June 28, 2000

Mr. Thomas J. Palmisano Site Vice President and General Manager Palisades Nuclear Generating Plant Consumers Energy Company 27780 Blue Star Memorial Highway Covert, MI 49043-9530

SUBJECT: PALISADES - NRC INSPECTION REPORT 50-255/2000008(DRS)

Dear Mr. Palmisano:

On June 8, 2000, the NRC completed a baseline inspection at your Palisades Nuclear Generating Plant. The results of this inspection were discussed on June 8, 2000, with you and members of your staff. The enclosed report presents the results of that inspection.

The inspection was an examination of activities conducted under your license as they relate to emergency preparedness and to compliance with the Commission's rules and regulations and with the conditions of your license. Within these areas the inspection consisted of a selective examination of procedures and representative records, observations of activities, and interviews with personnel. Specifically, this inspection focused on performance during your biennial emergency preparedness exercise and your staff's capability to self-assess your participants' performance. In addition, we reviewed your staff's determinations of performance indicators for the Emergency Preparedness Cornerstone.

Based on the results of this inspection, no findings were identified.

In accordance with 10 CFR 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 <u>or</u> from the *Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from* the NRC Web site at http://www.nrc.gov/NRC/ADAMS/index.html (the Public Electronic Reading Room).

T. Palmisano

We will gladly discuss any question you have concerning this inspection.

Sincerely,

/RA/

Gary L. Shear, Chief Plant Support Branch Division of Reactor Safety

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

- Enclosure: Inspection Report 50-255/2000008(DRS)
- cc w/encl: R. Fenech, Senior Vice President, Nuclear Fossil and Hydro Operations N. Haskell, Director, Licensing and Performance Assessment R. Whale, Michigan Public Service Commission Michigan Department of Environmental Quality Department of Attorney General (MI) Emergency Management Division, MI Department of State Police W. Curtis, FEMA, Region V

T. Palmisano

-2-

We will gladly discuss any question you have concerning this inspection.

Sincerely,

/RA/

Gary L. Shear, Chief Plant Support Branch Division of Reactor Safety

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

- Enclosure: Inspection Report 50-255/200008(DRS)
- cc w/encl: R. Fenech, Senior Vice President, Nuclear Fossil and Hydro Operations N. Haskell, Director, Licensing and Performance Assessment R. Whale, Michigan Public Service Commission Michigan Department of Environmental Quality Department of Attorney General (MI) Emergency Management Division, MI Department of State Police W. Curtis, FEMA, Region V

ADAMS Distribution: CMC1 WES DSH (Project Mgr.) J. Caldwell, RIII w/encl B. Clayton, RIII w/encl SRI Palisades w/encl DRP w/encl DRS w/encl RIII_IRTS JRK1 BAH3

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No: License No:	50-255 DPR-20
Report No:	50-255/2000008(DRS)
Licensee:	Consumers Energy Company
Facility:	Palisades Nuclear Generating Plant
Location:	27780 Blue Star Memorial Highway Covert, MI 49043-9530
Dates:	June 5-8, 2000
Inspectors:	 T. Ploski, Senior Emergency Preparedness Analyst R. Jickling, Emergency Preparedness Analyst D. Funk, Emergency Preparedness Analyst
Approved by:	Gary L. Shear, Chief, Plant Support Branch Division of Reactor Safety

NRC's REVISED REACTOR OVERSIGHT PROCESS

The federal Nuclear Regulatory Commission (NRC) recently revamped its inspection, assessment, and enforcement programs for commercial nuclear power plants. The new process takes into account improvements in the performance of the nuclear industry over the past 25 years and improved approaches of inspecting and assessing safety performance at NRC licensed plants.

The new process monitors licensee performance in three broad areas (called strategic performance areas): reactor safety (avoiding accidents and reducing the consequences of accidents if they occur), radiation safety (protecting plant employees and the public during routine operations), and safeguards (protecting the plant against sabotage or other security threats). The process focuses on licensee performance within each of seven cornerstones of safety in the three areas:

Reactor Safety

Radiation Safety

Safeguards

- Initiating Events
- Mitigating Systems
- Barrier Integrity
- Emergency Preparedness
- Occupational
 Public
- Physical Protection

To monitor these seven cornerstones of safety, the NRC uses two processes that generate information about the safety significance of plant operations: inspections and performance indicators. Inspection findings will be evaluated according to their potential significance for safety, using the Significance Determination Process, and assigned colors of GREEN, WHITE, YELLOW or RED. GREEN findings are indicative of issues that, while they may not be desirable, represent very low safety significance. WHITE findings indicate issues that are of low to moderate safety significance. YELLOW findings are issues that are of substantial safety significance. RED findings represent issues that are of high safety significance with a significant reduction in safety margin.

Performance indicator data will be compared to established criteria for measuring licensee performance in terms of potential safety. Based on prescribed thresholds, the indicators will be classified by color representing varying levels of performance and incremental degradation in safety: GREEN, WHITE, YELLOW, and RED. GREEN indicators represent performance at a level requiring no additional NRC oversight beyond the baseline inspections. WHITE corresponds to performance that may result in increased NRC oversight. YELLOW represents performance that minimally reduces safety margin and requires even more NRC oversight. And RED indicates performance that represents a significant reduction in safety margin but still provides adequate protection to public health and safety.

The assessment process integrates performance indicators and inspection so the agency can reach objective conclusions regarding overall plant performance. The agency will use an Action Matrix to determine in a systematic, predictable manner which regulatory actions should be taken based on a licensee's performance. The NRC's actions in response to the significance (as represented by the color) of issues will be the same for performance indicators as for inspection findings. As a licensee's safety performance degrades, the NRC will take more and increasingly significant action, which can include shutting down a plant, as described in the Action Matrix.

More information can be found at: http://www.nrc.gov/NRR/OVERSIGHT/index.html.

SUMMARY OF FINDINGS

Palisades Nuclear Generating Plant NRC Inspection Report 50-255/2000008(DRS)

The report covers a one week period of announced inspection by regional emergency preparedness inspectors. This inspection focused on the Reactor Safety, Emergency Preparedness Cornerstone, and included the following: evaluation of licensee staff's capability to assess licensee participants' performance during the biennial emergency preparedness exercise; and review of the three performance indicators associated with emergency preparedness.

REACTOR SAFETY

Cornerstone: Emergency Preparedness

• There were no findings identified during this inspection (Section 1EP1 and Section 4OA1).

Report Details

1. **REACTOR SAFETY**

Cornerstone: Emergency Preparedness (EP)

1EP1 Drill, Exercise, and Actual Events

a. Inspection Scope

The inspectors reviewed the 2000 exercise's objectives and scenario to ensure that the exercise would acceptably test major elements of the licensee's emergency plan. The scenario included a fire, multiple equipment failures, and a radiological release. The inspectors verified that these simulated problems provided an acceptable framework to support demonstration of the licensee's capabilities to implement its emergency plan.

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

- Control Room Simulator (CRS)
- Technical Support Center (TSC)
- Operational 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, interface with offsite officials, readiness of emergency facilities and related equipment, and overall implementation of the Palisades Nuclear Generating Plant'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 better understand the licensee's refined assessments of exercise participants' performances. These self-assessments were then compared with the inspectors' independent observations and related assessments. The inspectors also attended licensee exercise evaluators' subsequent presentation of self-identified performance strengths and concerns to plant management. On June 9, 2000, an inspector made a presentation at the post-exercise public and media briefing hosted by Federal Emergency Management Agency (FEMA) staff.

b. Issues and Findings

There were no findings identified during this inspection.

4. **OTHER ACTIVITIES**

4OA1 Performance Indicator (PI) Verification

a. Inspection Scope

The inspectors performed a review of PI data to verify the accuracy and completeness of reported data. The PIs reviewed included the public Alert and Notification System (ANS), Emergency Response Organization (ERO) Drill Participation, and Drill and Exercise Performance (DEP). The draft procedure for emergency preparedness PI data gathering was reviewed and discussed with the licensee. Documentation related to the raw data for each indicator was evaluated as were numerous condition reports. Current and historical records for each performance indicator were reviewed. Simulator training, siren testing and maintenance, and drill records were also reviewed.

b. Issues and Findings

There were no findings identified during this inspection.

40A5 Temporary Instruction 2515/144

a. Inspection Scope

The inspectors verified the licensee's processes used to compute values of the three emergency preparedness PIs. Specifically, the inspectors reviewed the data collecting and reporting process for the ERO and ANS PIs. Included was a review of indicator definitions, data reporting elements, calculation methods, definition of terms, procedures and instructions, and clarifying notes used by the licensee to ensure consistency with industry guidance document NEI 99-02, Revision 0.

b. Issues and Findings

The inspectors and licensee discussed several concerns regarding PI program implementation. The inspectors noted that historical data for the number of sirens tested during the monthly ANS test changed from quarter to quarter based on the licensee's interpretation of draft NEI 99-02 guidance. The inspectors and licensee agreed that future ANS PI reporting would account for all the sirens within the plant's emergency planning zone, as specified in current NEI guidance.

There were no findings identified during this inspection.

4OA6 Management Meetings

.1 Exit Meeting Summary

The inspectors presented the inspection results to Mr. T. Palmisano and other members of licensee management and staff at the conclusion of the inspection on June 8, 2000. The licensee acknowledged the findings presented and did not identify any information discussed as proprietary.

PARTIAL LIST OF PERSONS CONTACTED

<u>Licensee</u>

- N. Brott, Emergency Planning Staff
- J. Brunet, Emergency Planning Staff
- D. Cooper, Plant General Manager
- M. Cornel, Maintenance Manager
- M. Fields, Emergency Planning Staff
- R. Gerling, Licensing Staff
- N. Haskell, Licensing Director
- R. Kasper, Construction Supervisor
- S. King, Senior Technical Analyst
- T. Loudenslager, Emergency Planning Staff
- D. Malone, Engineering Director
- J. Milan, Emergency Planning Staff
- M. Moore, Auditor
- R. Orosz, Outage Manager
- T. Palmisano, Site Vice President and General Manager
- D. Rogers, Training Director
- M. Savage, Public Affairs Officer
- C. Scott, Human Resources staff
- G. Smith, Emergency Planning Supervisor
- G. Szczotka, Manager, Nuclear Performance Assessment Department
- B. Taylor, Emergency Planning Staff
- R. Vincent, Licensing Support Supervisor
- S. Wawro, Director of Staff

ITEMS OPENED, CLOSED, AND DISCUSSED

<u>Opened</u>

None.

Closed

None.

Discussed

None.

LIST OF ACRONYMS USED

ANS CFR CRS DEP DRS EI EOF ERO FEMA NEI NRC OA OSC PAP PERR PI	Alert and Notification System Code of Federal Regulations Control Room Simulator Drill and Exercise Performance Division of Reactor Safety Emergency Implementing (procedure) Emergency Operations Facility Emergency Preparedness Emergency Response Organization Federal Emergency Management Agency Nuclear Energy Institute Nuclear Regulatory Commission Other Activities Operational Support Center Palisades Administrative Procedure Public Electronic Reading Room Performance Indicator
PI	Performance Indicator
PWS	Public Warning System (procedure)
TI	Temporary Instruction
TSC	Technical Support Center

INSPECTION PROCEDURES USED

- 71114 Reactor Safety-Emergency Preparedness
- 71114.01 Exercise Evaluation
- 71151 Performance Indicator Verification
- TI 2515/144 Performance Indicator Data Collecting and Reporting Process Review

LIST OF DOCUMENTS REVIEWED

Miscellaneous

ANS Monthly Test Report Summaries for 1999 through April 2000 CRS records of drills conducted on May 10 and June 6, 2000 Licensee's records of actual Unusual Event declaration on September 7, 1999 NEI 99-02, Revision 0, "Regulatory Assessment PI Guideline" Summary Report of the May 9, 2000, Practice Drill Summary Report of the May 23, 2000, Practice Drill Training Attendance Records for sample of key ERO members - 1999 through April 2000

Condition Reports

99-1423; 0000532; 0000724; 0000884; 0000924; 0001384; 0001457; 0001458; 0001469; 0001471; 0001485; 0001486; 0001487; 0001489; 0001491; 0001505; 0001507; 0001516; 0001517; 0001633; 0001635; 0001650; 0001651; 0001653; 0001654; 0001655; 0001658; 0001666; 0001759; 0001763; 0001767; 0001769; 0001770; 0001771; 0001774; 0001775

Procedures

EI-1, Revision 33, "Emergency Classification and Actions"

EI-2.1, Revision 22, "Site Emergency Director"

EI-2.2, Revision 6, "Emergency Staff Augmentation"

EI-3, Revision 18, "Communications and Notifications"

EI-4.1, Revision 12, "TSC Activation"

EI-4.2, Revision 14, "OSC Activation"

EI-4.3, Revision 11, "EOF Activation"

EI-5, Revision 5, "Reentry"

EI-5.1, Revision 0, "Recovery"

EI-6.0, Revision 9, "Offsite Dose Calculation and Recommendations for Protective Actions"

EI-6.2, Revision 4, "Release Rate Determination from Steam Line Monitors for Steam Releases Through Atmospheric Dump Valves"

EI-6.9, Revision 5, "Automated Dose Assessment Program"

EI-6.13, Revision 9, "Protective Action Recommendations for Offsite Populations"

EI-8, Revision 12, "Onsite Radiological Monitoring"

EI-9, Revision 9, "Offsite Radiological Monitoring"

EI-12.1, Revision 9, "Personnel Accountability and Assembly"

EI-13, Revision 6, "Evacuation and Reassembly"

PAP 3.09, Draft, "Data Collection, Review, and Reporting for NRC PI Program"

PWS, Revision 12, "System Tests and System Preventive Maintenance"