October 27, 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 NUCLEAR GENERATING PLANT - NRC INSPECTION REPORT 50-255-00-14(DRP)

Dear Mr. Palmisano:

On September 30, 2000, the NRC completed an inspection at your Palisades Nuclear Generating Plant. The enclosed report presents the results of that inspection which were discussed on September 29, 2000, with you and other members of your staff.

The inspection was an examination of activities conducted under your license as they relate to reactor 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 selective examination of procedures and representative records, observations of activities, and interviews with personnel.

Based on the results of this inspection, one issue of very low safety significance (Green) was identified. The issue was determined to involve a violation of NRC requirements. However, the violation was not cited due to its very low safety significance and because it has been entered into your corrective action program. If you contest the noncited violation, you should provide a response within 30 days of the date of this inspection report, with a basis for your denial, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies 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 Nuclear Generating 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).

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

Sincerely,

/RA/

Michael J. Jordan, Chief
Reactor Projects Branch 3

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

Enclosure: Inspection Report 50-255-00-14(DRP)

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U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No:	50-255
License No:	DPR-20
Report No:	50-255-00-14(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:	August 11 through September 30, 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
! 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

NRC Inspection Report 50-255-00-14(DRP), Consumers Energy Company, Palisades Nuclear Generating Plant, conducted between August 11 and September 30, 2000. The inspection was conducted on the surveillance testing baseline activities.

The baseline inspection was conducted by resident and region based inspectors. The inspection identified one green issue which was a noncited violation. The significance of issues is indicated by their color (green, white, yellow, red) and was determined by the Significance Determination Process.

Cornerstone: Mitigating Systems

- Green. The inspectors identified a noncited violation for the failure to implement a fire protection pump capacity surveillance test in accordance with the approved procedure. Plant procedures required further testing to be stopped if one pump did not meet test acceptance criteria. However, licensee personnel failed to identify that the first pump tested had failed to meet the acceptance criteria, and proceeded to testing of the second pump. Consequently, contrary to procedural requirements, testing continued on the second pump which also failed to meet the acceptance criteria. Therefore, two fire protection system pumps were inoperable simultaneously.

  The issue was identified by the inspection determined to be of very low safety significance. The licensee's subsequent engineering analyses and operability determination concluded that while the two fire protection system pumps failed to meet test acceptance criteria, the pumps were in fact operable, but degraded, in accordance with NRC Generic Letter 91-18.

Report Details

Summary of Plant Status: The plant was at full power at the start of the inspection period. On September 5, 2000, the licensee identified a failed safety injection system check valve, which required the plant to be shutdown in accordance with Technical Specifications. Following the necessary repairs, the plant was returned to hot shutdown on September 11, 2000. While in hot shutdown the licensee discovered a body to bonnet leak on a valve in the pressurizer vent line, and the plant was returned to cold shutdown on September 13, 2000. Necessary repairs were completed and the plant was returned to full power on September 18, 2000, where it remained for the duration of the inspection period.

2. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity

1R04 Equipment Alignment

a. Inspection Scope

The inspectors performed routine partial walkdowns of the safety-related 2400 Volt Electrical Safeguards Bus 1D, off site power supply sources, and shutdown cooling equipment powered by the Safeguards Bus 1D to verify proper system lineup. The inspection verified that Bus 1D was supplied from the normal power source, that alternate power was available to Bus 1D, and that shutdown equipment powered by Bus 1D was properly protected and operable.

In addition, the inspectors walked down accessible portions of the fire protection sprinkler system and ring header. The walkdown was conducted to verify equipment alignment and identify any discrepancies that might impact the fire protection system function which could potentially increase risk.

The inspections incorporated reviews of the applicable portions of Technical Specification Requirements and the following documents:

- System Operating Procedure - 3, Checklist - 3.1, “Engineered Safeguards System Checklist (Shutdown Cooling in Service),” Revision 43;
- General Operating Procedure - 14, “Shutdown Cooling Operations,” Revision 12;
- Final Safety Analysis Report Section 9.6, “Fire Protection,” Revision 22; and
- Piping and Instrument Diagram M-216, “Fire Protection System.” Sheet 1, Revision 33 and Sheet 2, Revision 52.

c. Issues and Findings

There were no findings identified.

1R05 Fire Protection

a. Inspection Scope

The inspectors performed fire inspections of the following areas:

- East and West Mechanical Equipment rooms;
- Cable Spreading room;
- Control Room complex; and
- Southwest Cable Penetration room.

In the areas listed above, the inspectors observed the control of transient combustibles and ignition sources, and assessed the material condition of the passive fire protection features. The inspectors also verified the availability of the sprinkler fire suppression system, smoke detection system and manual fire fighting equipment for these areas.

The inspectors reviewed the applicable portions of the following documents during this inspection:

- Fire Protection Implementing Procedure - 4, “Fire Protection Systems and Fire Protection Equipment,” Revision 15;
- Off Normal Procedure - 25.1, “Fire which Threatens Safety-Related Equipment,” Revision 10;
- Final Safety Analysis Report, Section 9.6, “Fire Protection,” Revision 22, and Table 9-10, “Fire Detection System Instrumentation,” Revision 21;
- Fire Protection Implementing Procedure - 4, Attachment 2, “Sprinkler Systems/Deluge Systems Information,” Revision 15 and Attachment 5, “Fire Detection Systems,” Revision 15;
- Fire Protection System Procedure - RO-7, Attachment 2, “Inside Fire Hose Hydrostatic Pressure Test Data Sheet,” Revision 2, completed on July 1, 1999; and
- Off Normal Procedure - 25.1, Attachment 2, “Fire Area 2 - Cable Spreading Room,” Revision 10.

Documented results of completed surveillances on fire barrier penetrations and sprinkler heads in the cable spreading room.

b. Issues and Findings

There were no findings identified.

1R12 Maintenance Rule Implementation

h. Inspection Scope

The inspectors evaluated the effectiveness of the licensee’s implementation of the Maintenance Rule, 10 CFR Part 50.65, for system components in three systems ranked in the high safety significant category. The inspectors reviewed recent maintenance rule

evaluations to verify the appropriate maintenance rule categorization of specific issues for the following components.

- Primary Coolant Pumps;
- Auxiliary Feedwater Pump Motors; and
- Pressurizer Vent Line Valves.

The inspectors also reviewed and evaluated the applicable performance criteria, risk rankings and scoping criteria for appropriateness. In addition, the inspectors interviewed the licensee's maintenance rule coordinator and evaluated the licensee's monitoring and trending of performance data with the responsible system engineer when applicable.

In determining the appropriateness of the performance criteria, risk rankings and scoping criteria, the inspectors reviewed the applicable portions of the Final Safety Analysis Report and Design Basis Documents, in addition to the following maintenance rule program documentation:

- Engineering Procedure EM-25, "Maintenance Rule Program," Revision 2; and
- Engineering Procedure EGAD-EP-10, "Maintenance Rule Scoping Document," Revision 1.

In addition, the inspectors reviewed the following condition reports to verify that identified problems were appropriately characterized and evaluated with respect to the maintenance rule.

- CPAL9801930, "Primary Coolant Pump P-50D Motor EMA-2204 Upper Reservoir Drain/Instrument Line Leaking";
- CPAL9900135, "Primary Coolant Pump P-50D Motor EMA-2204 Upper Oil Reservoir Leak";
- CPAL9901251, "Maintenance Rule Category (A)(1) - Performance Improvement of Primary Coolant Pumps and Motors";
- CPAL0002053, "Primary Coolant System Unidentified Leakage Raised From 0.025 gallons per minute to 0.084 gallons per minute";
- CPAL0000625, "Auxiliary Feedwater Pump P-8A Outboard Motor Bearing Oil Contained Metal Shavings";
- CPAL0002305, "Increased Vibration Levels on P-8A, Auxiliary Feedwater Motor and Pump";
- CPAL0002612, "Coupling Spacing Between Pump and Motor Not Set Per Pump Manufacturer Drawing or Coupling Manufacturer Guidelines";
- CPAL0001055, "Pressurizer Vent Valve MV-PC1045B Boric Acid Leak";
- CPAL0002106, "Pressurizer Vent Valves MV-PC1045A and MV-PC1045B Leaking"; and
- CPAL0002778, "Pressurizer Vent Valve MV-PC1045A has a Body to Bonnet Leak."

b. <u>Issues and Findings</u>

There were no findings identified.

1R13 Maintenance Risk Assessment and Emergent Work Control

a. Inspection Scope

The inspectors reviewed the effectiveness of risk assessments before maintenance was conducted and verified that the licensee had taken necessary steps to plan and control work activities. The inspectors reviewed the following documents for planned maintenance:

- Operator's Risk Report for August 21 through 23, 2000, specifically pertaining to scheduled maintenance for the service water traveling screen trash baskets under Work Order 24913743, "Traveling Screens F-4B and F-4C Outside Trash Basket Cleaning, Inspection and Preventive Maintenance"

In addition, the inspectors verified that the licensee had taken necessary steps to plan and control maintenance activities from a risk perspective during emergent maintenance activities. The inspectors reviewed the following documents for emergent maintenance:

- Operator's Risk Report for September 8 through 10, 2000, specifically pertaining to the isolation of one train of shutdown cooling for maintenance on safety injection system Check Valve CK-ES3332 under Work Order 24013701, "Radiography Revealed That the Disc and Disc Arm Had Become Disconnected"; and
- Operator's Risk Report for September 29, 2000, following an unforseen failure of Thermal Margin Monitor "A" Channel.

The inspectors reviewed Administrative Procedure - 4.02, "Control of Equipment," Revision 17, and discussed the risk evaluations and plant configuration control for the maintenance activities with operations, maintenance and work control center personnel to evaluate whether the necessary steps were taken to control work activities.

Further, the inspectors reviewed the following condition reports to verify that identified problems regarding maintenance risk assessment and emergent work control activities were being entered into the corrective action program with the appropriate characterization and significance:

- CPAL0002597, "Equipment Out of Service (EOOS) Planning Did Not Consider F-4B/C Trash Baskets Inoperable";
- CPAL0002938, ""A" Channel Thermal Margin Monitor Experienced a Calculator Trouble Condition";
- CPAL0002951, ""Q" Stocked Power Supply Spare For Thermal Margin Monitor Was Incorrect Supply and Could Not Be Used"; and
- CPAL0002952, "Thermal Margin Monitor PY-0102A Multiple Output Power Supply Found Out-of-Tolerance Per RI-23A & Work Order 24014073."

b. Issues and Findings

There were no findings identified.

1R14 Personnel Performance During Nonroutine Evolutions and Events

a. Inspection Scope

The inspectors assessed control room operators performance following an unexpected lowering condenser vacuum on August 28, 2000. In addition, the inspectors observed and assessed the control room operators performance during a plant shutdown that was required by Technical Specification 3.0.3 after licensee personnel identified that safety injection system Check Valve CK-ES3332 was failed.

The inspectors reviewed the Technical Specifications and documents listed below to assess what had occurred, the appropriateness of control room operators' alarm response, and compliance with plant operating procedures during the evolutions:

- Shift Supervisor log book entries on August 28, and September 5 and 6, 2000;
- Off Normal Procedure - 14, "Loss of Condenser Vacuum," Revision 10;
- Annunciator Response Procedure - 1, Windows 10 and 11, "Vacuum Pretrip" and "Vacuum Low" respectively, Revision 10;
- General Operating Procedure - 8, "Power Reduction and Plant Shutdown to Hot Standby/Hot Shutdown," Revision 18;
- System Operating Procedure - 8, "Main Turbine and Generating Systems," Revision 51;
- Engineering Procedure EM-04-08, "Shutdown Margin Requirements," Revision 24; and
- Alarm Response Procedure - 4, "Primary System Volume, Level, Pressure Scheme EK-07 (C-12)," Revision 54.

Further, the inspectors reviewed the following condition reports to verify that identified problems during nonroutine evolutions were being entered into the corrective action program with the appropriate characterization and significance:

- CPAL0002637, "Condenser Vacuum Lowering Unexpectedly";
- CPAL0002714, "Radiography Shows Check Valve, CK-ES3332, Internals Separated from Hinge Pin";
- CPAL0002715, "Digital Electro Hydraulic System Unexpectedly Transferred to "Hold" While Power De-escalation was in Progress."
- CPAL0002717, "Control Rod Drive - 11 Secondary Position Indication Inoperable"; and
- CPAL0002732, "Digital Electro Hydraulic Valve Curves Do Not Accurately Reflect Actual Governor Valve Worth."

b. Issues and Findings

There were no findings identified.

1R15 Operability Evaluations

a. Inspection Scope

The inspectors reviewed the operability assessments as documented in the associated condition report evaluations for the following risk significant components:

- fire protection system pumps;
- engineered safeguards system air operated valves; and
- primary coolant system loop check valves.

The inspectors also reviewed the applicable sections of the Technical Specification Requirements, Final Safety Analysis Report and Design Basis Documents associated with the components. The review verified that operability was appropriately justified for each component assessed and that the components remained available, such that no unrecognized increase in risk had occurred.

In addition, the inspectors reviewed the following condition reports to verify that identified problems regarding operability evaluations were being entered into the corrective action program with the appropriate characterization and significance:

- CPAL0002819, "Primary Coolant System Leakrate Greater Than One Gallon per Minute Through Primary Coolant System Loop Check Valves"
- CPAL0002688, "Operability Determination Process Does Not Address Application of Generic Letter 91-18, "Resolution of Degraded and Nonconforming Conditions";
- CPAL0002706, "Diesel Fire Pump Operability Determination Failed to Address Final Safety Analysis Report Operability Requirements"; and
- CPAL0002804, "Palisades Air Operated Valve Assessment Team Audit Revealed Non-Conservatism in Capability Calculations on Control Valves -3018, -3027, and -3026."

b. Issues and Findings

There were no findings identified.

1R19 Post Maintenance Testing

a. Inspection Scope

The inspectors observed portions of post maintenance testing following scheduled maintenance activities to determine whether the tests were performed as written and whether applicable testing prerequisites were met prior to the start of the test. Post maintenance tests were observed for the following components:

- Containment Spray Pump P-54B;
- Auxiliary Feedwater Pump P-8A;
- Engineered Safeguards System Minimum-Flow Check Valve CK-ES3332; and
- High Pressure Safety Injection Pump P-66A.

The inspectors reviewed the completed test procedures to verify the tests were adequate for the scope of work performed and to ensure that acceptance criteria were clear and demonstrated equipment operability. The inspectors also reviewed applicable sections of the Technical Specification Requirements, Final Safety Analysis Report, and Design Basis Documents to verify that the post maintenance tests demonstrated the overall systems and individual components were capable of performing the intended safety functions. The inspection included a review of the following plant procedures and documents:

- Quarterly Operating Procedure - 16, “Inservice Test Procedure - Containment Spray Pumps,” Revision 16, and the associated Basis Document, Revision 11;
- Work Order 24013415, “Auxiliary Feedwater Pump P-8A Pump Coupling Inspection”;
- Work Order 24012981, “Auxiliary Feedwater Pump P-8A Breaker 152-204 Not Properly Engaging the Cubicle”;
- Quarterly Operating Procedure - 21, “Inservice Test Procedure - Auxiliary Feedwater Pumps,” Revision 19;
- Work Order 24013701, ”Radiography Revealed That the Disc and Disc Arm Had Become Disconnected on Check Valve CK-ES3332,“ and associated post maintenance test data;
- Quarterly Operating Procedure - 19, “Inservice Test Procedure - High Pressure Safety Injection Pumps and Engineered Safeguards System Check Valve Operability Test,” Revision 20, and associated Basis Document, Revision 6;
- Work Order 24010019, “High Pressure Safety Injection Pump P-66A Coupling and Impurity Eliminator Preventive Maintenance”; and
- Work Order 24011075, “High Pressure Safety Injection Pump P-66A Unions on Supply and Return Lines to Seal Cooler Leak,” and associated post maintenance test data.

In addition, the inspectors reviewed the following condition reports to verify that identified problems regarding post maintenance testing activities were being entered into the corrective action program with the appropriate characterization and significance:

- CPAL0002480, “Containment Spray Pump, P-54B, Limiting Condition for Operation for Planned Maintenance Exceeds Forecasted Duration”
- CPAL0002484, “Foreign Material in P-54B, Containment Spray Pump”;
- CPAL0002491, “Repair To Containment Spray Pump Threaded Drain Plug Failed VT-2 Examination”;
- CPAL0002942, “Individuals Exiting a Contamination Area Failed to Frisk at the Nearest Frisking Station”;
- CPAL0002874, “Lack of Coordination During High Pressure Safety Injection Pump P-66A Restoration and Testing”; and
- CPAL0002877, “Incorrect Technical Specification References in Technical Specification Surveillance Tests.”

b. Issues and Findings

There were no findings identified.

1R22 Surveillance Testing

a. Inspection Scope

The inspectors observed portions of surveillance testing activities and reviewed completed surveillance test data for the following risk-significant plant components or systems:

- Auxiliary Feedwater Pumps P-8A, P-8B, and P-8C;
- Fire Protection System Pumps P-9B and P-41; and
- Main Steam Isolation Valves.

In addition, the inspectors reviewed test procedures, the applicable Technical Specification Requirements and Final Safety Analysis Report, and the Design Basis Documents to verify that the surveillance tests demonstrated that the system components could perform the designated safety functions. The inspection included a review of the following procedures:

- Quarterly Operating Procedure - 37, “Main Steam Isolation and Bypass Valve Testing,” Revision 6; and associated Basis Document, Revision 4;
- Monthly Operating Procedure - 38, “Auxiliary Feedwater System - Monthly Test Procedure,” Revision 14; and
- Refueling Outage Procedure - 52, “Fire Suppression Water System Functional Test and Fire Pump Capacity Test,” Revision 17.

Further, the inspectors reviewed the following condition reports to verify that identified problems regarding surveillance testing activities were being entered into the corrective action program with the appropriate characterization and significance:

- CPAL0002674, “Diesel Driven Fire Pump, P-9B, Does Not Meet RO-52 Acceptance Criteria”;
- CPAL0002683, “Performance of Surveillance Procedure RO-52 Identified Several Areas Needing Improvement”; and
- CPAL0002662, “Diesel Driven Fire Pump P-41 is Inoperable Due to Failure to Meet the Acceptance Criteria of RO-52."

b. Issues and Findings

The inspectors identified a noncited violation for the failure to implement a fire protection pump capacity surveillance in accordance with the approved procedure. Subsequent engineering analyses and an operability determination concluded that while the two fire protection system pumps were inoperable per the test acceptance criteria, the pumps were operable, but degraded, in accordance with NRC Generic Letter 91-18.

Refueling Outage Procedure - 52 determined the operability of the Fire Suppression Water System by verifying that the three fire protection system pumps delivered 1,500 gallons per minute at 125 pounds per square inch total dynamic head. The test objectives were accomplished by first rendering Fire Pump P-9A inoperable and then testing the two diesel driven fire pumps P-9B and P-41 in succession. After each diesel

fire pump was tested, the procedure required an evaluation to verify the acceptance criteria was met prior to testing the next fire pump.

The inspectors observed Fire Pump P-41 testing and noted that representatives from the engineering, operations, maintenance and nuclear performance assessment departments were involved in either performing or observing this test. Operations and engineering personnel identified that Pump P-41 failed to meet the acceptance criteria during testing. Therefore, the pump was subsequently declared inoperable and testing was stopped as required by the procedure.

However, the inspectors reviewed the completed test data for Fire Pump P-9B which had been tested prior to Fire Pump P-41, and identified that P-9B had also failed to meet the test acceptance criteria. Licensee personnel failed to recognize that Fire Pump P-9B failed to meet test acceptance criteria. Consequently, Fire Pump P-9B was not declared inoperable following the test and testing was inappropriately continued on Fire Pump P-41. After the inspectors identified this issue, licensee personnel concurred that Pump P-9B was inoperable based on failure to meet the test acceptance criteria. Subsequently, licensee personnel generated a condition report and completed an operability determination.

Technical Specification Requirement 6.4.1.d, required, in part, that written procedures shall be implemented and maintained for activities covering the Site Fire Program Implementation. Site Fire Program Surveillance Procedure RO-52, “Fire Suppression Water System Functional Test and Fire Pump Capacity Test,” Section 5.4.25, stated, in part, that a Senior Reactor Operator shall evaluate and verify acceptance criteria is met for Diesel Driven Fire Pump P-9B prior to proceeding to the next fire pump.

The failure to verify that the acceptance criteria for Fire Pump P-9B was met prior to testing the next fire pump was determined to be a violation. Although Fire Pump P-9B failed to meet the test acceptance criteria, testing continued for Fire Pump P-41 which was contrary to procedure requirements. In accordance with Section VI.A.1 of the NRC Enforcement Policy, this procedure violation is being treated as a non-cited violation. This issue was entered into the licensee’s corrective action program as Condition Report CPAL0002674.

The inspectors discussed this issue with an NRC Senior Reactor Analyst and used the Significance Determination Process to evaluate the safety significance. The fire protection system was a credited mitigating system per the Final Safety Analysis Report, Section 9.6.2, in that it was the safety-related backup water supply for one train of the auxiliary feedwater system. Therefore, the issue had a credible impact on safety and could have affected the operability and reliability of a mitigating system.

However, the issue was considered to be of very low safety significance (Green) based on the licensee’s subsequent engineering analysis and operability determination. While the two fire pumps were simultaneously inoperable per the test acceptance criteria and Final Safety Analysis Report criteria, the engineering analysis concluded that the pumps were operable, but degraded, in accordance with NRC Generic Letter 91-18.

1R23 Temporary Plant Modifications

a. Inspection Scope

The inspectors reviewed temporary modifications that had been installed on the following two risk significant systems to verify that the modifications did not affect the systems safety functions:

- TM-2000-013, Remove Valve Internals From Service Water Manual Valve MV-SW281;
- TM-2000-019, Install Wavebook To The Thermal Margin Monitor Channel “D”

The inspectors reviewed the temporary modification documentation and associated 10 CFR 50.59 screening packages against the system design bases documentation to verify that the modifications did not affect the system availability or operability. The inspectors also verified that accessible portions of the temporary modifications were installed as described in the modification package, and that applicable plant drawings and procedures were revised to ensure configuration adequacy. The inspection included a review of the following procedures and documents:

- Final Safety Analysis Report Section 7.2.3.2, “Variable High Power,” Revision 22;
- Technical Specification Table 3.17.1, “Instrumentation Operating Requirements for Reactor Protective System,” Amendment No. 162;
- Electrical Drawing E-62, Sheet 3E, “Thermal Margin Monitor Local Power Density Variable High Power Trip,” Revision A;
- Work Order 24012168, “Install Wavebook / Isolation Fuses Per TM-2000-019;
- System Operating Procedure - 15, “Service Water System,” Revision 17;
- System Diagram M-208, Sheet A, “Service Water System,” Revision 14;
- Piping and Instrument Diagram M-208, Sheet 1B, “Service Water System,” Revision 25; and
- Administrative Procedure - 9.31, “Temporary Modification Control,” Revision 17.

Further, the inspectors reviewed the following condition report to verify that identified problems regarding temporary modifications were being entered into the corrective action program with the appropriate characterization and significance:

- CPAL0002669, “Wavebook Data Acquisition Equipment Not Placed On Cart Per TM-2000-019."

a. Issues and Findings

There were no findings identified.

2. OTHER ACTIVITIES (OA)

4OA1 Performance Indicator Verification

Safety System Functional Failures

a. Inspection Scope

The inspectors reviewed Licensee Event Reports and the applicable shift supervisor logs for the period from September 1, 1999, to August 1, 2000, to validate the data reported for the performance indicator regarding scrams with a loss of normal heat removal.

a. Issues and Findings

There were no findings identified.

4OA3 Event Follow Up

a. Inspection Scope

The inspectors reviewed the circumstances surrounding an Unusual Event that the licensee declared on September 15, 2000, because of primary coolant system leak rate was greater than Technical Specification limits while the plant was in hot shutdown. The inspectors verified that the event was properly classified in accordance with emergency action level procedures and that required notifications to state and county governments as well as to the NRC were completed. In addition, the inspectors reviewed applicable technical specification requirements and plant procedures that were utilized to mitigate the event to assess operator performance. The following documents were reviewed during the inspection:

- Event Notification Worksheet and associated Emergency Notification Form;
- Emergency Implementing Procedure 1, “Emergency Classification and Actions,” Revision 34, Attachment 1, “Site Emergency Plan Classification,” and Attachment 2, “Emergency Actions/Notifications”;
- General Operating Procedure 13, “Primary System Leakage Calculation,” Revision 15;
- Off Normal Operating Procedure 23.1, “Primary Coolant System Leak,” Revision 19;
- Shift Supervisor Log Book Number 281 entries made on September 15 - 16, 2000; and
- Emergency Implementing Procedure - 3, “Communications and Notifications,” Revision 18.

b. Issues and Findings

There were no findings identified.

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 September 29, 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
N. L. Haskell, Director, Licensing and Performance Assessment
R. J. Kilroy, Engineering Programs
D. G. Malone, Licensing
D. J. Malone, Engineering Director
G. C. Packard, Operations Superintendent
T. J. Palmisano, Site Vice President

NRC

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

LIST OF INSPECTIONS PERFORMED

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

Inspection Procedure		Report
Number	Title	Section
71111-04	Equipment Alignments	1R04
71111-05	Fire Protection	1R05
71111-12	Maintenance Rule Implementation	1R12
71111-13	Maintenance Risk Assessment and Emergent Work Control	1R13
71111-14	Personnel Performance During Nonroutine Evolutions and Events	1R14
71111-15	Operability Evaluations	1R15
71111-19	Post Maintenance Testing	1R19
71111-22	Surveillance Testing	1R22
71111-23	Temporary Plant Modifications	1R23
71151	Performance Indicator Verification	4OA1
71153	Event Follow-up	4OA3