

September 30, 2005

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

SUBJECT: DONALD C. COOK NUCLEAR POWER PLANT, UNITS 1 AND 2  
NRC EMERGENCY PREPAREDNESS INSPECTION REPORT  
NO. 05000315/2005011(DRS); 05000316/2005011(DRS)

Dear Mr. Nazar:

On September 23, 2005, the NRC completed an inspection at your Donald C. Cook Nuclear Power Plant. The enclosed report documents the inspection findings, which were discussed on September 23, 2005, with Mr. D. Fadel and other members of your staff.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel. Specifically, this inspection focused on emergency preparedness, including your staff's determinations of performance indicators for the Emergency Preparedness Cornerstone.

On the basis of the results of this inspection, no findings of significance were identified.

In accordance with 10 CFR Part 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 (PARS) component of NRC's

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-2-

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Sincerely,

***/RA/***

Kenneth Riemer, Chief  
Plant Support Branch  
Division of Reactor Safety

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

Enclosure: Inspection Report 05000315/2005011(DRS);  
05000316/2005011(DRS)

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  
D. Lochbaum, Union of Concerned Scientists

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Waste and Hazardous Materials Division  
Emergency Management Division  
MI Department of State Police  
D. Lochbaum, Union of Concerned Scientists  
W. King, FEMA, Region V

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

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

Report No: 05000315/2005011(DRS); 05000316/2005011(DRS)

Licensee: Indiana Michigan Power Company

Facility: Donald C. Cook Nuclear Power Plant, Units 1 and 2

Location: 1 Cook Place  
Bridgman, MI 49106

Dates: September 19 through September 23, 2005

Inspectors: T. Ploski, Senior Emergency Preparedness Inspector  
R. Jickling, Emergency Preparedness Inspector  
R. Ruiz, Reactor Engineer

Approved by: K. Riemer, Chief  
Plant Support Branch  
Division of Reactor Safety

Enclosure

## SUMMARY OF FINDINGS

IR 05000315/2005011(DRS); 05000316/2005011(DRS); 09/19/2005 - 09/23/2005;  
Donald C. Cook Nuclear Power Plant, Units 1 & 2; Emergency Preparedness Specialist Report.

The report covers a one-week baseline inspection by two regional emergency preparedness inspectors and a reactor engineer. The inspection focused on the Emergency Preparedness Cornerstone in the Reactor Safety strategic performance area during the biennial emergency preparedness exercise. This inspection also included a review of records related to the three emergency preparedness performance indicators for the period January 1, 2004 through June 30, 2005.

The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 3, dated July 2000.

**A. Inspector-Identified and Self-Revealed Findings**

None.

**B. Licensee-Identified Violations**

None.

## REPORT DETAILS

### 1. REACTOR SAFETY

#### Cornerstone: Emergency Preparedness

#### 1EP1 Exercise Evaluation (71114.01)

##### a. Inspection Scope

The inspectors reviewed the September 20, 2005, biennial emergency preparedness exercise's objectives and scenario to ensure that the exercise would acceptably test major elements of the licensee's emergency plan and to verify that the exercise's simulated problems provided an acceptable framework to support demonstration of the licensee's capability to implement its plan. The inspectors also reviewed records of four emergency preparedness drills, which were conducted between June 2004 and early September 2005, to determine whether those drills' scenarios were sufficiently different from the scenario used in the September 20, 2005, exercise.

The inspectors evaluated the licensee's exercise performance, focusing on the risk-significant activities of emergency classification, notification, and protective action decision making, as well as implementation of accident mitigation strategies in the following emergency response facilities:

- Control Room Simulator; (CRS)
- Technical Support Center (TSC);
- Operations Support Center (OSC); and
- Emergency Operations Facility (EOF).

The inspectors also assessed the licensee's recognition of abnormal plant conditions, transfer of responsibilities between facilities, internal communications, interfaces with offsite officials, readiness of emergency facilities and related equipment, and overall implementation of the licensee's emergency plan.

The inspectors attended post-exercise critiques in the TSC and EOF to evaluate the licensee's initial self-assessment of its exercise performance. The inspectors later met with the licensee's lead exercise evaluators to obtain the licensee's refined assessments of its exercise participants' performances. These self-assessments were then compared with the inspectors' independent observations and assessments to assess the licensee's ability to adequately critique its exercise performance.

These activities completed one inspection sample.

##### b. Findings

No findings of significance were identified.

#### 4. OTHER ACTIVITIES

##### 4OA1 Performance Indicator (PI) Verification (71151)

###### **Cornerstone: Emergency Preparedness**

##### .1 Reactor Safety Strategic Area

###### a. Inspection Scope

The inspectors reviewed the licensee's records associated with each of the three emergency preparedness PIs to verify that the licensee's program was implemented consistent with the industry guidelines in Nuclear Energy Institute Publication No. 99-02, "Regulatory Assessment Performance Indicator Guideline," Revisions 2 and 3, and related licensee procedures. Specifically, licensee records related to the performance of the Alert and Notification System (ANS), key Emergency Response Organization (ERO) members' drill participation, and Drill and Exercise Performance (DEP) were reviewed to verify the accuracy and completeness of the PI data submitted to NRC for the period from January 1, 2004 through June 30, 2005. The following three PIs were reviewed:

###### Common

- ANS;
- ERO Drill Participation; and
- Drill and Exercise Performance.

These activities completed three PI samples.

###### b. Findings

No findings of significance were identified.

##### 4OA6 Meetings

##### .1 Exit Meeting

An exit meeting was conducted for:

- Emergency Preparedness with Mr. D. Fadel and other members of licensee management and staff at the conclusion of the inspection on September 23, 2005. The licensee acknowledged the information presented. No proprietary information was identified.

ATTACHMENT: SUPPLEMENTAL INFORMATION



## **SUPPLEMENTAL INFORMATION**

### **KEY POINTS OF CONTACT**

#### Licensee

R. Brown, Human Performance Manager  
P. Carteaux, Emergency Planning Manager  
D. Fadel, Engineering Vice President  
M. Mierau, Operations Training Manager  
J. Newmiller, Regulatory Affairs Specialist  
M. Scarpello, Regulatory Assurance Supervisor  
D. Schroeder, Emergency Planning Coordinator  
S. Simpson, Safety Assurance Specialist  
S. Vazquez, System Engineering Manager  
V. Woods, Public Affairs Manager

### **LIST OF ITEMS OPENED, CLOSED AND DISCUSSED**

#### Opened and Closed

None.

#### Discussed

None.

### **LIST OF DOCUMENTS REVIEWED**

The following is a list of documents reviewed during the inspection. Inclusion on this list does not imply that the NRC inspectors reviewed the documents in their entirety but rather that selected sections of portions of the documents were evaluated as part of the overall inspection effort. Inclusion of a document on this list does not imply NRC acceptance of the document or any part of it, unless this is stated in the body of the inspection report.

#### 1EP1 Exercise Evaluation

D. C. Cook Plant Exercise Scenario Manual; dated September 20, 2005

Narrative Summary and Time Line for June 15, 2004, Drill

Time Line for December 7, 2004, Drill

Narrative Summary and Time Line for August 23, 2005, Drill

Time Line for September 6, 2005, Drill

Procedure PMP-2080-EPP-100; Emergency Response; Revision 5

Procedure PMP-2080-EPP-101; Emergency Classification; Revision 5

Procedure PMP-2080-EPP-108; Initial Dose Assessment; Revision 6

Procedure RMT-2080-TSC-001; Activation and Operation of the TSC; Revision 5

Procedure RMT-2080-OSC-001; Activation and Operation of the OSC; Revision 3

Procedure RMT-2080-EOF-001; Activation and Operation of the EOF; Revision 8

CR 05264010; During 2005 Exercise, Simulated Position Indications for Two Containment Pressure Relief Valves Did Not Always Reflect Valve Positions in Accordance With the Scenario

CR 05264013; During 2005 Exercise, a Deficiency Was Identified in Procedure PMP-2080-EPP-100 Regarding Onsite Announcements

CR 05264050; During 2005 Exercise, a Damage Control Team Member Did Not Wear Gloves, as Would Have Been Needed in an Actual Situation, When Simulating In-plant Equipment Manipulation

CR 05264054; During 2005 Exercise, One of Three Plume Tracking Computers Used by State Responders Provided Inconsistent Information

CR 05264058; During 2005 Exercise, CRS Personnel Were Not Informed of an Event Reclassification and an Off-site Protective Action Recommendation Made by the EOF Decision Maker

CR 05264059; During 2005 Exercise, the Priority Assigned to One In-plant Team's Mission Was Too Low

CR 05264060; During 2005 Exercise, Job Limitations Were Not Adequately Established and Communicated to Damage Control Team Number Five

CR 05264076; During 2005 Exercise, TSC Staff Did Not Adequately Consider Protective Actions for Downwind Security Guard Posts

CR 05264077; During 2005 Exercise, Inconsistent Use of Repeat Back Communications, Units of Measure, and Site-specific Terminology Were Evident and Could Have Resulted in Misunderstandings

CR 05264088; During 2005 Exercise, Senior Reactor Operator Concurrence Was Used to Allow Simulated Initiation of Containment Sprays Versus Invoking 10 CFR 50.54(x). Validity of This Decision Making Process Should Be Re-Evaluated.

CR 05265007; During 2005 Exercise, Two OSC Responders Did Not Bring Their Respirator Eyeglasses

CR 05265010; During 2005 Exercise, a Need to Clarify Procedure PMP-2080-EPP-100 Was Identified Regarding Precautionary Onsite Protective Actions

CR 05265023; During 2005 Exercise, Proceduralized, Manual Dose Tracking Tools Were Not Adequately Utilized When Considering Emergency Dose Authorizations

CR 02265073; During 2005 Exercise, a CRS Communicator Demonstrated Inadequate Understanding of NRC's Information Needs Following an Emergency Declaration

#### 40A1 Performance Indicator Verification

Desktop Guide for Emergency Preparedness Performance Indicators; Revisions 4 and 6

Sample of Berrien County Monthly Early Warning System Tests Reports; January 2004 through June 2005

Sample of End of Quarter ERO Drill Participation Records; January 2004 through June 2005

Sample of Records of Opportunities for the Drill/Exercise Performance PI; January 2004 through June 2005

CR 05265109; Revise Second Quarter 2005 DEP Data to Remove One Incorrectly Counted Opportunity During a CRS Training Session

CR 05265111; Revise Desktop Guide or Emergency Preparedness Administrative Manual to Improve Quality of Documentation of DEP Opportunities During CRS Training Sessions

### **LIST OF ACRONYMS USED**

ANS	Alert and Notification System
CFR	Code of Federal Regulations
CR	Condition Report
DEP	Drill and Exercise Performance
EOF	Emergency Operations Facility
ERO	Emergency Response Organization
NRC	United States Nuclear Regulatory Commission
NUREG	Nuclear Regulatory Guide
OSC	Operations Support Center
PI	Performance Indicator
TSC	Technical Support Center