

September 20, 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: D. C. COOK NUCLEAR POWER PLANT, UNITS 1 AND 2
BIENNIAL EMERGENCY PREPAREDNESS EXERCISE BASELINE
INSPECTION REPORT 05000315/2007502(DRS);
05000316/2007502(DRS)

Dear Mr. Nazar:

On August 17, 2007, the U. S. Nuclear Regulatory Commission (NRC) completed an inspection at your D. C. Cook Nuclear Power Plant, Units 1 and 2. The enclosed report documents the inspection findings, which were discussed on August 17, 2007, with Mr. M. Peifer 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 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

M. Nazar

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Sincerely,

/RA/

Eric Duncan, Chief
Plant Support Branch
Division of Reactor Safety

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

Enclosure: Biennial Emergency Preparedness Exercise Baseline Inspection Report
05000315/2007502(DRS); 05000316/2007502(DRS);
w/Attachment: Supplemental Information

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
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 Nos: 05000315/2007502(DRS); 05000316/2007502(DRS)

Licensee: Indiana Michigan Power Company

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

Location: Bridgman, MI 49106

Dates: August 13 through August 17, 2007

Inspectors: R. Jickling, Senior Emergency Preparedness Analyst
K. Walton, Reactor Engineer
J. Ellegood, Resident Inspector – Palisades Plant

Observers: R. Russell, Inspector-in-Training
M. Jones, Inspector-in-Training
V. Meghani, Inspector-in-Training

Approved by: E. Duncan, Chief
Plant Support Branch
Division of Reactor Safety

SUMMARY OF FINDINGS

IR 05000315/2007502; 05000316/2007502; on 08/13/2007-08/17/2007; D. C. Cook Nuclear Power Plant, Units 1 and 2, Biennial Emergency Preparedness Exercise Baseline Inspection.

The report covers a 1 week baseline inspection by one regional emergency preparedness inspector, a resident inspector, 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 April 1, 2006 through June 30, 2007.

The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4, dated December 2006.

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 August 14, 2007, 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 other drills and exercises conducted in 2005, 2006, and 2007, to verify that those drills' scenarios were sufficiently different from the scenario used in the August 14, 2007 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); 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 CRS, 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 and managers to obtain the licensee's findings and 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 of 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 the applicable revision of Nuclear Energy Institute Publication No. 99-02, "Regulatory Assessment Performance Indicator Guideline," 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 April 1, 2006, through June 30, 2007. The following three PIs were reviewed:

Common

- ANS;
- ERO Drill Participation; and
- DEP.

These activities completed three of three PI samples.

b. Findings

No findings of significance were identified.

The inspectors noted that the licensee's submittal for the Alert and Notification System Reliability Performance Indicator was in error because the fourth quarter 2007 data submittal indicated 141 sirens of 210 sirens were tested successfully instead of 140 of 209 sirens tested successfully. The regularly scheduled test for May 5, 2007, had only 69 sirens tested because one siren was not tested because of a local parade. The siren taken out-of-service for the regularly scheduled monthly siren test was tested on May 4, 2007, however, this siren test has to be counted for the NRC's ANS Performance Indicator as a non-opportunity per the guidance in NEI 99-02, Revision 5, "Regularly scheduled tests missed for reasons other than siren unavailability (e.g., out-of-service for planned maintenance or repair) should be considered non-opportunities." This error was entered into the licensee's corrective action system as AR-00817132, "PI Data Submitted Late to the NRC."

4OA5 Other

- .1 (Closed) Severity Level III Violation 05000315/316/2006502-01: A Severity Level III Violation was identified for the licensee's failure to maintain a standard emergency action level scheme.

The inspectors reviewed the licensee's action request 00801675 which included causes, extent of condition, and corrective actions. No concerns or issues were identified and appropriate corrective actions have been implemented. This violation is closed.

4OA6 Meetings

- .1 Exit Meeting

On August 17, 2007, at the conclusion of the on-site inspection activities, the inspectors presented preliminary inspection results to Mr. M. Peifer and other members of licensee management. The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee

M. Peifer, Vice President Site Support Services
R. Crane, Compliance Supervisor
H. Etheridge, Regulatory Affairs Specialist
J. Gebbie, Plant Engineering Director
C. Graffenius, Emergency Preparedness Coordinator
Q. Lies, Acting Plant Manager
J. Newmiller, Regulatory Affairs Specialist
A. Rodriguez, Emergency Preparedness Manager
D. Schroeder, Emergency Preparedness Coordinator
C. Springman, Principal Nuclear Specialist
R. Sieber, Chemistry Manager
J. Zwolinski, Performance Assurance Manager

Nuclear Regulatory Commission

B. Kemker, Senior Resident Inspector
J. Lennartz, Resident Inspector

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

None

Closed

NOV 05000315/316/2006-502-01	Failure to Maintain a Standard EAL Scheme.
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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

Donald C. Cook Nuclear Plant Emergency Plan; Sections B, D, E, H, I, J, and K;
Revision 24

PMP-2080-EPP-100; Emergency Response; Revision 9

RMT-2080-EOF-001; Activation and Operation of the EOF; Revision 11

RMT-2080-OSC-001; Activation and Operation of the OSC; Revision 6

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

Drill and Exercise Scenarios; dated November 2005 through July 2007

AR-07228078; Reevaluate the Sample Analysis Methods for Radioiodine for Offsite
Surveys; dated August 16, 2007

AR-07228031; 2007 NRC Evaluated Exercise Item – Error on Protective Action
Recommendation #2 Notification; dated August 16, 2007

AR-07228009; 2007 Exercise Fire Brigaded Failed To Include Required Operations
Technical Assistance; dated August 14, 2007

AR-07227063; 2007 Evaluated Exercise Incorrect Protective Action Recommendation;
dated August 15, 2007

AR-07227058; Several OSC Response Teams Dispatch Were Delayed Due to Failed
Electronic Dosimeter Reader; dated August 15, 2007

AR-07227032; Training for Emergency Exposure Authorization Requested by the Site
Emergency Director; dated August 15, 2007

4OA1 Performance Indicator Verification

ERO Member Drill Participation PI Data Sheets; dated April 2006 through June 2007

Drill/Exercise Performance Data Sheets; dated April 2006 through June 2007

2006 Siren Statistics for Early Warning Siren System; dated April 2006 through
June 2007

Berrien County Monthly EWS Test Reports; dated April 2006 through June 2007

Monthly Siren Test Computer Printout Data; dated April 2006 through June 2007

AR-07037040; Eight ANS Siren Failures During the February 3, 2007 Test; dated February 6, 2007

AR-00813287; Apparent Cause Evaluation for the Alert and Notification System Sirens Delayed Activation during the May 5, 2007, Monthly Test; dated May 7, 2007

AR-00817132; Contrary to PMP-7110-PIP-001, Alert and Notification System Reliability Data Was Sent to the NRC on July 25, 2007 with 141 of 210 Successful Siren Tests Instead of 140 of 209 Successful Tests; dated August 10, 2007

4OA5 Other

AR-00801675; Apparent Cause Evaluation of NRC Violation EA-06-177, Failure to Maintain a Standard Emergency Action Level Scheme; dated August 17, 2006

LIST OF ACRONYMS USED

ADAMS	Agencywide Documents Access and Management System
ANS	Alert and Notification System
CFR	Code of Federal Regulations
CRS	Control Room Simulator
DEP	Drill and Exercise Performance
DRS	Division of Reactor Safety
EOF	Emergency Operations Facility
EP	Emergency Preparedness
ERO	Emergency Response Organization
EWS	Early Warning Sirens
NARS	Nuclear Accident Reporting System
NRC	U. S. Nuclear Regulatory Commission
OSC	Operations Support Center
PARS	Publicly Available Records
PI	Performance Indicator
TSC	Technical Support Center