

August 31, 2007

Mr. Mano K. 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 14, 2007, 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 2007 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 security information. A separate letter designated and marked as "Official Use Only - Security-Related Information" will include the security cornerstone review and resultant inspection plan.

Our review identified that you have crossed the threshold from Green to Yellow for the Alert and Notification System Performance Indicator. This Yellow PI involved your report of 69 Alert and Notification System sirens that failed to actuate during a scheduled test on May 5, 2007. Specifically, the sirens required multiple actuation sequences over 23 minutes before annunciating.

As a result, we have assessed plant performance at the D. C. Cook Nuclear Power Plant to be in the Degraded Cornerstone column of the NRC's Action Matrix. Therefore, in addition to reactor oversight process (ROP) baseline inspections, we plan to conduct Supplemental Inspection 95002 following completion of your causal analysis and evaluation of the associated issues. Our assessment of plant performance and subsequent inspection plan is subject to the resolution of a Frequently Asked Question (FAQ) recently submitted in accordance with the FAQ process, regarding the Alert & Notification System PI.

The enclosed inspection plan details the inspections, less those related to security, scheduled through December 31, 2008. Significant inspections planned include a PI&R inspection in August 2008, and a component design bases inspection in November 2008. We also plan on conducting inspections of the Unit 2 head replacement activities. 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 nine 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).

The NRC is currently evaluating the scope and frequency of all the baseline inspection procedures. If the results of the evaluation, or any other circumstances, cause us to change the inspection plan, we will contact you to discuss the change as soon as possible. Please contact Christine Lipa at 630/829-9619 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

/RA/

James L. Caldwell,
Regional Administrator

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

Enclosure:
D. C. Cook Inspection/Activity Plan

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M. Nazar

-2-

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DATE	08/23/07	08/21/07	08/23/07	08/28/07	08/28/07			

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Letter to M. Nazar from J. Caldwell dated August 31, 2007

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

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
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
Mayor of St. Joseph
City Manager of St. Joseph
Mayor of Bridgman
City Manager of Bridgman
Mayor of Buchanan
City Manager of Buchanan
President, Village of Stevensville
President, Village of Berrien Springs
President, Village of Shoreham
INPO

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SRI Cook

DRPIII

DRSIII

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D.C. Cook
Inspection / Activity Plan
09/01/2007 - 12/31/2008

Inspection Activity	Title	No. of Staff on Site	Planned Dates		Inspection Type
			Start	End	
HD REPL - HEAD REPLACEMENT INSPECTION		2			
IP 71007	Reactor Vessel Head Replacement Inspection		04/23/2007	09/07/2007	Other Routine
BI RP - RADIATION PROTECTION BASELINE INSPECTION		1			
IP 7112101	Access Control to Radiologically Significant Areas		09/24/2007	09/28/2007	Baseline Inspections
IP 71151-OR01	Occupational Exposure Control Effectiveness		09/24/2007	09/28/2007	Baseline Inspections
IP 71151-PR01	RETS/ODCM Radiological Effluent		09/24/2007	09/28/2007	Baseline Inspections
BI ENG - ENGINEERING INSERVICE INSPECTION		2			
IP 7111108P	Inservice Inspection Activities - PWR		09/24/2007	10/26/2007	Baseline Inspections
BI RP - RADIATION PROTECTION BASELINE INSPECTION		1			
IP 7112201	Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems		11/05/2007	11/09/2007	Baseline Inspections
BI RP - RADIATION PROTECTION BASELINE INSPECTION		1			
IP 7112102	ALARA Planning and Controls		02/04/2008	02/08/2008	Baseline Inspections
BI OL - BIENNIAL REQUAL. PROGRAM INSPECTION		2			
IP 7111111B	Licensed Operator Requalification Program		03/10/2008	03/14/2008	Baseline Inspections
BI RP - RADIATION PROTECTION BASELINE INSPECTION		1			
IP 7112101	Access Control to Radiologically Significant Areas		03/24/2008	03/28/2008	Baseline Inspections
IP 71151-OR01	Occupational Exposure Control Effectiveness		03/24/2008	03/28/2008	Baseline Inspections
BI ENG - ENGINEERING INSERVICE INSPECTION		1			
IP 7111108P	Inservice Inspection Activities - PWR		03/17/2008	04/11/2008	Baseline Inspections
BI RP - RADIATION PROTECTION BASELINE INSPECTION		1			
IP 7112202	Radioactive Material Processing and Transportation		05/12/2008	05/16/2008	Baseline Inspections
IP 71151-PR01	RETS/ODCM Radiological Effluent		05/12/2008	05/16/2008	Baseline Inspections
BI EP - EP ROUTINE INSPECTION / PI VERIFICATION		1			
IP 7111402	Alert and Notification System Testing		06/02/2008	06/06/2008	Baseline Inspections
IP 7111403	Emergency Response Organization Augmentation Testing		06/02/2008	06/06/2008	Baseline Inspections
IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies		06/02/2008	06/06/2008	Baseline Inspections
IP 71151-EP01	Drill/Exercise Performance		06/02/2008	06/06/2008	Baseline Inspections
IP 71151-EP02	ERO Drill Participation		06/02/2008	06/06/2008	Baseline Inspections
IP 71151-EP03	Alert & Notification System		06/02/2008	06/06/2008	Baseline Inspections
BI ENG - ENGINEERING MODIFICATIONS / 50.59 INSP.		2			
IP 7111102	Evaluation of Changes, Tests, or Experiments		06/23/2008	07/11/2008	Baseline Inspections
IP 7111117B	Permanent Plant Modifications		06/23/2008	07/11/2008	Baseline Inspections
BI RP - RADIATION PROTECTION BASELINE INSPECTION		2			
IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		07/28/2008	08/01/2008	Baseline Inspections
IP 71151-BI01	Reactor Coolant System Activity		07/28/2008	08/01/2008	Baseline Inspections

D.C. Cook
Inspection / Activity Plan
09/01/2007 - 12/31/2008

Inspection Activity	Title	No. of Staff on Site	Planned Dates Start End		Inspection Type
OL EXAM W90183	- DC COOK INITIAL LICENSE EXAM VALIDATION DC COOK - INITIAL EXAM - JULY/AUG 2008	6	07/28/2008	08/01/2008	Not Applicable
BI PI&R IP 71152B	- BIENNIAL PI&R INSPECTION Identification and Resolution of Problems	3	08/11/2008	08/29/2008	Baseline Inspections
OL EXAM W90183	- DC COOK INITIAL LICENSE EXAMINATION DC COOK - INITIAL EXAM - JULY/AUG 2008	3	08/18/2008	08/29/2008	Not Applicable
BI ENG IP 7111121	- COMPONENT DESIGN BASES INSPECTION Component Design Bases Inspection	5	11/17/2008	12/19/2008	Baseline Inspections