



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

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

March 4, 2014

Mr. Larry Weber  
Senior Vice President 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 05000315/2013001; 05000316/2013001)

Dear Mr. Weber:

On February 12, 2014, 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, 2013, through December 31, 2013. 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.

As a result of the Safety Culture Common Language Initiative, the terminology and coding of cross-cutting aspects were revised. All cross-cutting aspects identified during inspections conducted in calendar year 2014 will reflect this revision to Inspection Manual Chapter (IMC) 0310. The CY 2013 end-of-cycle assessments were conducted using the IMC 0310 guidance in effect in CY 2013 (dated October 28, 2011). Cross-cutting aspects identified in 2013 using the 2013 terminology will be converted to the latest revision in accordance with the cross-reference in IMC 0310 during the mid-cycle assessment review and evaluated for cross-cutting themes and potential substantive cross-cutting issues in accordance with IMC 0305.

The enclosed inspection plan lists the inspections scheduled through June 30, 2015. Routine inspections performed by resident inspectors are not included in the inspection plan. The inspections listed during the last nine 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.

We also plan on conducting a special and infrequently performed Inspection Procedure (IP) which includes: IP 71003, "Post-Approval Site Inspection for License Renewal" for Unit 1.

Additionally, an NRC audit of licensee efforts towards compliance with Order EA-12-049, "Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events" is ongoing. This audit includes an onsite component in order for the NRC to evaluate mitigating strategies as described in licensee submittals, and to receive and review information relative to associated open items. This onsite activity will occur in the months prior to a declaration of compliance for the first unit at each site, and will aid staff in development of an ultimate Safety Evaluation for the site. The onsite component has been scheduled for the week of June 16, 2014. A site-specific audit plan for the visit will be provided in advance to allow sufficient time for preparations.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure, will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records System (PARS) component of NRC's Agencywide Documents Access and Management System (ADAMS), 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:  
Cook Inspection/Activity Plan

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L. Weber

-2-

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DOCUMENT NAME: DC Cook Annual Assessment Letter

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DATE	02/21/14	02/24/14		

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Letter to Larry Weber from Kenneth Riemer dated March 4, 2014

SUBJECT: ANNUAL ASSESSMENT LETTER FOR DONALD C. COOK NUCLEAR POWER  
PLANT, UNITS 1 AND 2 (REPORT 05000315/2013001; 05000316/2013001)

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**D.C. Cook**  
**Inspection / Activity Plan**  
**03/01/2014 - 06/30/2015**

Unit Number	Planned Dates Start End	Inspection Activity	Title	No. of Staff on Site
		<b>BI MODS - MODIFICATIONS/50.59 INSPECTION</b>		<b>6</b>
1, 2	03/03/2014 03/21/2014	IP 7111117T	Evaluations of Changes, Tests, and Experiments and Permanent Plant Modifications	
		<b>BI RP - RADIATION PROTECTION BASELINE INSPECTION</b>		<b>1</b>
1, 2	03/12/2014 03/21/2014	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1, 2	03/12/2014 03/21/2014	IP 71124.04	Occupational Dose Assessment	
		<b>BI OLRQ - BIENNIAL REQUAL PROGRAM INSPECTION</b>		<b>2</b>
1, 2	03/17/2014 03/21/2014	IP 7111111B	Licensed Operator Requalification Program	
		<b>RENEWAL - LICENSE RENEWAL U1</b>		<b>10</b>
1	04/28/2014 05/16/2014	IP 71003	Post-Approval Site Inspection for License Renewal	
		<b>BI RP - RADIATION PROTECTION BASELINE INSPECTION</b>		<b>1</b>
1	05/05/2014 05/09/2014	IP 71124.06	Radioactive Gaseous and Liquid Effluent Treatment	
		<b>BI EPR - EP ROUTINE INSPECTION / PI VERIFICATION</b>		<b>2</b>
1	06/23/2014 06/27/2014	IP 7111402	Alert and Notification System Testing	
1	06/23/2014 06/27/2014	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
1	06/23/2014 06/27/2014	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
1	06/23/2014 06/27/2014	IP 71151	Performance Indicator Verification	
		<b>OL PREP - INITIAL EXAM - 08/2014</b>		<b>4</b>
1	06/23/2014 06/27/2014	W90305	OL - INITIAL EXAM - 2014 APR/DEC - COOK	
		<b>OL EXAM - INIT EXAM FOR 07/2014</b>		<b>4</b>
1	07/21/2014 08/01/2014	W90305	OL - INITIAL EXAM - 2014 APR/DEC - COOK	
		<b>BI ISI - INSERVICE INSPECTION - UNIT 1</b>		<b>4</b>
2	09/30/2014 10/24/2014	IP 7111108P	Inservice Inspection Activities - PWR	
		<b>BI RP - RADIATION PROTECTION BASELINE INSPECTION</b>		<b>1</b>
1	11/03/2014 11/07/2014	IP 71124.07	Radiological Environmental Monitoring Program	
1	11/03/2014 11/07/2014	IP 71151-BI01	Reactor Coolant System Activity	
1	11/03/2014 11/07/2014	IP 71151-OR01	Occupational Exposure Control Effectiveness	
1	11/03/2014 11/07/2014	IP 71151-PR01	RETS/ODCM Radiological Effluent	
		<b>BI HS - TRIENNIAL HEAT SINK INSPECTION</b>		<b>2</b>
1	01/26/2015 01/30/2015	IP 7111107T	Heat Sink Performance	
		<b>BI RP - RADIATION PROTECTION BASELINE INSPECTION</b>		<b>1</b>
1	02/02/2015 02/06/2015	IP 71124.05	Radiation Monitoring Instrumentation	
		<b>BI RP - RADIATION PROTECTION BASELINE INSPECTION</b>		<b>1</b>
1	02/02/2015 02/06/2015	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	

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**  
**03/01/2014 - 06/30/2015**

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	02/02/2015	02/06/2015	IP 71124.04	Occupational Dose Assessment	
			<b>BI ISI - UNIT 2 ISI INSPECTION</b>		<b>1</b>
2	03/25/2015	04/25/2015	IP 7111108P	Inservice Inspection Activities - PWR	
			<b>BI RP - RADIATION PROTECTION BASELINE INSPECTION</b>		<b>1</b>
1	04/06/2015	04/10/2015	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1	04/06/2015	04/10/2015	IP 71124.02	Occupational ALARA Planning and Controls	
			<b>ISFSI - ISFSI INSPECTION</b>		<b>2</b>
1, 2	06/01/2015	06/30/2015	IP 60855.1	Operation of an Independent Spent Fuel Storage Installation at Operating Plants	