151	Performance Indicator Verification	
			BI OLRQ - BIENNIAL REQUAL PROGRAM INSPECTION		2
1, 2	03/19/2018	03/23/2018	IP 7111111B	Licensed Operator Requalification Program	
			BI RP - RADIATION PROTECTION BASELINE INSPECTION		2
1	05/07/2018	05/11/2018	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1	05/07/2018	05/11/2018	IP 71124.02	Occupational ALARA Planning and Controls	
1	05/07/2018	05/11/2018	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1	05/07/2018	05/11/2018	IP 71124.04	Occupational Dose Assessment	
			BI ENG - DBA TEAM INSPECTION		8
1, 2	06/25/2018	07/13/2018	IP 7111121M	Component Design Bases Inspection (Teams)	
			ISFSI - ISFSI CASK LOADING INSPECTION		1
1, 2	06/01/2018	09/01/2018	IP 60855.1	Operation of an Independent Spent Fuel Storage Installation at Operating Plants	
			BI RP - RADIATION PROTECTION BASELINE INSPECTION		2
1	06/18/2018	06/22/2018	IP 71124.06	Radioactive Gaseous and Liquid Effluent Treatment	
1	06/18/2018	06/22/2018	IP 71124.07	Radiological Environmental Monitoring Program	
			OL PREP - INITIAL PREP JULY 2018		3
1	06/25/2018	06/29/2018	W90372	OL - INITIAL EXAM - 2018 JUN-AUG - D.C. COOK	
			OL EXAM - INITIAL EXAM JULY 2018		3
1	07/23/2018	08/10/2018	W90372	OL - INITIAL EXAM - 2018 JUN-AUG - D.C. COOK	
			BI RP - RADIATION PROTECTION BASELINE INSPECTION		1
1	09/17/2018	09/21/2018	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1	09/17/2018	09/21/2018	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1	09/17/2018	09/21/2018	IP 71124.04	Occupational Dose Assessment	

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