



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

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

March 2, 2016

Mr. Joel 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 05000315/2015006 AND 05000316/2015006)**

Dear Mr. Gebbie:

On February 10, 2016, the U.S. Nuclear Regulatory Commission (NRC) completed its end-of-cycle performance review of Donald C. Cook Nuclear Power Plant, Units 1 and 2. The NRC reviewed the most recent quarterly performance indicators (PIs) in addition to inspection results and enforcement actions from January 1, 2015, through December 31, 2015. 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 determined that overall Donald C. Cook Nuclear Power Plant, Units 1 and 2 operated in a manner that preserved public health and safety and met all cornerstone objectives. 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 of the NRC's Reactor Oversight Process (ROP) Action Matrix because all inspection findings had very low (i.e., Green) safety significance, and all PIs indicated that your performance was within the nominal, 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, 2017. Routine inspections performed by resident inspectors are not included in the inspection plan. The inspections listed during the last 9 months of the inspection plan are tentative and may be revised at the mid-cycle performance review. The NRC provides the inspection plan to allow for the resolution of any scheduling conflicts and personnel availability issues. 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 security-related inspections, which will be sent via separate, non-publicly available correspondence.

From January 1 to December 31, 2015, the NRC issued three Severity Level IV traditional enforcement violations associated with impeding the regulatory process. Therefore, the NRC will conduct Inspection Procedure 92723, "Follow Up Inspection for Three or More Severity Level IV Traditional Enforcement Violations in the Same Area in a 12-Month Period" to follow-up on these violations. This inspection will be scheduled during 2016.

The NRC staff received the Donald C. Cook Nuclear Power Plant, Units 1 and 2 Final Compliance letter for Order EA-12-049, "Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events" and Order EA-12-051, "Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation." The NRC staff issued the Donald C. Cook Nuclear Power Plant, Units 1 and 2 Final Safety Evaluation on November 9, 2015, and will confirm full implementation of the orders mentioned above by performing TI 191: Inspection of the Licensee's Responses to Mitigation Strategies Order EA-12-049, Spent Fuel Pool Instrumentation Order EA-12-051 and Emergency Preparedness Information, dated December 1, 2015.

In accordance with 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®

The NRC staff received the Donald C. Cook Nuclear Power Plant, Units 1 and 2 Final Compliance letter for Order EA-12-049, "Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events" and Order EA-12-051, "Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation." The NRC staff issued the Donald C. Cook Nuclear Power Plant, Units 1 and 2 Final Safety Evaluation on November 9, 2015, and will confirm full implementation of the orders mentioned above by performing TI 191: Inspection of the Licensee's Responses to Mitigation Strategies Order EA-12-049, Spent Fuel Pool Instrumentation Order EA-12-051 and Emergency Preparedness Information, dated December 1, 2015.

In accordance with 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®

**DISTRIBUTION:**

Kimyata MorganButler  
 RidsNrrDorlLp3-1 Resource  
 RidsNrrPMDCCook Resource  
 RidsNrrDirslrib Resource  
 Cynthia Pederson  
 Darrell Roberts  
 Richard Skokowski  
 Allan Barker

Carole Ariano  
 Linda Linn  
 DRPIII  
 DRSIII  
 Jim Clay  
 Carmen Olteanu  
[ROPAssessment.Resource@nrc.gov](mailto:ROPAssessment.Resource@nrc.gov)

ADAMS Accession Number: ML16060A261

Publicly Available     Non-Publicly Available     Sensitive     Non-Sensitive

<b>OFFICE</b>	RIII	RIII		
<b>NAME</b>	NShah:bw	KRiemer		
<b>DATE</b>	02/24/16	02/24/16		

**OFFICIAL RECORD COPY**

**D.C. Cook**  
**Inspection / Activity Plan**  
**03/01/2016 - 12/31/2017**

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			<b>TI191 - FLEX/MITIGATING STRATEGIES/SFP</b>		<b>4</b>
1, 2	04/25/2016	04/29/2016	IP 2515/191	Inspection of Licensee's Responses to Order EA-12-049, EA-12-051 & EP Info Request March 12, 2012	
			<b>BI ENG - COMPONENT DESIGN BASIS INSPECTION PILOT</b>		<b>4</b>
1, 2	05/09/2016	05/13/2016	IP 7111121	Component Design Bases Inspection	
			<b>BI OLRQ - BIENNIAL REQUAL PROGRAM INSPECTION</b>		<b>2</b>
1, 2	02/29/2016	03/04/2016	IP 7111111B	Licensed Operator Requalification Program	
			<b>BI EP - EP ROUTINE INSPECTION/ PI VERIFICATION</b>		<b>1</b>
1, 2	03/07/2016	03/11/2016	IP 7111402	Alert and Notification System Testing	
1, 2	03/07/2016	03/11/2016	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
1, 2	03/07/2016	03/11/2016	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
1, 2	03/07/2016	03/11/2016	IP 71151	Performance Indicator Verification	
			<b>ENG BI - INSERVICE INSPECTION ON UNIT 1</b>		<b>2</b>
1	03/28/2016	04/22/2016	IP 7111108P	Inservice Inspection Activities - PWR	
			<b>BI RP - RADIATION PROTECTION BASELINE INSPECTION</b>		<b>1</b>
1	04/04/2016	04/08/2016	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1	04/04/2016	04/08/2016	IP 71124.02	Occupational ALARA Planning and Controls	
			<b>OL PREP - INIT PREP/JUNE 2016</b>		<b>4</b>
1	06/06/2016	06/10/2016	W90345	OL - INITIAL EXAM - 2016 JUNE-JULY- D.C. COOK	
			<b>BI RP - RADIATION PROTECTION BASELINE INSPECTION</b>		<b>1</b>
1	06/20/2016	06/24/2016	IP 71124.07	Radiological Environmental Monitoring Program	
			<b>OL EXAM - INIT EXAM/JULY 2016</b>		<b>5</b>
1	07/11/2016	07/22/2016	W90345	OL - INITIAL EXAM - 2016 JUNE-JULY- D.C. COOK	
			<b>BI RP - RADIATION PROTECTION BASELINE INSPECTION</b>		<b>1</b>
1	07/18/2016	07/22/2016	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1	07/18/2016	07/22/2016	IP 71124.06	Radioactive Gaseous and Liquid Effluent Treatment	
1	07/18/2016	07/22/2016	IP 71151	Performance Indicator Verification	
			<b>ENG BI - TRIENNIAL FIRE PROTECTION INSPECTION</b>		<b>3</b>
1, 2	08/01/2016	09/02/2016	IP 7111105T	Fire Protection [Triennial]	
			<b>ENG LR - LICENSE RENEWAL U2 71003 INSPECTION</b>		<b>7</b>
2	10/03/2016	10/14/2016	IP 71003	Post-Approval Site Inspection for License Renewal	
			<b>ENG BI - INSERVICE INSPECTION ON UNIT 2</b>		<b>1</b>
2	10/03/2016	11/11/2016	IP 7111108P	Inservice Inspection Activities - PWR	

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**  
**03/01/2016 - 12/31/2017**

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			<b>BI RP - RADIATION PROTECTION BASELINE INSPECTION</b>		<b>1</b>
1	10/17/2016	10/21/2016	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1	10/17/2016	10/21/2016	IP 71124.02	Occupational ALARA Planning and Controls	
			<b>BI RP - RADIATION PROTECTION BASELINE INSPECTION</b>		<b>1</b>
1	03/27/2017	03/31/2017	IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	
			<b>BI MODS - TRIENNIAL MODIFICATIONS/50.59 INSPECTION</b>		<b>3</b>
1, 2	03/27/2017	04/14/2017	IP 7111117T	Evaluations of Changes, Tests, and Experiments and Permanent Plant Modifications	
			<b>BI EP - EP EXERCISE INSPECTION / PI VERIFICATION</b>		<b>2</b>
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	
			<b>BI RP - RADIATION PROTECTION BASELINE INSPECTION</b>		<b>1</b>
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	
			<b>BI HS - TRIENNIAL HEAT SINK INSPECTION</b>		<b>2</b>
1, 2	06/19/2017	06/23/2017	IP 7111107T	Heat Sink Performance	
			<b>BI RP - RADIATION PROTECTION BASELINE INSPECTION</b>		<b>1</b>
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	
			<b>BI PI&amp;R - BIENNIAL PI&amp;R INSPECTION</b>		<b>1</b>
1, 2	08/14/2017	09/01/2017	IP 71152B	Problem Identification and Resolution	
			<b>ENG BI - INSERVICE INSPECTION UNIT 1</b>		<b>1</b>
1	09/20/2017	10/29/2017	IP 7111108P	Inservice Inspection Activities - PWR	
			<b>ENG LR - LICENSE RENEWAL U2 71003 INSPECTION</b>		<b>1</b>
2	10/03/2017	10/14/2017	IP 71003	Post-Approval Site Inspection for License Renewal	
			<b>BI RP - RADIATION PROTECTION BASELINE INSPECTION</b>		<b>1</b>
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	

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