December 3, 2001

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

SUBJECT: PALISADES NUCLEAR GENERATING PLANT
NRC INSPECTION REPORT 50-255/01-14(DRP)

Dear Mr. Cooper:

On November 19, 2001 the NRC completed an inspection at your Palisades Nuclear Generating Plant. The enclosed report documents the inspection findings which were discussed on November 19, 2001, with members of your staff.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspector reviewed selected procedures and records, observed activities, and interviewed personnel.

No findings of significance were identified.

Since September 11, 2001, the Palisades Nuclear Generating Plant has assumed a heightened level of security based on a series of threat advisories issued by the NRC. Although the NRC is not aware of any specific threat against nuclear facilities, the heightened level of security was recommended for all nuclear power plants and is being maintained due to the uncertainty about the possibility of additional terrorist attacks. The steps recommended by the NRC include increased patrols, augmented security forces and capabilities, additional security posts, heightened coordination with local law enforcement and military authorities, and limited access of personnel and vehicles to the site.

The NRC continues to interact with the Intelligence Community and to communicate information to the Nuclear Management Company, LLC. In addition, the NRC has monitored maintenance and other activities which could relate to the site's security posture.

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/

Anton Vegel, Chief
Branch 6
Division of Reactor Projects

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

Enclosure: Inspection Report 50-255/01-14(DRP)

cc w/encl: R. Fenech, Senior Vice President, Nuclear
Fossil and Hydro Operations
L. Lahti, Manager, Licensing
R. Anderson, Chief Nuclear Officer, NMC
A. Udrys, Esquire, Consumers Energy Company
S. Wawro, Nuclear Asset Director, Consumers Energy Company
W. Rendell, Supervisor, Covert Township
Office of the Governor
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Department of Attorney General (MI)

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No:	50-255
License No:	DPR-20
Report No:	50-255/01-14(DRP)
Licensee:	Nuclear Management Company, LLC
Facility:	Palisades Nuclear Generating Plant
Location:	27780 Blue Star Memorial Highway Covert, MI 49043-9530
Dates:	October 1 through November 19, 2001
Inspectors:	J. Lennartz, Senior Resident Inspector R. Krsek, Resident Inspector M. Farber, Reactor Engineer, RIII
Approved by:	Anton Vegel, Chief Branch 6 Division of Reactor Projects

SUMMARY OF FINDINGS

IR 05000255-01-14 on 10/01 - 11/19/2001, Nuclear Management Company, LLC, Palisades Nuclear Generating Plant.

This report covers a 7-week routine inspection and a baseline biannual Maintenance Rule implementation program inspection. The inspections were conducted by resident and specialist inspectors.

A. Inspector Identified Findings

No findings of significance were identified.

B. Licensee Identified Violations

A violation of very low significance which was identified by licensee personnel was reviewed by the inspectors. Corrective actions taken or planned by the licensee appear reasonable. The violation is listed in Section 4OA7 of this report.

Report Details

Summary of Plant Status

The plant was in Cold Shutdown (Mode 5) for the entire inspection period. The plant entered Mode 5 on June 21, 2001, because of a small leak from an axial crack on the Control Rod Drive Mechanism 21 pressure housing. Licensee personnel completed an extent of condition evaluation and began implementing a plan to replace all 45 control rod drive mechanism pressure housings. Housing replacement activities were in progress when the inspection period ended.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity and Emergency Preparedness

1R04 Equipment Alignment (71111.04)

.1 Quarterly Equipment Alignment Walkdowns

a. Inspection Scope

The inspectors performed partial walkdowns of Emergency Diesel Generator 1-2 and Fire Protection Pump P-9B, utilizing plant procedure system checklists, and piping and instrumentation diagrams, to verify proper system lineup while redundant plant equipment was out of service. The inspectors verified that power was available, that accessible equipment and components were appropriately aligned, and that no discrepancies existed which would impact the safety function of the system. Portions of the system alignment inspections included discussions and system walkdowns with operations and engineering personnel.

b. Findings

No findings of significance were identified.

1R05 Fire Protection (71111.05Q)

a. Inspection Scope

The inspectors toured the following areas in which a fire could affect safety related equipment:

- Containment Building (Fire Area 28); and
- West Engineered Safeguards Room (Fire Area 14).

The inspectors assessed the material condition of the passive fire protection features and verified that transient combustibles and ignition sources were appropriately controlled.

Also, the inspectors reviewed documentation for randomly selected completed surveillances to verify the availability of the sprinkler fire suppression system, smoke detection system, and manual fire fighting equipment for these areas. The inspectors also verified that the fire protection equipment that was installed and available in the toured fire areas corresponded with the equipment which was referenced in the applicable portions of the Final Safety Analysis Report, Section 9.6, "Fire Protection."

b. Findings

No findings of significance were identified.

1R12 Maintenance Rule Implementation

.1 Quarterly Maintenance Rule Implementation Inspections (71111.12Q)

a. Inspection Scope

The inspectors reviewed the licensee's Maintenance Rule Scoping Documents for the following plant equipment:

- Main Feedwater System; and
- Control Rod Drive Seal Housings.

The inspectors reviewed the licensee's Maintenance Rule performance indicators associated with the system's Maintenance Rule Category a(2) status. In addition, the inspectors discussed various technical issues with the applicable system engineer.

Further, the inspectors reviewed the licensee's corrective actions for selected condition reports that were written since October 2000 to verify that they were appropriately dispositioned in accordance with the licensee's Maintenance Rule program and corrective action program.

b. Findings

No findings of significance were identified.

.2 Biannual Maintenance Rule Implementation (71111.12B)

a. Inspection Scope

The objective of this portion of the inspection was to:

- Verify that the periodic evaluation was completed within the time restraints defined in the Maintenance Rule (once per refueling cycle, not to exceed 2 years), ensuring that the licensee reviewed its goals, monitoring, preventive maintenance activities, industry operating experience, and made appropriate adjustments as a result of that review;

- Verify that the licensee balanced reliability and unavailability during the previous refueling cycle, including a review of safety significant structures, systems, and components, (SSC);

- Verify that (a)(1) goals were met, corrective action was appropriate to correct the defective condition including the use of industry operating experience, and (a)(1) activities and related goals were adjusted as needed; and

- Verify that the licensee has established (a)(2) performance criteria, examined any SSCs that failed to meet their performance criteria, or reviewed any SSCs that have suffered repeated maintenance preventable functional failures including a verification that failed SSCs were considered for (a)(1).

The inspector examined the current periodic evaluation, “Palisades Maintenance Rule Periodic Assessment for the period from October 1, 1998 to July 31, 2000," dated January 19, 2001. To evaluate the effectiveness of (a)(1) and (a)(2) activities the inspector examined 26 Condition Reports (CRs) associated with the Low Pressure Safety Injection, Reactor Protection, and Critical Service Water systems. The CRs are contained in the list of documents at the end of this report.

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessments and Emergent Work Evaluation (71111.13Q)

a. Inspection Scope

The inspectors reviewed shutdown operation equipment check lists, Shift Supervisor logs and maintenance activity schedules to verify that the plant equipment necessary to minimize shutdown plant risk was operable and/or available as required. The inspectors randomly conducted plant tours to verify that the necessary equipment was available for use during the following planned and emergent maintenance activities:

- Scheduled maintenance outage for Emergency Diesel Generator 1-1 with Fire Pump P-9B out of service for planned maintenance; and

- Scheduled maintenance outage for Emergency Diesel Generator 1-2 and scheduled switchyard breaker maintenance in conjunction with Fire Pump P-9B out of service for planned maintenance.

The inspectors discussed the shutdown operation equipment checklists and plant configuration control for the maintenance activities with operations, maintenance and work control center personnel to verify that necessary steps were taken to control the work activities.

In addition, the inspectors reviewed select condition reports to verify that identified problems regarding maintenance risk assessments and control of emergent work

activities were appropriately characterized and entered into the licensee's corrective action program.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15Q)

a. Inspection Scope

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

- Containment Sump Check Valve CK-ES3181;
- Containment Sump Check Valve CK-ES3166; and
- High Pressure Safety Injection Relief Valve RV-3165.

The inspectors interviewed the cognizant engineers, and reviewed the supporting documents to assess the adequacy of the operability assessments for the current plant mode. The inspectors also reviewed the applicable sections of the Technical Specifications, Final Safety Analysis Report, and Design Basis Documents to verify that the operability assessments were technically adequate and that the components remained available, such that no unrecognized increase in plant risk had occurred.

Further, the inspectors reviewed select condition reports to verify that identified problems associated with the operability evaluations were appropriately characterized and entered into the licensee's corrective action program

b. Findings

No findings of significance were identified.

1R19 Post Maintenance Testing (71111.19Q)

a. Inspection Scope

The inspectors observed portions of post maintenance activities and reviewed completed test documentation following planned preventive and corrective maintenance to determine whether the tests were performed as written. The inspectors also verified that applicable testing prerequisites were met prior to the start of the tests. Post maintenance test activities were reviewed for the following activities:

- Planned preventive maintenance on Emergency Diesel Generator 1-1;
- Planned preventive maintenance on Emergency Diesel Generator 1-2;
- Planned corrective maintenance on Containment Air Cooler VHX-4 Service Water Inlet Valve CV-0869; and
- Planned overhaul of Diesel Driver K-5 and Fire Pump P-9B.

The inspectors reviewed post maintenance testing criteria specified in the work orders to verify that the test criteria was appropriate with respect to the scope of work performed and that the acceptance criteria were clear. The inspectors also reviewed completed test documentation for completeness and verified that the testing acceptance criteria was met which demonstrated the equipment's ability to perform intended safety functions.

The inspectors also reviewed select condition reports to verify that identified problems with post maintenance testing activities were appropriately characterized and entered into the licensee's corrective action program.

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing (71111.22)

a. Inspection Scope

The inspectors observed portions of surveillance testing activities conducted on the following risk-significant plant equipment to verify that testing was conducted in accordance with prescribed procedures:

- Low Pressure Safety Injection System Logic Test;
- Calibration of the Safeguards Bus 1C Undervoltage and Time Delay Relays; and
- Calibration of the Service Water Containment Break Detector.

The inspectors also reviewed the documented test data for the Technical Specification Surveillance Test procedures and the associated basis documents to verify that testing acceptance criteria were satisfied.

In addition, the inspectors reviewed applicable portions of Technical Specifications, the Final Safety Analysis Report and Design Basis Documents to verify that the surveillance tests adequately demonstrated that system components could perform designated safety functions.

Further, the inspectors reviewed condition reports regarding surveillance testing activities to verify that identified problems were appropriately characterized.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES (OA)

4OA1 Performance Indicator Verification (71151)

a. Inspection Scope

The inspectors verified that the data submitted by the licensee was accurate and complete for the residual heat removal and high pressure safety injection unavailability performance indicators. The inspectors reviewed control room logs, licensee monthly operating reports, licensee's Incident Analysis System logs, completed Technical Specification Surveillance Tests, and the licensee's maintenance work order database for January through October 2001, to verify that the licensee had accurately reported these performance indicators for these quarters. Also, the inspectors verified that the data submitted by the licensee for January through June 2001, was accurate and complete for the auxiliary feedwater system unavailability performance indicator.

In addition, the inspectors discussed the data with the licensee staff responsible for gathering and reporting the information related to this performance indicator. Further, the inspectors reviewed condition reports regarding performance indicator data to verify that identified problems were appropriately characterized.

b. Findings

No findings of significance were identified.

4OA2 Problem Identification and Resolution (71111.12B)

a. Inspection Scope

The objective of the inspection was to review the licensee's problem identification and resolution of Maintenance Rule-related issues. The inspector reviewed ten condition reports identifying problems with Maintenance Rule implementation. The condition reports are contained in the list of documents at the end of this report.

b. Findings

No findings of significance were identified.

4OA3 Event Follow-up (71153)

.1 Event Notification 38477

a. Inspection Scope

The inspectors reviewed and verified the accuracy of Event Notification No. 38477 that licensee personnel reported to the NRC on October 7, 2001. The event notification was an 8-hour Non-Emergency report for an unanalyzed condition per

10 CFR 50.72(b)(3)(ii)(B), that licensee personnel identified when the plant was in Mode 5 (Cold Shutdown).

b. Findings

Mock-up testing of a full scale containment sump check valve was conducted as a corrective action to address an issue identified in Condition Report CPAL0100764, "Performance of Containment Sump Check Valves During Post-Design Basis Accident Recirculation Mode May Not Be Acceptable." On October 7, 2001, the licensee evaluated preliminary test results from the containment sump check valve's (CK-ES3181 and CK-ES3166) testing and determined that the head loss characteristics of the check valves were greater than previously assumed by engineering calculations and vendor information which was contained in the plant safety analyses.

The licensee reported that the result of increased head loss through the containment sump check valves would be reduced available net positive suction head for the safety injection and containment spray pumps during the recirculation mode following a loss of coolant accident. Consequently, the reduced available net positive suction head may have affected the ability of the pumps to satisfy the required design function during previous periods of plant operation. The report further stated that this issue did not have adverse implications given that the plant was in Mode 5 (Cold Shutdown).

The licensee made Event Notification 38477 based on preliminary analyses of test data. Additional finalized data to assess the past operability, or potential risk and safety significance of this issue was not available at the end of the inspection period. Therefore, due to the potential safety significance of this issue, the inspectors will track the analyses of finalized test data as an Unresolved Item. (URI 50-255/01-14-01)

.2 Event Notification 38195

a. Inspection Scope

The inspectors reviewed and verified the accuracy of the retraction of Event Notification No. 38195 that licensee personnel reported to the NRC on November 19, 2001.

b. Findings

On August 8th, 2001, the licensee reported Event Notification No. 38195 for the missile shield over the reactor vessel not being able to perform an intended safety function. The inspectors noted that the notification was over 100 days old and had not been retracted nor had a 10CFR50.73(a)(1) 60-day report been made. The licensee subsequently noted that an operability determination was completed on August 28, 2001, which declared the missile shield operable.

On November 19, 2001, the licensee retracted Event Notification No. 38195 and generated Condition Report, CPAL0103689, "Retraction of 10 CFR 50.72 Notification Not Completed In A Timely Manner," which was entered into the licensee's corrective action program. The failure of the licensee to make a 10 CFR 50.73(a)(1) report or update the original 10 CFR 50.72 report within the required 60-day period constitutes a violation of

minor significance that is not subject to enforcement action in accordance with Section IV of the Enforcement Policy.

4OA6 Management Meetings

Exit Meeting Summary

The inspectors presented the inspection results to Mr. D. E. Cooper and other members of licensee management on November 19, 2001. Licensee personnel acknowledged the findings presented. No proprietary information was identified at the exit meeting. The following interim exit meeting was also conducted during the inspection period:

Interim Exit Meeting

The inspectors presented the Maintenance Rule implementation biannual inspection results to Mr. D. E. Cooper and other members of licensee management on November 16, 2001. No proprietary information was identified at the exit meeting.

4OA7 Licensee Identified Violations

The following finding of very low safety significance was identified by the licensee and is a violation of NRC requirements which meet the criteria of Section IV of the NRC Enforcement Policy, NUREG-1600 for being dispositioned as a Non-Cited Violation (NCV).

If you deny this Non-Cited Violation, you should provide a response with the basis for your denial, within 30 days of the date of this inspection report, 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 facility.

NCV Tracking Number	Requirement Licensee Failed To Meet
NCV 50-255/01-14-02	Technical Specification 5.4.1.a requires, in part, that written procedures shall be implemented for the applicable procedures in Regulatory Guide 1.33, which requires procedures for the plant fire protection system. Condition Report CPAL0103254 documented a licensee identified issue regarding a valve lineup that was not performed in accordance with Procedure SWSO-4 on October 11, 2001, which resulted in the inadvertent isolation of the outer loop fire protection headers. This issue is being treated as a Non-Cited Violation.

PARTIAL LIST OF PERSONS CONTACTED

Licensee

M. Carlson, Programs Engineering Manager
D. Cooper, Site Vice President
D. Crabtree, Systems Engineering Manager
B. Dotson, Licensing Analyst
P. Harden, Director, Engineering
L. Lahti, Licensing Manager
D. Malone, Supervisor, Regulatory Assurance
D. Malone, General Plant Manager
G. Packard, Operations Superintendent
K. Smith, Operations Manager
E. Tiffany, Maintenance Rule Engineer
R. Westerhof, Reliability Section Leader

NRC

D. Hood, Project Manager, NRR
T. Vegel, Branch Chief

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

50-255/01-14-01	URI	Unresolved item to track and assess the completed test results from full scale testing of a containment sump check valve
50-255/01-14-02	NCV	Licensee identified non-cited violation for the failure to implement plant procedures as written which resulted in the inadvertent isolation of a portion of the plant fire protection system

Closed

50-255/01-14-02	NCV	Licensee identified non-cited violation for the failure to implement plant procedures as written which resulted in the inadvertent isolation of a portion of the plant fire protection system

Discussed

None

LIST OF DOCUMENTS REVIEWED

1R04 Equipment Alignment

Plant Procedures

SOP-22, Attachment 8	Checklist CL 22.1, Diesel Generators System Checklist	Revision 31
SOP-22, Attachment 9	Checklist CL 22.2, Fuel Oil System Checklist	Revision 31
GOP-14	General Operating Procedure - Shutdown Cooling Operations	Revision 14
FPIP-4	Fire Protection Implementing Procedure - Fire Protection Systems and Fire Protection Equipment	Revision 16

1R05 Fire Protection

	Final Safety Analysis Report Section 9.6 - Fire Protection System	
	Fire Hazards Analysis for Fire Areas 28, Containment; and 14, West Engineered Safeguards Room	Revision 4
	Pre-Fire Plans for Fire Areas 28, Containment; and 14, West Engineered Safeguards Room	

Completed Fire Protection Surveillance Procedures

FPSP-SI-1	Functional Tests of Fire Protection Systems	July 19, 2001
FPSP-RO-9	Fire Sprinkler System Inspection	December 19, 2000
FPSP-RO-6	Fire Hose Reel/Rack Station Checksheet	March 30, 2001
FPSP-MO-2	Fire Hose Reel/Rack Valve and Station and Fire Hydrant Hose Inspection	September 2001
FP-PE-3	Fire Protection Check Sheet - Fire Extinguishers	July 2001

1R12.1 Quarterly Maintenance Rule Implementation

	Main Feedwater Maintenance Rule Scoping Document	

	Main Feedwater System Health Assessments - 1st/2nd/3rd Quarter 2001	
	Control Rod Drive System Maintenance Rule Scoping Document	
	Control Rod Drive System Health Assessment - 1st/2nd/3rd Quarter 2001	
	Control Rod Drive System Maintenance Rule Performance Monitoring Results	
EM - 25	Maintenance Rule Program	Revision 3

Condition Reports

CPAL0101017	Suspected Primary Coolant System Boundary Leakage on Control Rod No. 22 Seal Housing
CPAL0101688	Control Rods Found with Mechanical Stop s Still Engaged
CPAL0101588	Water Inside Drive Motor of Control Rod Drive No. 35
CPAL0100018	Ultrasonic Flow Monitor Loop B Feedwater Flow Exhibiting High Standard Deviation
CPAL0100572	As Found Part in Feedwater Bypass Valve (CV-0734) POC May Not Be Correct
CPAL0101419	SV-0703B Failed to Close on Loss of Instrument Air

Condition Reports Reviewed To Assess Problem Identification Characterization

CPAL0103407	Clarification Needed in Maintenance Rule Program Definition of Maintenance Preventable Related to Design Deficiencies

1R12.2Biannual Maintenance Rule Implementation

Plant Procedures

EM-20	System Performance Monitoring	October 30, 2001
EM-25	Maintenance Rule Program	November 11, 2001
EM-25-01	Maintenance Rule Structural Monitoring	November 8, 2001
EGAD-EP-10	Maintenance Rule Scoping Document	November 21, 2000

Condition Reports

CPAL9801790	PY-0102D TMM Power Supply Failure	October 29, 1998
CPAL9801947	CV-0824 Exceeded Its QO-6 Stroke Time (To Close) Acceptance Criteria	December 15, 1998
CPAL9900258	CK-WG402 Check Valve Stuck Open (Repeat Maintenance)	March 9, 1999
CPAL9901427	TM/LP Pre-trip Channel 'D' (PY-0102D)	September 8, 1999
CPAL9901835	CV-3006 Failed Closed Stroke Time	October 16, 1999
CPAL9901936	Inadvertent RPS Trip/Pre-Trip During Level Transmitter Calibration (LT-0701, LT-0702, LT-0703)	October 20, 1999
CPAL9901954	Valve Manifold Installed 180 Degrees Out (FE-0882)	October 21, 1999
CPAL9902197	CK-SW408 Shaft Key Appears to Have Separated from the External Actuator Shaft	October 29, 1999
CPAL9902218	P-67A Trips Upon Being Started During RT-8D	October 29, 1999
CPAL9902268	Failure of CK-SW407, CK-SW408, CK-SW409	October 31, 1999
CPAL9902812	Failure of LPSI Loop Injection Flows to Meet the Acceptance Criteria of QO-8B During Testing (MO-3010, MO-3012, MO-3014, MO-3008)	November 28, 1999
CPAL9903031	P-7B Adverse Motor Vibration and Amps Trend	December 22, 1999
CPAL0000013	Unexpected Short Packing Life for P-7A	January 3, 2000
CPAL0000409	CV-3006 Fails to Meet QO-43 Close Acceptance	February 6, 2000
CPAL0000613	Service Water Pump P-7A Premature Packing Failure	February 22, 2000
CPAL0000631	Service Water Pump P-7C Packing Installed in Incorrect Stack Up	February 23, 2000
CPAL0000964	Shutdown Cooling Inlet Control Valve CV-3055 Failed to Operate	March 26, 2000
CPAL0001367	Service Water Pump P-7A Failed to Start During QO-1, "Safety Injection System" (152-204)	April 28, 2000
CPAL0001890	Elevated Pump Seal Leakage on Main Feedwater Pump P-1A	June 17, 2000

CPAL0002053	PCS Unidentified Leakage Raised from 0.025 GPM to 0.084 GPM	June 30, 2000
CPAL0002071	CV-0501 Does Not Close Completely During QO-37 - Main Steam Isolation and Bypass	July 3, 2000
CPAL0003023	Plant Air Compressors (C-2A/C-2C) Loading Problem after Preventative Maintenance on 2C	October 10, 2000
CPAL0100182	LPSI Pump As-found Alignment Out of Spec.	January 18, 2001
CPAL0101017	Suspected PCS Boundary Leakage on Control Rod #22 Seal Housing	March 31, 2001
CPAL0101432	RPS Signal Loop to Earth Ground Discovered per WI-RPS-1-01	April 15, 2001
CPAL0102086	CV-0869 Containment Air Cooler Inlet Valve Will Not Isolate Flow	June 7, 2001

Miscellaneous Documents

	Maintenance Rule Category (a)(1) List	November 1, 2001
	Palisades Maintenance Rule Performance Monitoring Results	October 1, 2001
	Palisades Maintenance Rule Performance Indicators	September 21, 2001
	Palisades Maintenance Rule Periodic Assessment for the period from April 1, 1997 to September 30, 1998	January 21, 1999
	Palisades Maintenance Rule Periodic Assessment for the period from October 1, 1998 to July 31, 2000	January 19, 2001
	System Health Assessment - 1st/2nd Quarter 2000 - Engineered Safeguards Systems	undated
	System Health Assessment - 1st/2nd Quarter 2000 - Reactor Protection System	undated
	System Health Assessment - 1st/2nd Quarter 2000 - Critical Service Water System	undated
	Program Health Assessment - 1st/2nd Quarter 2001 - Maintenance Rule Program	July 20, 2001
2001-16	Self-Assessment of Maintenance Rule Implementation	October 9, 2001

1R13 Maintenance Risk Assessments and Emergent Work Evaluation

Plant Procedures

GOP-14, Attachment 17	Equipment Waiver Sheet	10/08/01 - 10/09/01
GOP-14, Attachment 3	Shutdown Cooling Equipment Availability in effect September 30 through October 14, 2001, and October 15 through 19, 2001	Revisions 35, 36, 37 and 38
GOP-14, Attachment 16	Shutdown Operation Equipment Sheets in effect September 30 through October 14, 2001, and October 15 through 19, 2001	Revision 14

Other Documents

Shift Supervisor Logs for September 30 through October 9, 2001 and October 14 through October 18, 2001

Condition Reports Reviewed To Assess Problem Identification Characterization

CPAL0103245	GOP-14 Waiver Period Was Not Of Long Enough Duration

1R15 Operability Evaluations

	Operability Determination for Condition Report CPAL0103366; QO-38: Breakaway Torque on CK-ES3181 Indicated a Change from 697 to 1170 foot pounds	
EA-C-PAL-1998-1408A-04	Hydraulic Opening Forces Acting on Sump Check Valves	Revision 1
	Final Safety Analysis Report Section 6	
	Design Basis Document 2.0.2, High Pressure Safety Injection System	Revision 6
	Operability Determination for Condition Report CPAL0103563; Containment Sump Check Valve Lab Testing Results are Inconsistent with ECCS Model	
	Operability Determination for Condition Report CPAL0102806; Review of Work Order 24011886 Indicates that Relief Valve RV-3165 Installed on the High Pressure Safety Injection System During the 2001 Refout was Improperly Set	

Final Safety Analysis Report Section 6.1 - Safety Injection System

Final Safety Analysis Report Section 6.2 - Containment Spray System

Condition Reports Reviewed To Assess Problem Identification Characterization

CPAL0103366	QO-38: Breakaway Torque on CK-ES3181 Indicated a Change from 697 to 1170 foot pounds
CPAL0103563	Condition Report - Containment Sump Check Valve Lab Testing Results Are Inconsistent with Emergency Core Cooling System Model
CPAL0102806	Review of Work Order 24011886 Indicates that Relief Valve RV-3165 Installed on the High Pressure Safety Injection System During the 2001 Refout was Improperly Set
CPAL0103361	QO-38: Breakaway Torque on CK-ES3166 Indicated a Change from 545 to 840 foot pounds

1R19 Post Maintenance Testing

Work Orders

24111279	K-6A, replace expansion joints	10/7/01
24111383	CK-DE417, replace check valve	10/4/01
24112839	K-6A, Emergency Diesel Generator 1-1 did not reach 2705 KW during peak load test	10/7/01
24912645	Clean and inspect fuel oil belly tank	10/7/01
24110187	Replace tach pak with new transmitter	
24114133	Containment Air Cooler VHX-4 Service Water Inlet Valve CV-0869 leaks by seat	
24110785	K-5 Diesel Driver Overhaul and Installation	
24112481	P-9B Fire Pump Remove, Rebuild and Installation	

Documented Post Maintenance Test Procedure Data

MO-7A-1, Attachment 1	1-1 Diesel Generator Pre and Post Conditions	10/7/01

MO-7A-1, Attachment 2	1-1 Diesel Generator Operating Conditions	10/7/01
MO-7A-1	Emergency Diesel Generator 1-1 (K-6A)	10/7/01
MO-7A-1, Attachment 6	1-1 Diesel Generator Peak Load Test	10/7/01
QO-5, Attachment 12	Valve stroke testing data sheet, CV-0869	9/6/01
RO-52	Fire Water Pump P-9B Data	10/26/01

Other Documents

RO-52	Surveillance and Special Test Procedure and Basis Document- Fire Suppression Water System Functional Test and Fire Capacity Test	Revision 20 and 9
	Final Safety Analysis Report Section 9.6 - Fire Protection System	

Condition Reports Reviewed To Assess Problem Identification Characterization

CPAL0103247	Two Data Points on Tech Spec Test Do Not Match
CPAL0103201	EDG 1-1 Failure To Maintain Peak Load Above 2705KW During Post Maintenance Testing
CPAL0102963	Unable To Use VHX-4 Service Water Flow Indicator FI-1773 For The Anticipated Range Required
CPAL0103433	RO-52 Run Discrepancy
CPAL0103431	RV-1310, P-9B Fire Water Pump Mini-Flow Line, Causes Housekeeping Issues in Standby
CPAL0103367	Fuel Oil Filter Leak at K-5 Diesel Driver for Fire Pump P-9B
CPAL0103410	RO-52 Surveillance Procedure Issues Identified at T-0
CPAL0103417	RO-52 Fire Suppression Water System Functional Test and Fire Pump Capacity Test Issued to Control Room Missing a Necessary Section for Test
CPAL0103425	Start of Job Delayed for One Hour to Resolve Work Order Issues

CPAL0103455	Administrative Delay in Declaring Diesel Fire Pump P-9B Operable Due to Lack of Documentation Supporting the Transfer of Condition Report Operability to Work Orders	
CAPL0103694	Potential Pre-Conditioning Concern For Emergency Diesel Generator Monthly Surveillance Testing	

1R22 Surveillance Testing

RI-27	Technical Specification Surveillance Procedure and Basis Document - Containment Service Water Break Detector	Revisions 7 and 13
RE-137	Technical Specificaiton Surveillance Procedure and Basis Document - Calibration of Bus 1C Undervoltage and Time Delay Relays	Revision 1
PPAC SWS103	Predetermined and Periodic Activity Control - Backflush of Service Water Break Detector Sensing Lines	
RI-7	Technical Specification Surveillance Procedure and Basis Document - Low Pressure Safety Injection Signal Initiation Logic	Revision 10 and 6
	Final Safety Analysis Report Section 6.1 - Safety Injection System	
	Final Safety Analysis Report Section 8.4.1 - Emergency Power Sources	
	Final Safety Analysis Report Section 9.1 - Service Water System	

4OA1 Performance Indicator Verification

NEI 99-02	Nuclear Energy Institute - Regulatory Assessment Performance Indicator Guideline	
	Various Shift Supervisors Logs from the time period of January 2001 to October 2001	
	Incident Analysis System Logs from the time period of January 2001 to October 2001	

	Work Order Histories for Components related to the Residual Heat Removal and High Pressure Safety Injection Unavailability Performance Indicators from the time period of January 2001 to October 2001	
	Licensee Monthly Operating Reports from the time period of January 2001 to October 2001	
Proc. No. 3.09	Palisades Nuclear Plant Administrative Procedure-Data Collection, Review and Reporting For NRC Performance Indicator Program	Revision 4
	Maintenance Rule Performance Indicator data, work order history and surveillance testing history for the Auxiliary Feedwater System for the time period of January 2001 through June 2001	

Condition Reports Reviewed To Assess Problem Identification Characterization

CPAL0102779	Unavailability Hours Not Included In Performance Indicator Report For March 2001

4OA2 Problem Identification and Resolution

Plant Procedures

3.03	Corrective Action Process	Revision 27

Condition Reports

CPAL9900935	Maintenance Rule Category (a)(1) Performance Improvement of Engineered Safeguards Room Coolers VHX-27A & VHX-27B	June 21, 1999
CPAL0003284	Critical Service Water System (CSW) Exceeds Maintenance Rule Performance Criteria (CV0821, CV-0826, P-7A)	November 6, 2000
CPAL0003496	Fire Pump P-9B Exceeds Maintenance Rule Performance Indicators	November 30, 2000
CPAL0100251	Adverse Trend in Resolution of Category (a)(1) Issues	January 24, 2001
CPAL0100252	Adverse Trend in Repeat Category (a)(1) Issues	January 24, 2001
CPAL0100253	Multiple Compressor-related Performance Issues Placed in Category (a)(1)	January 24, 2001
CPAL0100254	Availability Performance Criteria Limitations not Integrated into Scheduling Process	January 24, 2001

CPAL0100808	Fire Pump P-41 Exceeds Maintenance Rule Performance Criteria	March 13, 2001
CPAL0102505	Inadequate Maintenance Rule Impact Determination for Degraded Grid Voltage	July 24, 2001
CPAL0103000	Maintenance Rule Applicability Determination Error by CRG on CPAL0102974	September 17, 2001

4OA3 Event Follow-up

EN 38477	50.72(b)(3)(ii)(B) Event Notification - Head Loss Characteristics of Containment Sump Check Valves Greater Than Previously Assumed
CPAL0100764	Condition Report - Performance of Containment Sump Check Valves During Post-DBA Recirculation Mode May Not Be Acceptable
CPAL0103563	Condition Report - Containment Sump Check Valve Lab Testing Results Are Inconsistent with Emergency Core Cooling System Model
	Final Safety Analysis Report Section 6.1 - Safety Injection System
	Final Safety Analysis Report Section 6.2 - Containment Spray System

Condition Reports Reviewed To Assess Problem Identification Characterization

CPAL0103689	Retraction of 10 CFR 50.72 Notification Not Completed In A Timely Manner

4OA7 Licensee Identified Violations

CPAL0103254	Inadvertent Isolation of Fire Protection System	
SWSO-4	Service Water System Procedure - Molluscide Treatment of Service Water and Fire Protection Systems	Revision 5
	Shift Supervisors Logs - October 11, 2001	