

August 31, 2006

Mr. M. Nazar  
Senior Vice President and  
Chief Nuclear Officer  
Indiana Michigan Power Company  
Nuclear Generation Group  
One Cook Place  
Bridgman, MI 49106

SUBJECT: MID-CYCLE PERFORMANCE REVIEW AND INSPECTION PLAN -  
D. C. COOK NUCLEAR POWER PLANT, UNITS 1 AND 2

Dear Mr. Nazar:

On August 7, 2006, the NRC staff completed its performance review of the D. C. Cook Nuclear Power Plant, Units 1 and 2, for the first half of the calendar year 2006 assessment cycle. Our technical staff reviewed performance indicators (PIs) for the most recent quarter and inspection results over the previous 12 months. The purpose of this letter is to inform you of our assessment of your safety performance during this period and our plans for future inspections at your facility.

This performance review and enclosed inspection plan do not include physical protection information. A separate letter designated and marked as "Exempt from Public Disclosure in accordance with 10 CFR 2.390" will include the physical protection review and resultant inspection plan.

Plant performance for the most recent quarter at D. C. Cook Nuclear Power Plant, Units 1 and 2, was within the Licensee Response column of the NRC's Action Matrix, based on all inspection findings being classified as having very low safety significance (Green) and all PIs indicating performance at a level requiring no additional NRC oversight (Green). Therefore, we plan to conduct reactor oversight process (ROP) baseline inspections at your facility.

The enclosed inspection plan details the inspections, less those related to physical protection scheduled through March 31, 2008. We plan on conducting non-ROP inspections which include Unit 1 head replacement activities, and a containment sump blockage inspection. The inspection plan is provided to allow for the resolution of any scheduling conflicts and personnel availability issues well in advance of inspector arrival onsite. Routine resident inspections are not listed due to their ongoing and continuous nature. The inspections in the last 9 months of the inspection plan are tentative and may be revised at the end-of-cycle review.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be made 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), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

If circumstances arise which cause us to change the inspection plan, we will contact you to discuss the change as soon as possible. Please contact me at 630/829-9619 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

*/RA/*

Christine A. Lipa, Chief,  
Branch 4  
Division of Reactor Projects

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

Enclosure:  
D. C. Cook Inspection/ Activity Plan

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**/RA/**

Christine A. Lipa, Chief,  
Branch 4  
Division of Reactor Projects

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cc w/encl: J. Jensen, Site Vice President  
L. Weber, Plant Manager  
G. White, Michigan Public Service Commission  
L. Brandon, Michigan Department of Environmental Quality -  
Waste and Hazardous Materials Division  
Emergency Management Division  
MI Department of State Police  
State Liaison Officer, State of Michigan  
D. Lochbaum, Union of Concerned Scientists  
Berrien County Board Chairman  
Berrien County Coordinator  
Berrien County Sheriff  
EMA Coordinator, Berrien County Emergency  
Management Agency  
Mayor of Benton Harbor  
City Manager of Benton Harbor  
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**D.C. Cook**  
**Inspection / Activity Plan**  
**09/01/2006 - 03/31/2008**

Unit Number	Inspection Activity	Title	No. of Staff on Site	Planned Dates		Inspection Type
				Start	End	
	<b>HD FAB</b>	<b>- U1 HEAD FAB/PRESERVICE REVIEW</b>	<b>1</b>			
1	IP 71007	Reactor Vessel Head Replacement Inspection		09/05/2006	09/14/2006	Other Routine
	<b>ISI</b>	<b>- D.C. COOK U1 ISI &amp; RPV HD RPLC MOD INSP</b>	<b>3</b>			
1	IP 71007	Reactor Vessel Head Replacement Inspection		08/14/2006	11/03/2006	Other Routine
1	IP 7111102	Evaluation of Changes, Tests, or Experiments		09/04/2006	11/03/2006	Baseline Inspections
1	IP 7111117B	Permanent Plant Modifications		09/11/2006	11/03/2006	Baseline Inspections
1	IP 7111108P	Inservice Inspection Activities - PWR		10/09/2006	11/03/2006	Baseline Inspections
	<b>7112101</b>	<b>- RAD ACCESS AND OUTAGE ALARA</b>	<b>1</b>			
1,2	IP 7112101	Access Control to Radiologically Significant Areas		10/02/2006	10/06/2006	Baseline Inspections
1,2	IP 7112102	ALARA Planning and Controls		10/02/2006	10/06/2006	Baseline Inspections
1,2	IP 71151	Performance Indicator Verification		10/02/2006	10/06/2006	Baseline Inspections
	<b>7112202</b>	<b>- TRANSPORTATION &amp; RADWASTE</b>	<b>1</b>			
1,2	IP 7112202	Radioactive Material Processing and Transportation		10/30/2006	11/03/2006	Baseline Inspections
1,2	IP 71151	Performance Indicator Verification		10/30/2006	11/03/2006	Baseline Inspections
	<b>71121.02</b>	<b>- POST OUTAGE ALARA</b>	<b>1</b>			
1,2	IP 7112101	Access Control to Radiologically Significant Areas		01/08/2007	01/12/2007	Baseline Inspections
1,2	IP 7112102	ALARA Planning and Controls		01/08/2007	01/12/2007	Baseline Inspections
1,2	IP 71151	Performance Indicator Verification		01/08/2007	01/12/2007	Baseline Inspections
	<b>CDBI</b>	<b>- COMPONENT DESIGN BASES INSPECTION</b>	<b>5</b>			
1,2	IP 7111121	Component Design Bases Inspection		01/29/2007	03/02/2007	Baseline Inspections
	<b>FY 2007</b>	<b>- D. C. COOK INIT PREP 02/2007</b>	<b>3</b>			
1	W90152	OL - INITIAL EXAM - D.C. COOK - FEB/MAR 2007		02/26/2007	03/02/2007	Not Applicable
	<b>FY 2007</b>	<b>- D. C. COOK INIT EXAM 03/2007</b>	<b>3</b>			
1	W90152	OL - INITIAL EXAM - D.C. COOK - FEB/MAR 2007		03/19/2007	03/30/2007	Not Applicable
	<b>71122.03</b>	<b>- REMP &amp; RAD MTL CONTROL</b>	<b>1</b>			
1,2	IP 7112203	Radiological Environmental Monitoring Program (REMP) And Radioactive Material Control P		04/30/2007	05/04/2007	Baseline Inspections
	<b>HEATSINK</b>	<b>- HEAT SINK INSPECTION</b>	<b>1</b>			
1,2	IP 7111107B	Heat Sink Performance		07/09/2007	07/13/2007	Baseline Inspections
	<b>EP BI</b>	<b>- BASELINE EP EXERCISE INSP</b>	<b>1</b>			
1,2	IP 7111401	Exercise Evaluation		08/13/2007	08/17/2007	Baseline Inspections
1,2	IP 71151-EP01	Drill/Exercise Performance		08/13/2007	08/17/2007	Baseline Inspections
1,2	IP 71151-EP02	ERO Drill Participation		08/13/2007	08/17/2007	Baseline Inspections
1,2	IP 71151-EP03	Alert & Notification System		08/13/2007	08/17/2007	Baseline Inspections
	<b>ISI</b>	<b>- HEAD REPLACEMENT</b>	<b>1</b>			
2	IP 71007	Reactor Vessel Head Replacement Inspection		08/06/2007	09/07/2007	Other Routine

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**  
**09/01/2006 - 03/31/2008**

Unit Number	Inspection Activity	Title	No. of Staff on Site	Planned Dates Start	Planned Dates End	Inspection Type
	<b>71121.01</b>	<b>- RADIOLOGICAL ACCESS CONTROL</b>	<b>1</b>			
1,2	IP 7112101	Access Control to Radiologically Significant Areas		09/10/2007	09/14/2007	Baseline Inspections
1,2	IP 7112102	ALARA Planning and Controls		09/10/2007	09/14/2007	Baseline Inspections
1,2	IP 71151	Performance Indicator Verification		09/10/2007	09/14/2007	Baseline Inspections
	<b>ISI</b>	<b>- ISI BASELINE INSPECTION</b>	<b>1</b>			
2	IP 7111108P	Inservice Inspection Activities - PWR		09/24/2007	10/19/2007	Baseline Inspections
	<b>71122.01</b>	<b>- RADIOLOGICAL EFFLUENTS</b>	<b>1</b>			
1,2	IP 7112201	Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems		11/05/2007	11/09/2007	Baseline Inspections
1,2	IP 71151	Performance Indicator Verification		11/05/2007	11/09/2007	Baseline Inspections