

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 INSPECTION REPORT 50-255/2000007(DRP)

Dear Mr. Palmisano:

On April 2 through May 13, 2000, the NRC completed an inspection at your Palisades Nuclear Generating Plant. The enclosed report presents the results of that inspection. The results of this inspection were discussed on May 15, 2000, with you and other members of your staff.

The inspection was an examination of 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. Within these areas, the inspection consisted of a selected examination of procedures and representative records, observation of activities, and interviews with personnel.

Based on the results of this inspection we noted a cross-cutting issue regarding human performance. The event was evaluated under the risk significance determination process and was determined to be of very low safety significance (Green). This issue was entered into your corrective action program and is discussed in the summary of findings and in the body of the attached inspection report. The issue resulted in a violation of NRC requirements, but because of the very low safety significance the violation is not cited. If you contest this non-cited violation, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC, 20555-0001; with a copy to the Regional Administrator, Region III; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC, 20555-0001; and the NRC Resident Inspector at the Palisades Plant.

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 **or** 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).

Sincerely,
/RA/
Original signed by
Michael J. Jordan

Michael J. Jordan, Chief
Reactor Projects Branch 3

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

Enclosure: Inspection Report 50-255/2000007(DRP)

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

T. Palmisano

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Sincerely,

/s/Michael J. Jordan

Michael J. Jordan, Chief
Reactor Projects Branch 3

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

Enclosure: Inspection Report 50-255/2000007(DRP)

cc w/encl: R. Fenech, Senior Vice President, Nuclear
Fossil and Hydro Operations
D. Malone, Acting Director, Licensing
R. Whale, Michigan Public Service Commission
Michigan Department of Environmental Quality
Department of Attorney General (MI)
Emergency Management Division, MI Department
of State Police

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U. S. NUCLEAR REGULATORY COMMISSION

REGION III

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

Report No: 50-255/2000007(DRP)

Licensee: Consumers Energy Company
212 West Michigan Avenue
Jackson, MI 49201

Facility: Palisades Nuclear Generating Plant

Location: 27780 Blue Star Memorial Highway
Covert, MI 49043-9530

Dates: April 2 through May 13, 2000

Inspectors: J. Lennartz, Senior Resident Inspector
R. Krsek, Resident Inspector
T. Tongue, Project Engineer

Approved by: Michael J. Jordan, Chief
Reactor Projects Branch 3
Division of Reactor Projects

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
<ul style="list-style-type: none">● Initiating Events● Mitigating Systems● Barrier Integrity● Emergency Preparedness	<ul style="list-style-type: none">● Occupational● Public	<ul style="list-style-type: none">● 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 50-255/2000007(DRP)

The report covers a 6-week period of resident inspection. The significance of issues is indicated by their color (green, white, yellow, red) and was determined by the Significance Determination Process in Inspection Manual Chapter 0609.

Cornerstone: Initiating Events

- GREEN. Control room operators manually tripped the reactor on April 4, 2000, in response to a loss of both main feedwater pumps. It was determined that an Auxiliary Operator failed to follow plant operating procedures while manipulating the Emergency Diesel Generator 1-1 output breaker, which resulted in the loss of both main feedwater pumps and the subsequent plant trip. All safety-related equipment operated as designed following the plant trip, and no plant equipment was damaged by the event. The event had very low risk significance. The inspectors identified a non-cited violation for the failure to accomplish activities affecting quality in accordance with prescribed procedures. (Section 4OA3.1).

Report Details

Summary of Plant Status: The plant was at 100 percent power at the start of the inspection period. On April 4, 2000, the plant was manually tripped in accordance with plant procedures after the main feedwater pumps tripped, as designed, on low suction pressure following the loss of the heater drain pumps. The plant returned to full power on April 9, 2000, where it remained for the duration of the inspection period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity

1R01 Adverse Weather

a. Inspection Scope

The inspectors assessed plant procedures to protect mitigating systems from high wind conditions which could lead to a loss of offsite power and queried operations personnel regarding the actions that would be taken in response to notification of high wind conditions. The inspectors also reviewed Off Normal Procedure (ONP) - 12, "Acts of Nature," Revision 16.

b. Issues and Findings

There were no findings identified and documented during this inspection.

1R04 Equipment Alignments

.1 Semiannual Complete System Walkdown

a. Inspection Scope

The inspectors performed walkdowns of the auxiliary feedwater system, a risk-important mitigating system. The inspection consisted of verifying the correct system lineup of system components, reviewing active maintenance work requests which may impact the ability of the system to perform the intended safety function, and reviewing active design and engineering issues associated with the auxiliary feedwater system. The walkdown incorporated reviews of the applicable portions of the Technical Specification (TS) Requirements and Final Safety Analysis Report, and System Operating Procedure - 12, "Feedwater System," Checklists 12.5 and 12.6, "Auxiliary Feedwater System and K-8 Steam Supply Checklists," Revision 37.

In addition, the inspectors reviewed corrective action program documentation to verify that safety-related equipment alignment problems identified in the program were appropriately evaluated and corrected. The inspectors reviewed the following Condition Reports and associated documentation:

- Condition Report CPAL0000201, "Unnamed Valve Associated with Diesel Generator Room Ventilation Found Partially Open, Instead of Full Open"

- Condition Report CPAL0000233, “NSSS Panel, EC-32, Sample Valve from Letdown Line Found Open”

- Condition Report CPAL9903026, “Spent Fuel Pool Cooling Pump P-51A Casing Drain Plug Not Installed Prior to Restoration”

- b. Issues and Findings

There were no findings identified and documented during this inspection.

.2 Routine Partial System Walkdowns

- a. Inspection Scope

The inspectors performed walkdowns of the safety-related 2400V electrical safeguards Bus 1D and off site power supply sources following the plant trip on April 4, 2000. The inspection consisted of verifying that Bus 1D was supplied from the normal power source, that alternate power was available to Bus 1D, and that the nominal number of off site power sources were available as indicated on control room panels. The inspection also incorporated reviews of the applicable portions of TS requirements.

- b. Issues and Findings

There were no findings identified and documented during this inspection.

1R05 Fire Protection

- a. Inspection Scope

The inspectors toured the east and west safeguards rooms, the electrical switchgear room, and the emergency diesel generator rooms. The inspectors observed the control of transient combustibles and ignition sources and where applicable verified the operability of the sprinkler fire suppression system, smoke detector system and manual fire fighting equipment in these areas. The inspectors also verified the availability of the safety-related fire reel and hose stations in the auxiliary building.

The inspectors reviewed the applicable portions of Procedures FPIP-4, “Fire Protection Systems and Fire Protection Equipment,” Revision 15 and ONP-25.1, “Fire which Threatens Safety-Related Equipment,” Revision 10 during the inspection. Condition Report 000946, “Appendix R Post Fire Repair Equipment Not Properly Staged,” was also reviewed to determine whether appropriate corrective actions were taken in response to this fire protection issue.

- b. Issues and Findings

There were no findings identified and documented during this inspection.

1R11 Licensed Operator Requalification

a. Inspection Scope

The inspectors observed simulator evaluations performed for licensed operators' requalification testing. The simulator scenarios were reviewed for the appropriate scope, depth and complexity in the stated objectives as compared with the simulator testing guidelines contained in NUREG-1021, "Operator Licensing Examinations for Power Reactors."

In addition, the inspectors observed the licensee evaluators' critique which assessed the operating crew's performance during the simulator evaluation.

b. Issues and Findings

There were no findings identified and documented during this inspection.

1R12 Maintenance Rule Implementation

a. Inspection Scope

The inspectors evaluated the licensee's implementation of the Maintenance Rule, 10 CFR Part 50.65, for the following high safety significant systems: Service Water Pumps P-7A, P-7B and P-7C, and Engineered Safeguards Room Coolers VHX-27A and VHX-27B. The inspectors reviewed recent maintenance rule evaluations for the service water and engineered safeguards room cooler systems to verify the appropriate maintenance rule categorization of specific issues and to evaluate the appropriateness of the performance criteria established for the system. The inspectors also interviewed the licensee's maintenance rule coordinator and evaluated the licensee's monitoring and trending of performance data with the responsible system engineer.

In addition, the inspectors observed the performance of Work Order 24011589, "Pump-7A, Service Water Pump Repack." This routine maintenance has recently been performed at an increased frequency due to a shortened service time of the service water pump packing. The inspectors also reviewed the following Condition Reports and associated documentation related to this issue:

- CPAL0000613, "Service Water Pump P-7B Premature Packing Failure"
- CPAL0000618, "Service Water Pump P-7A Premature Packing Failure"
- CPAL0000631, "Service Water Pump P-7C Packing Installed in Incorrect Stack-Up"

b. Issues and Findings

There were no findings identified and documented during this inspection.

1R13 Maintenance Risk Assessment and Emergent Work Prioritization

a. Inspection Scope

The inspectors reviewed the scheduling and Operator's Risk Report for April 24, 2000, pertaining to maintenance on Auxiliary Feedwater Flow Control Valves CV-0737, "Auxiliary Feedwater Pump P-8C To Steam Generator E-50A," and CV-0736, "Auxiliary Feedwater Pump P-8C To Steam Generator E-50B." The inspectors also reviewed the Operator's Risk Report for May 10, 2000, and the scheduled activities during maintenance on High Pressure Air Compressor C-6A. In addition, the inspectors discussed the risk evaluations and plant configuration control for the maintenance activities with operations and work control center personnel.

b. Issues and Findings

There were no findings identified and documented during this inspection.

1R14 Personnel Performance During Non-routine Plant Evolutions

a. Inspection Scope

The inspectors assessed operator performance during the plant trip event that occurred on April 4, 2000. The inspectors reviewed the following documents during the inspection:

- Licensee Event Report 50-255/00-003, "Inadvertent Closure of Emergency Diesel Generator 1-1 Output Breaker"
- operation personnel's "Post Event Review Report"
- plant computer event report data
- control room strip chart data for steam generator levels
- Condition Report CPAL0001050, "Inadvertent Manual Closure of 1-1 Emergency Diesel Generator Output Breaker Causes Motorization of Emergency Diesel Generator," and the associated evaluation
- licensee personnel's "Incident Response Team Report" regarding CPAL0001050
- shift supervisor logs
- Emergency Operating Procedure - 1.0, "Standard Post-Trip Actions," Revision 9

The inspectors also reviewed Condition Report CPAL0001051, "E-50A Steam Generator Atmospheric Dump Valves Steaming Harder Than E-50B Steam Generator Atmospheric Dump Valves Following Plant Trip," to verify that licensee personnel appropriately identified equipment problems that occurred following the trip. Also, the inspectors verified that the identified corrective actions were appropriate and that immediate corrective actions had been implemented.

b. Issues and Findings

The Auxiliary Operator was unable to remove the breaker from the cabinet after depressing the breaker foot pedal release mechanism in accordance with the procedure. He then erroneously discharged the charging springs thinking this would remove the

interference. However, the procedural step to discharge the closing springs was required to be performed after the breaker was removed from the cabinet. This improper action closed the breaker connecting EDG 1-1 to Bus 1C as a load which caused safeguards transformer voltage to lower starting both EDGs and excessive current flow which subsequently tripped the Bus 1C supply breaker from the safeguards transformer as designed. The load on Bus 1C was then picked up by EDG 1-1 because EDG 1-1 had started and the output breaker was closed.

In addition, the degraded voltage on Bus 1C caused a momentary loss of some instrument power, which resulted in a loss of both heater drain pumps because of an indicated low level in the heater drain tank. The loss of both heater drain pumps resulted in a low suction pressure to both main feedwater pumps, which tripped as designed. The control room operators recognized the loss of both main feedwater pumps and tripped the reactor in accordance with plant procedures. All plant equipment operated as designed during the transient and following the trip. The NRC risk analysts concluded that this event had very low risk significance (Green).

The Auxiliary Operator failed to follow System Operating Procedure - 30, "Station Power," while racking out EDG 1-1 output breaker 152-107, an activity affecting quality, on April 4, 2000. Consequently, an unnecessary plant trip occurred. This issue was considered a non-cited violation of NRC requirements. Specifically, 10 CFR 50, Appendix B, Criterion V, states, in part, that activities affecting quality shall be accomplished in accordance with prescribed procedures. (NCV 50-255/2000007-01)

This issue was appropriately documented in Condition Report CPAL001050, "Inadvertent Manual Closure of 1-1 EDG Output Breaker Causes Motorization of EDG," and entered into the licensee's corrective action program.

1R15 Operability Evaluations

a. Inspection Scope

The inspectors reviewed the operability assessments for safety-related 2400V safeguards Bus 1C and Emergency Diesel Generator 1-1 that were completed following the plant trip on April 4, 2000. The following documents were reviewed:

- Condition Report CPAL0001053, "Potential Bus 1C Damage Due To Motorizing 1-1 Emergency Diesel Generator"
- Applicable sections of Final Safety Analysis Report, Chapter 8, "Electrical Systems," Revision 21
- System Operating Procedure - 22, "Emergency Diesel Generators," Attachment 6, "Diesel Generator Log Sheet," Revision 28
- Emergency Diesel Generator 1-1 voltage and frequency test data obtained on April 5, 2000, as compared to test data obtained on October 19, 1999
- Technical Specification 4.7, "Electrical Power System Tests," Amendment 180 and the associated bases.

b. Issues and Findings

There were no findings identified and documented during this inspection.

1R19 Post Maintenance Testing

a. Inspection Scope

The inspectors observed the post maintenance tests and reviewed test data for the following activities:

- Work Order 24011589, "Pump-7A, Service Water Pump Repack"
- Work Order 24913742, "Emergency Diesel Generator 1-1 Air Start Motors"
- Work Order 24912686, "East Engineered Safeguards High Pressure Air System Pressure Switch Alarm"
- Work Order 24912685, "High Pressure Air Compressor C-6A Pressure Switch Start"

The inspectors verified that the post maintenance tests observed demonstrated the systems and components were capable of performing the intended safety function. In addition, the inspectors reviewed the applicable sections of the TS Requirements and Final Safety Analysis Report, and the following plant procedures:

- QO-14A, "Inservice Test Procedure- Service Water Pumps," Revision 14
- MO-7A-1, "Emergency Diesel Generator 1-1," Revision 51
- System Operating Procedure - 20, "High Pressure Control Air System," Revision 15

The inspectors also reviewed Condition Reports CPAL0001481, "Unexpected Entry Into TS 3.3.2 During Restoration of C-6A," and CPAL0001483, "High Pressure Air Compressor C-6A Relief Valve Lifting Continuously On Return To Service Following Maintenance," to verify that licensee personnel appropriately identified problems that occurred during post maintenance testing. The inspectors also verified that the identified corrective actions were appropriate and that immediate corrective actions had been implemented.

b. Issues and Findings

There were no findings identified and documented during this inspection.

1R22 Surveillance Testing

a. Inspection Scope

The inspectors observed and reviewed surveillance tests for the following risk-significant plant components or systems: Auxiliary Feedwater Pump P-8B; safety injection signal initiation circuitry; and, auxiliary feedwater actuation signal initiation circuitry. The inspection included reviews of the applicable TS Requirements and Final Safety Analysis Report, in addition to the Design Basis Documents and vendor manuals. The following surveillance test procedures and plant documents were reviewed during these inspections:

- QO-21B, "Inservice Test Procedure - Auxiliary Feedwater Pumps," Revision 18
- QO-1, "Safety Injection System," Revision 43
- QO-1, "Bases Document, Safety Injection System," Revision 2
- MI-39, "Auxiliary Feedwater Actuation System Logic Test," Revision 6
- Logic Diagram E-17, Sheet 4, "Safety Injection Actuation," Revision 15

The inspectors also reviewed Condition Reports CPAL0001367, "Service Water Pump P-7A Failed to Start During QO-1," and CPAL0001379, "Service Water Pump P-7A Breaker 152-204 Green Light Flickered During QO-1" to verify that licensee personnel appropriately identified surveillance testing problems. Also, the inspectors verified that the identified corrective actions were appropriate and that immediate corrective actions had been implemented.

b. Issues and Findings

There were no findings identified and documented during this inspection.

1R23 Temporary Plant Modifications

a. Inspection Scope

The inspectors reviewed Temporary Modification TM 99-035, "Load Resister - Auxiliary Feedwater Actuation System Actuation Channel Power Supply." The inspectors interviewed the system engineer, reviewed the applicable portions of the TSs and the Final Safety Analysis Report, and reviewed the following licensee documentation:

- Condition Report CPAL9902698, "Auxiliary Feedwater Actuation System/Feed Only Good Generator Panel +12 VDC Input Power Supply Design Deficiency"
- Engineering Analysis, "Auxiliary Feedwater Actuation System Palisades Generating Plant #991101"
- Temporary Modification Form 3621 for Temporary Modification TM 99-035
- Auxiliary Feedwater Actuation System Qualification Unit Electrical Test Procedure 12447-059, J447Q171-1
- Acceptance Test Procedure 166, "Acceptance Test Procedure for Berkleonics CEA3A120Y102FLP3U Power Supply," Revision1.0

The inspectors verified that the installed temporary modification did not degrade or affect the safety functions of the Auxiliary Feedwater Actuation System.

b. Issues and Findings

There were no findings identified and documented during this inspection.

Cornerstone: Emergency Preparedness

1EP1 Exercise Evaluation

a. Inspection Scope

The inspectors observed portions of emergency response personnel performance in the simulator and Technical Support Center during an Emergency Preparedness training drill that was conducted on May 9, 2000. The inspectors assessed emergency response personnel's ability to classify events, complete required notifications, and determine protective action recommendations. The inspectors also discussed drill performance with emergency preparedness personnel regarding the identification and resolution of performance weaknesses.

b. Issues and Findings

There were no findings identified and documented during this inspection.

4. OTHER ACTIVITIES (OA)

4OA1 Performance Indicator Verification

Unplanned Scrams Per 7000 Critical Hours

a. Inspection Scope

The inspectors reviewed the licensee report of monthly operating data and Licensee Event Reports for the period from May 1, 1999, to March 31, 2000, to verify the performance indicator regarding unplanned scrams per 7000 critical hours.

b. Issues and Findings

There were no findings identified and documented during this inspection.

4OA3 Event Follow-up

.1 Manual Reactor Trip on April 4, 2000

a. Inspection Scope

The inspectors assessed and reviewed the circumstances surrounding the plant trip event that occurred on April 4, 2000. The inspectors conducted a walkdown of the control room panels and observed operator performance during post-trip recovery actions. The inspectors reviewed the following documents during the inspection:

- operation personnel's "Post Event Review Report"
- plant computer event report data
- control room strip chart data for steam generator levels
- shift supervisor logs

- Emergency Operating Procedure - 1.0, "Standard Post-Trip Actions," Revision 9
- Licensee Event Report 50-255/00-003, "Inadvertent Closure of Emergency Diesel Generator 1-1 Output Breaker"
- Condition Report CPAL0001050, "Inadvertent Manual Closure of 1-1 Emergency Diesel Generator Output Breaker Causes Motorization of Emergency Diesel Generator," and the associated evaluation
- licensee personnel's "Incident Response Team Report" regarding CPAL0001050
- System Operating Procedure - 30, "Station Power," Section 8.4.1, "To Remove an Allis-Chalmers or Siemens 2400V/4160V Stored Energy Breaker From Service," Revision 29

b. Issues and Findings

An Auxiliary Operator inadvertently closed the Emergency Diesel Generator (EDG) 1-1 output breaker 152-107 on April 4, 2000, while attempting to rack the breaker out for a tagging order. The error resulted in the output breaker being closed onto the 2400V safeguards electrical Bus 1C with EDG 1-1 not in operation. Consequently, both main feedwater pumps tripped on low suction pressure as designed. Control room operators manually tripped the reactor in accordance with plant procedures, in response to a loss of both main feedwater pumps. All safety-related equipment operated as designed following the manual reactor trip, and no plant equipment was damaged by the event. This event was discussed in Section 1R14 of this report.

No new findings were identified and documented in this report.

- .2 (Closed) Licensee Event Report (LER) 50-255/00-003: "Inadvertent Closure of Emergency Diesel Generator 1-1 Output Breaker." This event was discussed in Section 1R14 of this report and resulted in a Non-Cited Violation. No new issues were revealed by the LER.

4OA5 Other

- .1 Temporary Instruction 2515/142, "Draindown During Shutdown and Common-Mode Failure (NRC Generic Letter 98-02)"

a. Inspection Scope

The inspectors reviewed the licensee's actions in response to NRC Generic Letter 98-02, "Loss of Reactor Coolant Inventory and Associated Potential for Loss of Emergency Mitigation Functions While in a Shutdown Condition." The licensee review of the Generic Letter identified a susceptibility to a loss of primary coolant system inventory if a valve misalignment occurred while a portion of the safety injection system was used for shutdown cooling. The licensee determined that this scenario created a primary coolant system flow path which cross-connected two safety injection pump suction headers and the Safety Injection and Refueling Water Tank, while the emergency core cooling system function of the safety injection pumps was still required to be operable. Licensee personnel concluded that if this low probability event occurred, the primary coolant system could be depressurized which could result in voiding of the shutdown cooling system.

The inspectors interviewed engineering department personnel, operators and operations support personnel; reviewed the licensee's onsite documentation required by Generic Letter 98-02, and reviewed the applicable portions of the following documents:

- Consumers Energy correspondence to the NRC in response to NRC Generic Letter 98-02, dated November 24, 1998
- Consumers Energy correspondence to the NRC in response to NRC Information Notice IN 95-03 "Loss of Mitigation Functions While in a Shutdown Condition." dated February 23, 1995"
- System Operating Procedure (SOP)-1, "Primary Coolant System," Revision 47
- SOP-3, "Safety Injection and Shutdown Cooling System," Revision 41
- General Operating Procedure (GOP)-14, "Shutdown Cooling Operations," Revision 11
- Off Normal Procedure (ONP)-17, "Loss of Shutdown Cooling," Revision 25
- Technical Specification Surveillance Procedure QO-16, "Inservice Test Procedure - Containment Spray Pumps," Revisions 16
- Technical Specification Surveillance Procedure QO-19, "Inservice Test Procedure - HPSI Pumps and ESS Check Valve Operability Test," Revision 20
- Technical Specification Surveillance Procedure QO-20, "Inservice Test Procedure - Low Pressure Safety Injection Pumps," Revisions 10 and 12
- Technical Specification Surveillance Procedure QO-43, "SIRW Tank Outlet Check Valves (Including Boron Equalization) and Shutdown Cooling Bypass and Loop Isolation Valves Inservice Test," Revision 1
- Palisades Administrative Procedure - No. 4.02, "Control of Equipment," Revision 17
- Palisades Internal Correspondence, B. C. Bauer to Plant Operators "ONP-17 Revisions," dated October 14, 1999 (Operator training on this issue)
- Various Applicable Drawings

The inspectors also verified that licensee personnel initiated and implemented appropriate corrective actions to resolve the issues identified as a result the assessment of Generic Letter 98-02. The corrective actions included appropriate procedure revisions and operator training.

d. Issues and Findings

There were no findings identified during this inspection. Licensee personnel assessed the issues identified in NRC Generic Letter 98-02 and implemented appropriate corrective actions to resolve the identified issues.

4OA6 Meetings, including Exit

The inspectors presented the inspection results to Mr. Palmisano, Site Vice President and General Manager, and other members of licensee management at the conclusion of the inspection on May 15, 2000. The licensee acknowledged the findings presented.

The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

PARTIAL LIST OF PERSONS CONTACTED

Licensee

G. R. Boss, Operations Manager
D. E. Cooper, General Manager, Plant Operations
R. M. Hamm, System Engineering
R. K. Mocerri, System Engineering
D. G. Malone, Licensing
T. J. Palmisano, Site Vice President

NRC

D. Hood, Project Manager, NRR
S. Burgess, Senior Risk Analyst, RIII

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

50-255/2000007-01 NCV Failure to Follow Procedures While Racking Out EDG 1-1 Output Breaker 152-107

Closed

50-255/2000007-01 NCV Failure to Follow Procedures While Racking Out EDG 1-1 Output Breaker 152-107

50-255/200000003 LER Inadvertent Closure of Emergency Diesel Generator 1-1 Output Breaker

Discussed

None

LIST OF INSPECTIONS PERFORMED

The following inspectable-area procedures were used to perform inspections during the report period. Documented findings are contained in the body of the report.

<u>Inspection Procedure</u>		<u>Report Section</u>
<u>Number</u>	<u>Title</u>	
71111-01	Adverse Weather	1R01
71111-04	Equipment Alignments	1R04
71111-05	Fire Protection	1R05
71111-11	Licensed Operator Requalification	1R11
71111-12	Maintenance Rule Implementation	1R12
71111-13	Maintenance Risk Assessment and Emergent Work Evaluation	1R13
71111-14	Personnel Performance During Non-routine Plant Evaluations	1R14
71111-15	Operability Evaluations	1R15
71111-19	Post Maintenance Testing	1R19
71111-22	Surveillance Testing	1R22
71111-23	Temporary Plant Modifications	1R23
71114-06	Exercise Evaluation	1EP1
71151	Performance Indicator Verification	4OA1
71153	Event Follow-up	4OA3
TI 2515/142	Draindown During Shutdown and Common-Mode Failure (NRC Generic Letter 98-02)	4OA5

List of Acronyms Used

ONP	Off Normal Procedure
FPI	Fire Protection
CFR	Code of Federal Regulations
SOP	System Operating Procedure
ONP	Off Normal Procedure
TS	Technical Specification
MOSP	Monthly Operating Surveillance Procedure
MISP	Monthly Instrument Surveillance Procedure
GOP	General Operating Procedure