June 8, 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 50-255/2000-09(DRS)

Dear Mr. Palmisano:

On May 1-9, 2000 the NRC conducted its biennial inspection of the licensed operator requalification training program at the Palisades Nuclear Power Plant. The results of this inspection were discussed with you and other members of your staff on May 9, 2000. The enclosed report presents the results of this inspection.

This inspection was an examination of activities conducted under your license as they relate to safety 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. There were no findings identified during this inspection.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be placed in the NRC Public Document Room and will be available on the NRC Public Electronic Reading Room (PERR) link at the NRC home page, http://www.nrc.gov/NRC/ADAMS/index.html.

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

Sincerely,

/RA/

David E. Hills, Chief
Operations Branch
Division of Reactor Safety

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

Enclosures: 1. Inspection Report 50-255/2000009(DRS)
2. List of Documents Reviewed

cc w/encls: 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
D. W. Rogers, Training Manager

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Docket No. 50-255
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Enclosures:
1. Inspection Report 50-255/2000009(DRS)
2. List of Documents Reviewed
3. Simulation Facility Report

cc w/encls:
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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
D. W. Rogers, Training Manager

DOCUMENT NAME: G:DRS\PAL2000009DRS.WPD
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U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No:	50-255
License No:	DPR-20
Report No:	50-255/2000009(DRS)
Licensee:	Consumers Energy Company
Facility:	Palisades Nuclear Generating Plant
Location:	27780 Blue Star Memorial Highway Covert, MI 49043-9530
Dates:	May 1-5 and 8-9, 2000
Examiners:	Michael Bielby, Senior Operations Inspector Jay Lennartz, Palisades Senior Resident Inspector
Approved by:	David E. Hills, Chief, Operations 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	● Occupational	● Physical Protection
● Mitigating Systems	● Public	
● Barrier Integrity		
● Emergency Preparedness		

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 Power Plant
NRC Inspection Report 50-255/2000009(DRS)

This report covers the baseline inspection for the biennial review of the licensed operator requalification training program. The inspectors used the risk informed baseline inspection procedure 71111, Attachment 11, “Licensed Operator Requalification.”

There were no findings identified during this inspection.

Report Details

1. REACTOR SAFETY

1R11 Licensed Operator Requalification

.1 Review of Historical Data - Effectiveness of Operator Training

a. Inspection Scope

The inspectors reviewed the plant's operating history from February 1999 through April 2000, to assess whether the licensed operator requalification training program had addressed operator performance deficiencies noted in the plant.

b. Issues and Findings

No findings were identified during inspection of this area.

.2 Requalification Examination Material

a. Inspection Scope

The inspectors reviewed the Cycle 99H annual requalification examination material, which consisted of dynamic simulator scenarios and job performance measures (JPMs), and the previous annual written examinations to evaluate general quality, construction, and difficulty level. The inspectors reviewed the methodology for developing the requalification examinations, including incorporation of probabilistic risk assessment insights. The inspectors compared both the current year and last year's annual requalification cycle examination material to assess the level of examination material duplication. The inspectors also discussed various aspects of the examination development with members of the licensee's training and operations staff.

Specific documents reviewed for this inspection are listed in Enclosure 2.

b. Issues and Findings

No inspection findings were identified during inspection of this area.

.3 Requalification Examination Administration Practices

a. Inspection Scope

The inspectors observed the administration of all aspects of the requalification operating examination to determine the evaluators' ability to administer an examination and to assess adequate performance through measurable criteria. The inspectors also noted the performance of the simulator to support the examinations. The inspectors observed one operating shift crew and one administrative crew during the dynamic simulator scenarios and JPM evaluations. Training staff personnel were observed administering the examinations, including pre-examination briefings, observations of operator

performance, individual and crew evaluations of observations, techniques for JPM cuing, and final evaluation briefing and documentation for licensed operators. In addition, the inspectors interviewed operators and key staff members from the training and operations departments to assess their understanding of the requalification training process. The inspectors also reviewed the licensee's overall examination security program.

Specific documents reviewed for this inspection are listed in Enclosure 2.

b. Issues and Findings

No inspection findings were identified during inspection of this area.

.4 Requalification Training Program Feedback Process

a. Inspection Scope

The inspectors verified the methods and effectiveness of the licensed operator requalification training program to ascertain whether assessments of operator performance were effectively incorporated into the requalification training. The inspectors performed interviews with key licensee personnel (operators, instructors, and training management) and reviewed the applicable licensee's procedures and recent operations department self-assessments. Specific documents reviewed for this inspection are listed in Enclosure 2.

b. Issues and Findings

No inspection findings were identified during inspection of this area.

.5 Remedial Training Program

a. Inspection Scope

The inspectors assessed the licensed operator requalification remedial training program, including reviews of program procedures and interviews with key staff members. The inspectors reviewed the remediation documentation for two individuals that was prepared during the current (Cycle 99H) Week 2 annual operating examination and five individuals from the previous annual licensed operator requalification training (LORT) examination. Additionally, the inspectors reviewed remediation documentation for the previous year's (1999) five annual written examination failures.

Specific documents reviewed for this inspection are listed in Enclosure 2.

b. Issues and Findings

No inspection findings were identified during inspection of this area.

.6 Conformance with Operator License Condition

a. Inspection Scope

The inspectors reviewed a sample of licensed operators' records to ascertain whether the facility and the operator licensee's were maintaining license conditions in accordance with 10 CFR 55.53. In addition to the documents listed in Enclosure 2, the following records were reviewed:

- a sampling of licensed operator medical records,
- operator proficiency log records for 2000 which indicated the watch standing hours for licensed operators at the facility, and
- requalification training attendance records for this current cycle.

b. Issues and Findings

No inspection findings were identified during inspection of this area.

4.0 OTHER ACTIVITIES

4OA6 Management Meetings

.1 Exit Meeting Summary

The inspectors presented the inspection results to Mr. Palmisano and other members of licensee management at the conclusion of the inspection on May 9, 2000. The licensee acknowledged the observations and findings and did not identify any information as proprietary.

PARTIAL LIST OF PERSONS CONTACTED

Licensee

T. Palmisano, Site Vice-President and General Manager
G. Baustian, Nuclear Engineering Manager
J. Boss, Operations Manager
D. Cooper, Plant General Manager
N. Haskell, Licensing Director
R. Kasper, Maintenance and Construction
S. King, Licensing
T. Lintzenich, Business Strategies
D. Malone, Licensing Manager
D. Rogers, Training Director

NRC

J. Lennartz, Palisades Senior Resident Inspector

ITEMS OPENED, CLOSED AND DISCUSSED

Opened

None

Closed

None

Discussed

None

LIST OF ACRONYMS USED

AP	Administrative Procedure
CFR	Code of Federal Regulations
DRS	Division of Reactor Safety
ESDE	Excess Steam Demand Event
JPM	Job Performance Measure
LOCA	Loss of Coolant Accident
LORT	Licensed Operator Requalification Training
NRC	Nuclear Regulatory Commission
PNT	Palisades Nuclear Training Procedure
SGTR	Steam Generator Tube Rupture
SPE	Simulator Performance Examination

Enclosure 2

LIST OF DOCUMENTS REVIEWED

The following is a list of licensee documents reviewed during the inspection, including documents prepared by others for the licensee. Inclusion on this list does not imply that NRC inspectors reviewed the documents in their entirety, but, rather that selected sections or portions of the documents were evaluated as part of the overall inspection effort. NRC acceptance of the documents or any portion thereof is not implied.

Procedures:

- Palisades Nuclear Training Procedure (PNT) 7.0, Revision 5, dated 3/24/00
- PNT 13.0, Revision 0, dated 1/13/99
- Palisades Nuclear Plant Administrative Procedure (AP) 4.05, "Operator Training," Revision 17, dated 4/11/00
- Palisades Nuclear Plant Systematic Approach to Training Manual, Appendix A, "Decision Tree for Determining Task Category," and Appendix B, "Job Analysis Job Aid," Revision 2, dated April 1997
- AP 4.05, Attachment 3, "Certification for Resuming Active License Status"

Licensed Operator Requalification Training Documentation:

- Training Attendance Records (May 1999 - April 2000)
- List of individual operator license information including status of active/inactive, physical and renewal due dates, and current license restrictions
- Review of medical records for five licensed operators
- Evaluation Tracking of SROs in the Control Room Supervisor Position (2/26/99-2/1/00)
- Historical Description of LORT 1998 Cycle (97/98 Two Year Cycle)
- LORT Lesson Plans (LP 99A-E)
- Human Performance Issues, October 1999 to February 2000
- Simulator Significant Differences, Revision 87 (4/10/00)
- Operable Plant Modifications Not Installed in the Simulator (PALTRACK, 5/1/00)

Current (Cycle 99H) and Previous Annual Examination Material and Documentation:

- 1998/2000 Annual LORT Sample Plan
- JPM TBAR-JP-04, Revision 3e, "Reduce Station Battery #1 Loading"
- JPM TBAM-06A, Revision 1e, "Energize Bus 1C From Startup Transformer 1-2 Locally"
- JPM TBAF-02, Revision 0, "Raising RIA-0707 High Radiation Trip Set Point"
- JPM ASFA-04, Revision 1, "Concentrated Boric Acid Flow Test"
- JPM ASAC-02, Revision 4c, "Unload and Secure 1-1 Diesel Generator in Parallel From the Control Room"
- JPM ASFA-03, Revision 0e, "Recirculate a Boric Acid Storage Tank for Sampling"
- JPM ASAB-06, Revision 2, "Change Operating Station Power Battery Chargers"
- JPM ASED-01, Revision 2e, "Start a Primary Coolant Pump"
- Simulator Performance Examination (SPE) 8, Revision 7, "Small Break Loss of Coolant Accident (LOCA) / Steam Generator Tube Rupture (SGTR)"
- SPE 11, Revision 6, "LOCA"
- SPE 13, Revision 7, "Vapor Space LOCA"
- SPE 15, Revision 8, "SGTR/Loss of Component Cooling Water"
- SPE 20, Revision 5, "Excess Steam Demand Event (ESDE) Inside Containment"

- SPE 21, Revision 1, “ESDE Inside Containment/SGTR”
- SPE 24, Revision 4, “ESDE Inside Containment”
- SPE 31, Revision 3, “SGTR”
- Licensee’s evaluation of operating crew performance as documented in Attachment 5, “Simulator Performance Evaluations” of PNT 7.0
- Unsatisfactory individual scenario performance as documented in Attachment 1, “Operator Performance Evaluation, Revision 16, of AP 4.05, “Operator Training.”
- Remediation Training documentation for two licensed operators who failed the annual operating exam (April/May 2000)
- Part A and B Written Examinations (March-April 1999)
- Individual and Crew Simulator Evaluations (February-March 1999)
- Remediation Training documentation for five licensed operators who failed the biennial written examination administered in 1999

Assessments:

- Self-Assessment Reports for Licensed Operator Requalification Training (January 1999 - February 2000)
- Nuclear Performance Assessment Department, Licensed Operator Requalification Training (May 1999 - March 2000)
- 1997-1998 Classroom Training Report