

October 5, 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 50-255/01-12(DRP)

Dear Mr. Cooper:

On September 29, 2001 the NRC completed an inspection at your Palisades Nuclear Generating Plant. The enclosed report documents the inspection findings which were discussed on October 3, 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 inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

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

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room 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 Vogel, Chief  
Branch 6  
Division of Reactor Projects

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

Enclosure: Inspection Report 50-255/01-12(DRP)

See Attached Distribution

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D. Cooper

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cc w/encl: R. Fenech, Senior Vice President, Nuclear  
Fossil and Hydro Operations  
N. Haskell, Director, Licensing and Performance Assessment  
R. Anderson, Chief Nuclear Officer, NMC  
A. Udrys, Esquire, Consumers Energy Company  
S. Wawro, Nuclear Asset Director, Consumers Energy Company  
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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

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

Report No: 50-255/01-12(DRP)

Licensee: Nuclear Management Company, LLC

Facility: Palisades Nuclear Generating Plant

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

Dates: August 12 through September 29, 2001

Inspectors: J. Lennartz, Senior Resident Inspector  
R. Krsek, Resident Inspector  
J. Maynen, Resident Inspector, D.C. Cook  
D. Nelson, Radiation Specialist, RIII  
T. Madeda, Physical Security Inspector  
G. Wright, Project Engineer, RIII

Approved by: Anton Vogel, Chief  
Branch 6  
Division of Reactor Projects

## SUMMARY OF FINDINGS

IR 05000255-01-12 on 08/12 - 09/29/2001, Nuclear Management Company, LLC, Palisades Nuclear Generating Plant.

This report covers a 7-week routine resident inspection, a baseline safeguards physical protection inspection, and a baseline radiation protection program inspection. The inspections were conducted by resident and region based specialist inspectors.

A. Inspector Identified Findings

No findings of significance were identified.

B. Licensee Identified Violations

No violations of significance were identified.

## Report Details

A list of documents reviewed within each inspection area is included at the end of the report.

### 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 Number 21 control rod drive mechanism pressure housing. Licensee personnel completed an extent of condition evaluation and implemented a repair plan to replace all 45 control rod drive mechanism pressure housings. The repair plan was in progress when the inspection period ended.

## **1. REACTOR SAFETY**

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

#### 1R05 Fire Protection (71111.05Q)

##### a. Inspection Scope

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

- 1D Switchgear Room (Fire Area 3);
- Emergency Diesel Generator 1-2 Room (Fire Area 6); and
- Spent Fuel Pool Cooling Room (Fire Area 17).

During the fire area tours, the inspectors verified that associated sprinkler fire suppression systems, smoke detection systems, and manual fire fighting equipment designated in the Final Safety Analysis Report (FSAR) and plant procedures were available in the areas; verified that transient combustibles and ignition sources were appropriately controlled; and, assessed the material condition of the passive fire protection features.

The inspectors reviewed documentation to verify that fire suppression and detection system surveillances had been completed as required by the licensee's fire protection program; reviewed completed evaluations of condition reports that had been entered into the licensee's corrective program to assess the appropriateness of designated corrective actions; and, verified that the designated corrective actions had been implemented.

##### b. Findings

No findings of significance were identified.

## 1R12 Maintenance Rule Implementation (71111.12Q)

### a. Inspection Scope

The inspectors reviewed the licensee's Maintenance Rule Scoping Document for the following systems designated as having high safety significance within the licensee's Maintenance Rule program:

- Service Water System;
- Switchyard System; and
- Instrument Air System.

The inspectors reviewed the goals and corrective actions for the Service Water and Instrument Air Systems which were designated as 10 CFR 50.65(a)(1) systems, and the performance criteria for the Switchyard System which was designated as 10 CFR 50.65(a)(2) system to verify appropriateness. The inspectors reviewed select condition reports that were written over the last year and the associated maintenance rule evaluations to verify that performance issues were appropriately characterized in accordance with the licensee's corrective action and maintenance rule programs.

In addition, the inspectors reviewed completed evaluations of select condition reports that were entered into licensee's corrective action program to assess the appropriateness of designated corrective actions and verified that the designated corrective actions had been implemented.

### 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 conducted plant tours to verify that the necessary equipment was available for use during the following planned and emergent maintenance activities:

- Scheduled surveillance testing of fire protection pumps with Fire Pump P-9B out of service for planned maintenance in conjunction with Instrument Air Compressor C-2A emergent maintenance.
- Scheduled maintenance on Service Water Pump P-7C and main generator output breaker relay work in the switchyard 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 equipment:

- 1-1 Emergency Diesel Generator
- 2400 Volt Safety-Related Bus 1D

The inspectors reviewed applicable sections of the Technical Specifications (TS), Final Safety Analysis Report, Design Basis Documents (DBD), and operating and maintenance procedures 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 operability evaluations were appropriately characterized and entered into the licensee's corrective action program.

b. Findings

No findings of significance were identified.

1R16 Operator Workarounds (71111.16)

a. Inspection Scope

The inspectors reviewed the cumulative effect of Operator Workarounds (OWAs) on equipment availability, initiating event frequency, and the ability of the operators to implement abnormal or emergency operating procedures. As part of this inspection, the inspectors interviewed the OWA Coordinator regarding the oversight and control of OWAs.

b. Findings

No findings of significance were identified.

1R17 Permanent Plant Modifications (71111.17A)

a. Inspection Scope

The inspectors reviewed the modification that plugged two tubes in non-safety related containment air cooler, VHX-4 that had small service water leaks. The inspectors considered this modification to have risk significance in that the failure of these tubes could lead to a release path which bypassed containment or to flooding inside containment in excess of the containment flood analysis. The inspectors reviewed the licensee's engineering analysis, safety screening, and licensing basis documents.

b. Findings

No findings of significance were identified.

1R19 Post Maintenance Testing (71111.19Q)

a. Inspection Scope

The inspectors reviewed post maintenance testing documentation following scheduled and emergent maintenance to determine whether the tests were performed as written for the following activities:

- Scheduled preventative maintenance on 1-1 Emergency Diesel Generator;
- Emergent corrective maintenance on Charging Pump P-55A; and
- Scheduled maintenance on Instrument Air Compressors 2A and 2C.

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; reviewed completed test documentation for completeness and to verify that the testing acceptance criteria was met which demonstrated the equipment's ability to perform intended safety functions.

The inspectors reviewed condition reports to verify that post maintenance testing issues were appropriately characterized and entered into the licensee's corrective action program. Completed evaluations of select condition reports that had been entered into the licensee's corrective action program were reviewed to assess the appropriateness of designated corrective actions and to verify that the designated corrective actions had been implemented.

b. Findings

No findings of significance were identified.

## 1EP6 Drill Evaluation (71114.06)

### a. Inspection Scope

The inspectors observed an emergency preparedness training drill conducted on September 19, 2001, to verify that licensee personnel could implement the emergency plan in accordance with the prescribed implementing procedures which included evaluating the following attributes:

- the ability to classify the event accurately and within prescribed time limits;
- the ability to complete required notifications to state, local and NRC officials within prescribed time limits;
- the ability to activate the Technical Support Center within prescribed time limits and with the required number of emergency response personnel; and
- the ability to transfer command and control functions between emergency response support facilities.

The inspectors reviewed the post-drill critique to assess the licensee's evaluators ability to identify emergency plan implementation performance deficiencies; reviewed condition reports to verify that identified problems pertaining to emergency planning were appropriately characterized and entered into the licensee's corrective action program; and reviewed completed evaluations of select condition reports that had been entered into the licensee's corrective action program to assess the appropriateness of designated corrective actions and to verify that the designated corrective actions had been implemented.

### b. Findings

No findings of significance were identified.

## 2. **RADIATION SAFETY**

### **Cornerstone: Occupational Radiation Safety**

## 2OS1 Access Controls for Radiologically Significant Areas (71121.01)

### .1 Plant Walkdowns and Radiological Boundary Verifications

#### a. Inspection Scope

The inspector conducted walkdowns of the radiologically controlled area to verify the adequacy of radiological boundaries and postings. Specifically, the inspector walked down several radiologically significant work area boundaries (high and locked high radiation areas) in the Auxiliary Building and the Spent Fuel Pool.

#### b. Findings

No findings of significance were identified.

## 20S2 As-Low-As-Is-Reasonably-Achievable (ALARA) Planning and Controls (71121.02)

### .1 Job Site Inspections and ALARA Control

#### a. Inspection Scope

The inspector reviewed the ALARA planning for each of the activities associated with the removal and replacement of 45 Control Rod Drive Upper Housings. During the inspection, neither the final ALARA planning documents nor the radiation work permits had been reviewed or approved. The inspector did, however, review the draft ALARA job evaluations, exposure estimates, and exposure mitigation requirements. The inspector also evaluated the planning stage interfaces between radiation protection, maintenance, maintenance planning, scheduling, and engineering groups for interface problems or missing program elements. In addition, the inspector evaluated the proposed interfaces between radiation protection, plant management and the contractors brought on site to replace the housings, and discussed with the ALARA planners the integration of ALARA requirements into work packages.

#### b. Findings

No findings of significance were identified.

## 20S3 As-Low-As-Is-Reasonably-Achievable (ALARA) Planning and Controls (71121.02)

### .1 Radiological Work Planning

#### a. Inspection Scope

The inspector reviewed the exposure results for activities associated with removal of 35 out of 45 Control Rod Drive Upper Housings in order to evaluate the accuracy of exposure estimates in the ALARA plan. The inspector compared the actual exposure results versus the initial exposure estimates, the estimated and actual dose rates as well as the estimated and actual man-hours expended. The inspector also reviewed the licensee's exposure tracking system to determine whether the level of exposure tracking detail, exposure report timeliness, and exposure report distribution was sufficient to support control of collective exposures during removal of the housings. The inspector reviewed the exposure history for the project to determine if management had monitored the exposure status of the project, to determine if in-progress ALARA job reviews were needed, if additional engineering/dose controls had been established and if required corrective documents had been generated.

#### b. Findings

No findings of significance were identified.

## Cornerstone: Public Radiation Safety

### 2PS3 Radiological Environmental Monitoring and Radioactive Material Control Programs (71122.03)

#### .1 Review of Environmental Monitoring Reports and Data

##### a. Inspection Scope

The inspector reviewed the 2000 Annual Radiological Environmental Operating Report. Sampling location commitments, monitoring and measurement frequencies, land use census, the vendor laboratory's Interlaboratory Comparison Program, and data analysis were assessed. Anomalous results including data, missed samples, inoperable, or lost equipment were evaluated. The review of the Radiological Environmental Monitoring Program (REMP) was conducted to verify that the REMP was implemented as required by the Offsite Dose Calculation Manual (ODCM) and associated Technical Specifications, and that changes, if any, did not affect the licensee's ability to monitor the impacts of radioactive effluent releases on the environment. The most recent quality assessment of the licensee's REMP vendor was reviewed to verify that the vendor laboratory performance was consistent with licensee and NRC requirements.

##### b. Findings

No findings of significance were identified.

#### .2 Walkdowns Of Radiological Environmental Monitoring Stations and Meteorological Tower

##### a. Inspection Scope

The inspector conducted a walk down of selected environmental air sampling stations and thermoluminescent dosimeters to verify that their locations were consistent with their descriptions in the ODCM, and to evaluate the equipment material condition. The meteorological monitoring site was observed to validate that sensors were adequately positioned and operable. The inspector reviewed the 2000 Annual Radiological Environmental Operating Report, to evaluate the onsite meteorological monitoring program's data recovery rates, routine calibration and maintenance activities, and non-scheduled maintenance activities. The review was conducted to verify that the meteorological instrumentation was operable, calibrated and maintained in accordance with licensee procedures. The inspector also verified that readouts of wind speed, wind direction, and atmospheric stability measurements were available in the Control Room and that the readout instrumentation was operable.

##### b. Findings

No findings of significance were identified.

.3 Review of REMP Sample Collection and Analysis

a. Inspection Scope

The inspector accompanied the licensee REMP technician to observe the collection and preparation of air filters to verify that representative samples were being collected in accordance with procedures and the ODCM. The inspector observed the technician perform air sampler field check maintenance to verify that the air samplers were functioning in accordance with procedures. Selected air sampler calibration and maintenance records for 2001 were reviewed to verify that the equipment was being maintained as required. The environmental sample collection program was compared with the ODCM to verify that samples were representative of the licensee's release pathways. Additionally, the inspector reviewed results of the vendor laboratory's Interlaboratory Comparison Program to verify that the vendor was capable of making adequate radio-chemical measurements.

b. Findings

No findings of significance were identified.

.4 Unrestricted Release of Material From the Radiologically Controlled Area

a. Inspection Scope

The inspector evaluated the licensee's controls, procedure, and practices for the unrestricted release of material from radiologically controlled areas and verified that: (1) radiation monitoring instrumentation used to perform surveys for unrestricted release of materials was appropriate; (2) instrument sensitivities were consistent with NRC guidance contained in Inspection and Enforcement (IE) Circular 81-07 and Health Physics Positions in NUREG/CR-5569 for both surface contaminated and volumetrically contaminated materials; (3) criteria for survey and release conformed to NRC requirements; (4) licensee procedures were technically sound and provided clear guidance for survey methodologies; and (5) radiation protection staff adequately implemented station procedures.

b. Findings

No findings of significance were identified.

.5 Identification and Resolution of Problems

a. Inspection Scope

The inspector reviewed condition reports, a Nuclear Performance Assessment Department audit of the Palisades Emergency Preparedness and Meteorological Monitoring Project, the Chemical and Radiological Services Department's focused self-assessment on liquid and gaseous radiological effluents, REMP and unconditional release to determine if problems were being identified and entered into the corrective action program for timely resolution. The inspector also reviewed the licensee's overall

management of the REMP, including attention to details of the sampling program and the vendor laboratory, in order to evaluate the effectiveness of the REMP in collection and analysis of samples for the detection of offsite radiological contamination.

b. Findings

No findings of significance were identified.

**3. SAFEGUARDS**

**Cornerstone: Physical Protection**

3PP4 Security Plan Changes (71130.04)

a. Inspection Scope

The inspector reviewed Revision 45 to the Palisades Nuclear Plant Security Plan to verify that the changes did not decrease the effectiveness of the submitted document. The referenced revision was submitted in accordance with 10 CFR 50.54(p)(2) requirements by licensee letter dated August 21, 2001.

b. Findings

No findings of significance were identified.

**4. OTHER ACTIVITIES (OA)**

4OA3 Event Follow-up (71153)

- .1 (Closed) LER 50-255/01-001: "10 CFR 20.2201(b) Report - Loss of a Low Activity, Mixed Isotope Source." Per 10 CFR 20.2201 and 10 CFR 50.73, the licensee reported to the NRC that during an inventory of radioactive check and calibration sources at Palisades a low activity level mixed gamma source was found to be missing from its assigned cabinet. The licensee concluded after conducting an investigation that the source had inadvertently been sent to a waste disposal facility for disposal. The licensee subsequently revised the source control procedures to ensure that all sources marked for disposal are cross checked and deleted from the source inventories before they are shipped to a disposal facility. This item is closed.

#### 4OA6 Exit Meetings

The inspectors presented the inspection results to Mr. Dan J. Malone and other members of licensee management on October 3, 2001, after the inspection period ended. The licensee acknowledged the findings presented. No proprietary information was identified at the exit meeting. The following interim exit meetings were also conducted during the inspection period:

##### Interim Exit Meeting

Senior Official at Exit:	Mr. N. Haskell, Nuclear Oversight Manager
Date:	August 30, 2001
Proprietary:	No
Subject:	Radiological Environmental Monitoring Program (REMP) and Radioactive Material Control Program, As-Low-As-Is-Reasonably-Achievable (ALARA) Planning and Controls and Access Control to Radiologically Significant Areas
Change to Inspection Findings:	No

##### Interim Exit Meeting

Senior Official at Exit:	S. Cote, Security Manager
Date:	August 30, 2001
Proprietary:	No
Subject:	Security Plan Review
Change to Inspection Findings:	No

## KEY POINTS OF CONTACT

### Licensee

M. P. Banks, Corrective Action Program Supervisor  
T. Brown, Manager, Chemical and Radiological Services  
D. E. Cooper, Site Vice President  
J. Fletcher, Security Manager  
B. Dotson, Licensing Analyst  
P. Harden, Director, Engineering  
N. L. Haskell, Nuclear Oversight Manager  
D. G. Malone, Acting Director, Licensing and Performance Assessment  
D. J. Malone, Plant General Manager  
G. C. Packard, Operations Superintendent  
K. Smith, Operations Manager

### NRC

D. Hood, Project Manager, NRR  
J. Stang, Project Manager, NRR

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

None

Closed

50-255/01-001	LER	10 CFR 20.2201(b) Report - Loss of a Low Activity, Mixed Isotope Source
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Discussed

None

LIST OF DOCUMENTS REVIEWED

1R05 Fire Protection

FSAR Section 9.6	Fire Protection System	Revision 22
	Fire Hazards Analysis for Fire Areas 3, 1-D Switchgear Room; 6, 1-2 Emergency Diesel Generator; and 17, Refueling Spent Fuel Pool Area	Revision 4
	Pre-Fire Plans for Fire Areas 3, 1-D Switchgear Room; 6, 1-2 Emergency Diesel Generator; and 17, Refueling Spent Fuel Pool Area	

Completed Fire Protection Surveillances

FPSP-QO-2, Attachment 2	Fire Protection Sprinkler System Water Flow Switch Alarm Check Sheet	May 18, 2001
FPSP-SI-1, Attachment 2	Data Sheet For Alarm Bells and Ionization Smoke Detectors	July 18, 2001
FPSP-RO-9, Attachment 2	Cableway Room 328 and 1D Switchgear Room 223 Sprinkler Head Locations	December 8, 2000
FPSP-RO-9, Attachement 5	Diesel Generator 1-1 Room 116 and Diesel Generator Room 1-2 Room 116B Sprinkler Head Locations	December 9, 2000
FPSP-RO-6, Attachment 2	Fire Hose Reel/Rack Station Checksheet	March 26, 2001

Condition Report Reviewed To Assess Problem Identification Characterization

CPAL0102901	Corrective Action For CPAL0100548 Not Adequately Documented
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Condition Reports Reviewed To Assess Corrective Actions

CPAL0100548	Fire Drill Affected by RWP (Radiation Work Permit) Administrative Issue
CPAL0100203	Inconsistency In Fire Hazard Analysis and Placement Of Fire Extinguisher In North Heating Boiler Room

1R12 Maintenance Rule Implementation

	Critical Service Water Maintenance Rule Scoping Document	
FSAR Section 9.1	Service Water System	
FSAR Section 6.3	Containment Air Coolers	
FSAR Section 9.5	Instrument and Service Air	
TS 3.6.1	Containment	
TS 3.6.6	Surveillance Test, Containment Cooling Systems	
RO-216	Service Water Flow Verification	Revision 0
P&ID M-208, Sheet 1B	Service Water System	
	Switchyard Maintenance Rule Scoping Document	
	Switchyard System Health Assessment - 1st/2nd Quarter 2001	
	Switchyard System Maintenance Rule Performance Monitoring Results and Performance Indicators	

Work Orders

24112133	CV-0869; leaks by seat > 100 gpm. Remove valve/replace seat.
24110570	East Starting Air To K-6B Governor Check
24110571	West Starting Air To K-6B Governor Check
24014804	Miscellaneous Electrical System Work

Condition Reports

CPAL012086	Containment air cooler valve will not isolate flow
CPAL011532	T-388 (CV-0824 D/P Test) suspended due to difficulties with CV-0824 and CV-0847
CPAL010340	Service Water System hydraulic model error
CPAL003014	When Placing Instrument Air Compressor C-2C Inservice, Found C-2C Unloader Supply Valve MV-CA-603 Closed

- CPAL003599      Off Normal Procedure 7.1, "Loss of Instrument Air," Entered During Return to Service of M-75 Air Dryer
- CPAL010091      Compressor C-2A Failed to Load After Repairs to C-2C

Condition Reports Reviewed To Assess Corrective Actions

- CPAL0100722      Switchyard 125 VDC/240 VAC Trouble Alarm
- CPAL0100902      Thermal Scan Found Hot Spot On Disconnect 29R4
- CPAL0003284      Critical Service Water System Exceeds Maintenance Rule Performance Criteria
- CPAL0100365      Start Time Acceptance Criteria Not Met For 1-2 EDG Using 1 Air Start Motor

1R13            Maintenance Risk Assessments and Emergent Work Evaluation

- Shift Supervisor log entries September 9 through 15, and September 21 through 27, 2001
- GOP-14,            Shutdown Operation Protected Train Equipment      Revision 13  
Attachment 15      List in effect September 9 through 15, 2001
- GOP-14,            Shutdown Operation Equipment Sheets in effect      Revision 13  
Attachment 16      September 9 through 15, September 21 through 26, and September 26 through 28, 2001
- GOP-14,            Shutdown Cooling Equipment Availability in              Revisions 33 and 34  
Attachment 3      effect September 21 through 26, and September 26 through 28, 2001

Condition Reports Reviewed To Assess Problem Identification Characterization

- CPAL0102928      Instrument Air Compressor C-2A Removed From Service Prior To Making C-2C Operable
- CPAL0103068      Service Water Pump 7C Return To Service Delayed Due To Mechanical Work Package
- CPAL0103141      GOP-14 Shutdown Cooling Equipment Availability Sheet did Not Reflect Actual Power Supply Alignment For 1C and 1D 2400 Volt Busses

1R15      Operability Evaluations

FSAR Section 8.4	Emergency Power Sources	
TS 3.8.1	AC Sources - Operating	
EA-ELEC-LD TAB.005	Engineering Analysis, Emergency Diesel Generators 1-1 and 1-2 Steady State Loading	Revision 5
MO-7A-1	Surveillance Test, Emergency Diesel Generator 1-1 (K-6A)	Revision 54
MO-7A-1&2	Surveillance Test, Emergency Diesel Generators 1-1 & 1-2	Revision 7
DBD 5.03	Emergency Diesel Generator Criteria	Revision 5
CPAL012683	Condition Report - Emergency Diesel Generator 1-1 could not reach acceptance criteria of 2705 kW during peak load test	
FSAR Section 8.6	Automatic Transfer, Voltage Protection and Load Shedding Controls	Revision 21
FSAR Section 8.3.2	2400 Volt System	Revision 21
CPAL0103069	Condition Report - Bus 1D Voltage Below 2300 Volts For Four Minutes	
ESOG Item 75	Voltage Restrictions In Mode 5 and 6	

Condition Reports Reviewed To Assess Problem Identification Characterization

CPAL012696	Current DBA kW load values for Diesel Generator 1-1 and 1-2 are not reflected in the DBD	
CPAL0103041	Incorrect Operability Determinations	

1R16      Operator Workarounds

Emergency Operating Procedures

EOP-1	Standard Post Trip Actions	Revision 10
EOP-4	Loss of Coolant Recovery	Revision 12
Supplement 42	Jumpering CHP For One Containment Spray Valve	Revision 0

EOP-5	Steam Generator Tube Rupture Recovery	Revision 12
EOP-9	Functional Recovery Procedure	Revision 13
Supplement 6	Checksheet For Containment Isolation and CCW Restoration	Revision 7

Off Normal Operating Procedures

ONP-6.2	Loss of Component Cooling Water	Revision 8
ONP-23.1	Primary Coolant Leak	Revision 19

Condition Reports

CPAL0100025	Traveling screen high differential pressure alarm design change being developed to reduce/eliminate frazil ice in bubbler tubes
CPAL0100243	Unexpected transfer of spent fuel pool inventory to SIRW
CPAL0100382	Primary information processor (PIP) did not return to service when reset
CPAL0100545	Intake bay ice results in traveling screen f-4c failure and entering of ONP 6.1 "Loss of Service Water"

Other Documents

Palisades Nuclear Procedure Action Plan #2210-009	Operator Work Around Program	Revision 0, Dated 2/8/01
Administrative Procedure 4.12	Operator Work Around Program	Revision 0
	Operator Work Around Check Sheet	

1R17 Permanent Plant Modifications

FSAR Section 6.3	Containment Air Coolers
TS 3.6.1	Containment
TS 3.6.6	Containment Cooling Systems
EAR-2001-0367	Engineering Action Request - Permanent Plugs for Containment Air Cooler VHX-4

P&ID M-208-1B                      Service Water System

Work Orders

24111857	VHX-4; tube leak and cooling coil repair. TM-2001-010.
24111944	VHX-4; remove TM-2001-010 and perform permanent repairs
24111971	VHX-4; apply epoxy to repair leak. TM- 2001-011

1R19                      Post Maintenance Testing

Work Orders

24014737	K-6A, upgrade M series heads with ALCO 251 Plus heads	August 12, 2001
24014834	K-6A, replace rocker bushings on all 18 cylinders	August 12, 2001
24111376	K-6A starting air instrumentation calibration	August 10, 2001
24112722	1-1 EDG, install new starting air PCV	August 12, 2001
24014409	C-3A air compressor maintenance	August 12, 2001
24014256	K-6A, pump timing, valve adjustment, hose replacement	August 12, 2001
24111996	Charging Pump P-55A, leak from fluid drive cooler reversing endbell	August 19, 2001
24119924	Instrument Air Compressor 2A Overhaul and Flush	September 28, 2001
24014530	Instrument Air Compressor 2A and 2C, Resolve Rusty Loader Valves Per EAR-2000-0559	September 20, 2001
24111001	Instrument Air Compressor 2C Overhaul and Flush	September 28, 2001

Other Documents

FSAR Section 8.4	Emergency Power Sources
TS 3.8.1	AC Sources - Operating

MO-7A-1	Surveillance Test - Emergency Diesel Generator 1-1 (K-6A)	Revision 54
MO-7A-1&2	Surveillance Test - Emergency Diesel Generators 1-1 & 1-2	Revision 7
EPS-M-14	Diesel Generator 1-1 - Refueling Frequency Maintenance	Revision 1
	Consumers Energy Memorandum, Periodic review of VT-2 Examiner Certifications	July 19, 2001
EM-09-14, Attachment 1	VT-2 Examination Checklist, Work Order 24111996	August 19, 2001
Procedure 5.19, Attachment 2	Guidelines For Post Maintenance Testing Electrical Maintenance	Revision 9
WI-CAS-M-04	Work Instructions For Maintenance of Plant Air Dryer M-2	Revision 1
Work Order 24014129	M-2 Annual Inspection	May 25, 2001
Procedure RO-97	Auxiliary Feedwater System Automatic Initiation Test Procedure	Revision 10
EA-GEJ-96-06	Engineering Analysis, Minimum Auxiliary Feed Requirement For All Auxiliary Feed Pumps	Revision 0

Condition Reports Reviewed To Assess Problem Identification Characterization

CPAL012643	Rocker Arm on 1-1 EDG Found Slightly Peened at the Bushing Area
CPAL0102974	Wrong Solenoid Valve Determinated For Work On Instrument Air Compressor C-2A
CPAL0102826	Weaknesses in Condition Report Evaluations and Corrective Actions

Condition Reports Reviewed To Assess Corrective Actions

CPAL0000583	Inadequate Post Maintenance Testing Performed on CRD-12
CPAL0000876	Incomplete Post Maintenance Testing Per WI-CAS-M-04
CPAL0002531	No Steps In Procedure To Mechanically Start Fire Pump P-9B Driver K-5

CPAL0001378 Post Maintenance PMT Inadequate  
 CPAL9901345 Incorrect Post Maintenance Testing Specified on  
 PPAC FWS-138

1EP6 Drill Evaluation

Emergency Plan Implementing Procedures

EI-4.1	Technical Support Center Activation	Revision 13
EI-1	Emergency Classification and Actions	Revision 36
EI-3	Communications and Notifications	Revision 18
EI-3, Attachment 1	Emergency Notification Form	Revision 18
EI-1, Attachment 2	Emergency Actions/Notifications	Revision 36

Condition Reports Reviewed To Assess Problem Identification Characterization

CPAL0103027	Emergency Preparedness Training Areas Needing Improvement	
CPAL0102995	Palisades Public Warning System Siren Failures September 8, 2001	
CPAL0103061	Emergency Classification Anomaly During PALEX2001 Not Reflected In Exercise Scenario	
CPAL0103052	Incorrect Egress From TSC During PALEX2001 Exercise	
CPAL0103062	Emergency Siren and PA Not Heard In DFS Building	
CPAL0103058	Errors/Omissions On Notification Forms During PALEX2001	

Condition Report Reviewed To Assess Corrective Actions

CPAL0001507	Quality of Notification Forms Generated During the May 9 Practice Exercise	
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20S2 As-Low-As-Is-Reasonably-Achievable (ALARA) Planning and Controls

CPAL0103065	RWP P011033 as exceeded the Rev. 0 dose estimate by more than 50 percent (i.e., 88 percent)	September 9, 2001
HP 11.1	Processing radiation work permits and ALARA reviews	Revision 13

HP 11.1 Attachment 9	In-Progress ALARA Review for ALARA Review Number 01-1033	September 27, 2001
RWP 01-1033	Control Rods and Drive Mechanisms	Revision 13
	Phase II CRD Project Timeline - Remove 35 CRD Housing from Reactor Head	September 27, 2001
	Daily Activity on One RWP (01-1033)	September 27, 2001

2PS3      Radiological Environmental Monitoring and Radioactive Material Control Programs

A-00-007	Palisades Emergency Preparedness and Meteorological Monitoring Project Audit	August 18, 2000
C&RS 2001-01	Self-Assessment on Liquid and Gaseous Radiological Effluents, REMP and Unconditional Release	June 8, 2001
CPAL0003052	Several Procedure Deficiencies Noted During Annual Audit of REMP/RETS	October 10, 2000
CPAL0102831	Environmental Air Station Location	August 8, 2001
EA-JBB-99-001	Engineering Analysis - Plant Radionuclide Mixture and Calibration Sources	March 10, 1999
	Offsite Dose Calculation Manual	Revision 15
Exelon Audit No. SR- 2001-341	Nuclear Utilities Procurement Issues Committee Audit Report - Environmental Incorporated	June 27, 2001
	2000 Annual Radiological Environmental Operating Report	April 30, 2001
Administration Procedure No. 7.15	Contamination Control	Revision 8
HP 10.10	Palisades Radiological Environmental Program Sample Collection and Shipment	Revision 5
Meteorological Monitoring Project Plan MM-150	Calibrations	June 8, 1998
WS-1 Calibration	10 Meter Wind Speed 1 A	June 19, 2001
WD-1 Calibration	10 Meter Wind Direction 1 A	June 19, 2001
WD-2 Calibration	10 Meter Wind Direction 2 A	June 19, 2001

WS-1 Calibration	10 Meter Wind Speed 1 B	June 20, 2001
WD-1 Calibration	10 Meter Wind Direction 1 B	June 20, 2001
WD-2 Calibration	10 Meter Wind Direction 2 B	June 20, 2001
WS-1 Calibration	60 Meter Wind Speed 1	June 21, 2001
WD-1 Calibration	60 Meter Wind Direction 1	June 21, 2001
WD-2 Calibration	60 Meter Wind Direction 2	June 21, 2001
Temperature Calibration	Temperature Delta T	June 19, 2001
3039506	Air Monitor Calibration	March 14, 2001
PAL-1	Air Monitor Calibration	January 11, 2001
PAL-5	Air Monitor Calibration	January 11, 2001
PAL-6	Air Monitor Calibration	May 1, 2001
PAL-7	Air Monitor Calibration	May 1, 2001

3PP4      Security Plan Changes

Revision 45      Palisades Security Plan

August 20, 2001