Mr. Douglas E. Cooper Site Vice President Palisades Nuclear Plant Nuclear Management Company, LLC 27780 Blue Star Memorial Highway Covert, MI 49043-9530

SUBJECT: PALISADES NUCLEAR PLANT

NRC INSPECTION REPORT 50-255/02-06(DRS)

Dear Mr. Cooper:

On June 7, 2002, the NRC completed an inspection at your Palisades Nuclear Plant. The enclosed report documents the inspection findings, which were discussed on June 7, 2002, with you and 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 2.790 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 document system (ADAMS). ADAMS is accessible from the NRC Web site at <a href="http://www.nrc.gov/reading-rm/adams.html">http://www.nrc.gov/reading-rm/adams.html</a> (the Public Electronic Reading Room).

Sincerely,

/RA/

Kenneth R. Riemer, Chief Plant Support Branch Division of Reactor Safety

Docket No. 50-255 License No. DPR-20

Enclosure: Inspection Report 50-255/02-06(DRS)

See Attached Distribution

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cc w/encl: R. Fenech, Senior Vice President, Nuclear

Fossil and Hydro Operations L. Lahti, Manager, Licensing

R. Anderson, Chief Nuclear Officer, NMC

A. Udrys, Esquire, Consumers Energy Company

S. Wawro, Nuclear Asset Director, Consumers Energy Company

W. Rendell, Supervisor, Covert Township

Office of the Governor

Michigan Department of Environmental Quality

Department of Attorney General (MI)

W. Curtis, FEMA, Region V

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# U.S. NUCLEAR REGULATORY COMMISSION REGION III

Docket No: 50-255 License No: DPR-20

Report No: 50-255/02-06(DRS)

Licensee: Nuclear Management Company, LLC

Facility: Palisades Nuclear Generating Plant

Location: 27780 Blue Star Memorial Highway

Covert, MI 49043-9530

Dates: June 3 through June 7, 2002

Inspectors: T. Ploski, Senior Emergency Preparedness Inspector

R. Jickling, Emergency Preparedness Inspector

R. Krsek, Resident Inspector

Observers: M. Castanedo, Engineer

R. Alexander, Radiation Protection Inspector

Approved by: Kenneth R. Riemer, Chief

Plant Support Branch Division of Reactor Safety

#### SUMMARY OF FINDINGS

IR 05000255-02-06(DRS), on 06/03-06/07/2002, Nuclear Management Company, LLC, Palisades Nuclear Plant. Emergency Preparedness Specialist Report.

The report covers a one week baseline inspection by two regional emergency preparedness inspectors and a resident inspector. The inspection focused on the Emergency Preparedness Cornerstone in the Reactor Safety strategic performance area, during the biennial emergency preparedness exercise. This inspection included a review of records related to the three emergency preparedness performance indicators for the 12 month period ending March 31, 2002. No findings of significance were identified. 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.

## Report Details

#### 1. REACTOR SAFETY

**Cornerstone: Emergency Preparedness** 

## 1EP1 Exercise Evaluation (71114.01)

#### a. <u>Inspection Scope</u>

The inspectors reviewed the June 4, 2002 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 two practice drills, which were conducted in May 2002, to determine whether the associated accident scenario was sufficiently different from the scenario used in the June 4, 2002 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)
- 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, OSC, 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.

#### b. Findings

No findings of significance were identified.

#### 4. OTHER ACTIVITIES

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

#### a. <u>Inspection Scope</u>

The inspectors reviewed the licensee's records related to 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 (NEI) publication No. 99-02, Regulatory Assessment Performance Indicator Guideline, Revision 2, 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 data submitted to NRC for the period from April 2001 through March 2002.

### b. <u>Findings</u>

One Unresolved Item was identified regarding the licensee's incorrect assessments of the accuracy of at least six initial notification forms, which were associated with the DEP performance indicator opportunities during license operator requalification training in the simulator conducted between April 2001 and March 2002. These forms would be used to document information communicated to State and county officials during an actual emergency event. However, State and county officials did not participate in, or receive any notification forms during these simulator drills.

Section 2.4 of Revisions 1 and 2 of the NEI 99-02 publication identified 10 items that were expected to be correctly completed on an initial notification form to State and county officials in order to conclude that the form was accurately completed. Two of these accuracy criteria were the "date and time of declaration of emergency" and "whether the event is a drill or actual event." Based on a review of initial notification forms generated during simulator drills for the aforementioned time period, the inspectors identified two types of completion errors that were not identified by licensee staff as being a failed DEP PI opportunity in accordance with the 10 accuracy criteria of Section 2.4 of the NEI 99-02 publication. The first type of error was that several message forms were approved prior to the time of the associated emergency declaration, based on the emergency declaration and message approval times documented on these forms. The second type of error was that several forms indicated that they were associated with an actual emergency event rather than a drill. Upon being informed of the inspectors' identification of these two types of errors on some notification message forms, the licensee initiated a re-assessment of the accuracy of its notification forms generated during simulator and other training activities that were counted as DEP indicator opportunities since the NEI 99-02 accuracy criteria became effective on July 1, 2001.

The inspectors also reviewed an emergency preparedness PI self-assessment report, which was approved on January 17, 2002, which identified an NEI 99-02 interpretation error, which seemed relevant to those cases in which the notification message form was approved prior to the corresponding emergency declaration. Specifically, the second of

nine simulator training objectives incorrectly stated that "within 15 minutes of recognizing the condition as an emergency action level, declare the classification." In contrast, the January 2002 self-assessment report contained an adequate interpretation of the NEI 99-02 guidance such that the emergency classification decision was expected to be made within 15 minutes of information becoming available that warranted an emergency declaration. However, the self-assessment report did not also address the accuracy of the notification forms completed during CRS sessions with respect to the ten criteria in Section 2.4 of the NEI publication.

The PI self-assessment report also indicated that the second training objective was expected to be reworded by the end of March 2002 in order to eliminate the NEI 99-02 interpretation error. The inspectors determined that this objective had not been reworded and implemented as of June 6, 2002.

The licensee's DEP indicator value was 91.9 percent for the eight calendar quarters ending on March 31, 2002. Since this value was near the 90 percent threshold for a DEP indicator color change, the licensee's ongoing reassessment of the accuracy of its notification message forms could result in a White DEP indicator. This concern is an Unresolved Item pending completion of the licensee's re-assessment of the accuracy of its notification message forms and, as needed, a re-submittal of revised DEP indicator data to NRC (Unresolved Item No. 50-255/02-06-01).

#### 4OA2 Identification and Resolution of Problems

The inspectors and the licensee independently identified the following concern regarding the June 2002 exercise that adversely affected the capability to assess several DEP indicator opportunities due, in part, to the scenario's use of pre-scripted and actual meteorological information:

 The scenario's narrative summary and time line indicated only two opportunities for issuing a protective action recommendation to offsite officials; however, participants correctly identified the need for three such recommendations.

#### 4OA6 Meetings

#### **Exit Meeting**

The inspectors presented the inspection results to Mr. D. Cooper and other members of licensee management and staff at the conclusion of the inspection on June 7, 2002. The licensee acknowledged the information presented. No proprietary information was identified.

#### Other Meeting

On June 7, 2002, an inspector made a presentation on NRC's preliminary assessments of the exercise inspection at a public and media briefing hosted by the staff of the Federal Emergency Management Agency in Paw Paw, Michigan.

#### KEY POINTS OF CONTACT

#### Licensee

- E. Bogue, Training Director
- T. Brown, Chemistry and Radiological Services Manager
- J. Brunet, Emergency Planning Specialist
- E. Chatfield, Performance Assessment Specialist
- D. Cooper, Site Vice President
- D. Crabtree, Systems Engineering Manager
- W. G. Hettel, Maintenance Manager
- D. G. Malone, Regulatory Compliance Supervisor
- D. J. Malone, Plant General Manager
- K. Marbaugh, Nuclear Oversight Specialist
- M. Moore, Nuclear Oversight Specialist
- T. O'Leary, Business Support Manager
- G. Packard, Operations Manager
- R. Remus, Assistant Plant Manager
- D. Rogers, Acting Emergency Planning Manager
- P. Russell, Performance Assessment Director
- B. Taylor, Emergency Planning Specialist
- S. Wawro, Director
- R. Werdann, Planning and Scheduling Manager

## LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

#### Opened

50-255/02-06-01 Unresolved Item Licensee reassessment of the accuracy of its notification message forms per NEI 99-02 criteria.

Closed

None

Discussed

None

## LIST OF ACRONYMS USED

ANS Alert and Notification System
CFR Code of Federal Regulations
CPAL Condition Report - Palisades
CRS Control Room Simulator

DEP Drill and Exercise Performance
DRS Division of Reactor Safety
El Emergency Instruction

EOF Emergency Operations Facility
ERO Emergency Response Organization

IR Inspection Report

NEI Nuclear Energy Institute

NRC Nuclear Regulatory Commission

NUREG Nuclear Regulatory Guide
OSC Operations Support Center
PI Performance Indicator
TSC Technical Support Center

## LIST OF DOCUMENTS REVIEWED

1EP1 Exercise	Evaluation	
	Exercise Scenario Manual for Two Practice Drills Conducted During May 2002	
	June 2002 Exercise Scenario Manual	
EI-1	Emergency Classification and Actions	Revision 39
EI-2.1	Site Emergency Director	Revision 23
EI-3	Communications and Notifications	Revision 18
EI-4.1	TSC Activation	Revision 14
EI-4.2	OSC Activation	Revision 15
EI-4.3	EOF Activation	Revision 12
EI-5.1	Recovery	Revision 1
EI-6.0	Offsite Dose Calculation and Recommendations for Protective Actions	Revision 9
EI-6.7	Plant Site Meteorological System	Revision 6
EI-6.8	Backup and Supplemental Meteorology	Revision 5
EI-6.9	Automated Dose Assessment Program	Revision 5
EI-6.10	Offsite Dose Calculation - Manual Method	Revision 5
EI-6.13	Protective Action Recommendations for Offsite Population	Revision 10
EI-12.1	Personnel Accountability and Assembly	Revision 9
	Draft Summary of June 2002 Exercise Critique	June 6, 2002
40A1 Perform	ance Indicator Verification	
	Records of Monthly ANS Test Results, April 2001 through March 2002	
	End of Quarter Key ERO Drill and Exercise Participation Records, April 2001 through March 2002	
	Records of DEP Indicator Opportunities, April 2001 through March 2002	
	Independent Self-Assessment of Palisades PI Program	January 17, 2002
CPAL 0102443	Two Sirens Failed to Activate During July 2001 Test	

CPAL 0102742	Two Sirens Failed to Activate During August 2001 Test
CPAL 0102995	Two Sirens Failed to Activate During September 2001 Test
CPAL 0103368	One Siren Failed to Activate During October 2001 Test
CPAL 0104166	One Siren Failed to Activate During December 2001 Test
CPAL 0200299	One Siren Failed to Activate During January 2002 Test