

July 17, 2002

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 50-255/02-04(DRP)

Dear Mr. Cooper:

On June 30, 2002, the NRC completed an inspection at your Palisades Nuclear Generating Plant. The enclosed report documents the inspection findings which were discussed on June 27, 2002, 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, we identified two issues of very low safety significance (Green) that were determined to involve violations of NRC requirements. However, because of the very low safety significance and because the issues were entered into your corrective action program, the NRC is treating these issues as Non-Cited Violations in accordance with Section VI.A.1 of the NRC's Enforcement Policy. If you deny these Non-Cited Violations, you should provide a response with a 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 Office at the Palisades facility.

D. Cooper

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Sincerely,

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Dave Passehl, Acting Chief  
Branch 6  
Division of Reactor Projects

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

Enclosure: Inspection Report 50-255/02-04(DRP)

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

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

Report No: 50-255/02-04(DRP)

Licensee: Nuclear Management Company, LLC

Facility: Palisades Nuclear Generating Plant

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

Dates: April 1 through June 30, 2002

Inspectors: J. Lennartz, Senior Resident Inspector  
R. Krsek, Resident Inspector  
T. Madeda, Physical Security Inspector  
R. Winter, Reactor Engineer  
H. Peterson, Senior Operations Engineer

Observer: M. Castenado, Nuclear Safety Intern / Reactor Engineer

Approved by: Dave Passehl, Acting Chief  
Branch 6  
Division of Reactor Projects

## SUMMARY OF FINDINGS

IR 05000255/02-04, Nuclear Management Company, LLC, on 04/01/2002 - 06/30/2002, Palisades Nuclear Generating Plant. Personnel Performance Related to Non-Routine Plant Evolutions and Events, and Problem Identification and Resolution.

This report covers a 12-week period of resident inspection, a review of annual operating test results by a regional senior operations engineer and an announced baseline physical protection inspection by a physical security inspector. The significance of most findings is indicated by their color (green, white, yellow, red) using Inspection Manual Chapter 0609, "Significance Determination Process," (SDP). The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG 1649, "Reactor Oversight Process," Revision 3, dated July 2000.

### A. Inspector Identified Findings

#### **Cornerstone: Initiating Event**

- Green. The inspectors identified one Green self-revealed finding that is being treated as a Non-Cited Violation of Technical Specifications 5.4, "Procedures," for the failure to establish and maintain System Operating Procedure 30, "Station Power." This procedure is used for electrical system equipment control, an activity contained in Appendix A to Regulatory Guide 1.33. Specifically, steps for the tag out of stored energy breakers did not provide adequate physical controls to prevent inadvertent system/component interactions. This resulted in the independent tripping of Cooling Tower Pump P-39B on June 11, 2002, while the plant was at full power.

This self-revealed finding was determined to be of very low safety significance (Green) by the significance determination process, because: (1) the finding did not contribute to the likelihood of a Primary or Secondary system Loss of Coolant Accident initiator; (2) the finding did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available; and (3) the finding did not increase the likelihood of a fire or internal/external flood. (Section 1R14.1)

#### **Cornerstone: Mitigating Systems**

- Green. The inspectors identified a Green finding that is being treated as a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Actions," for the failure to promptly identify and correct conditions adverse to quality regarding the licensee's review, acceptance, and approval of licensee contractor's procedures utilized to perform work and testing on all safety-related electrical components at the plant.

This inspector identified finding was determined to be of very low safety significance (Green) by the significance determination process, because: (1) the finding was not a design or qualification deficiency; (2) the finding did not

represent an actual loss of safety function; (3) the finding did not represent an actual loss of a safety function of a single train for greater than Technical Specification outage time; (4) the finding did not represent an actual loss of a safety function of one or more Non-Technical Specification trains of equipment; and (5) the finding did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. (Section 40A2)

B. Licensee Identified Findings

None.

## 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 at full power for the majority of the inspection period. However, from May 17 to May 20, 2002, Reactor Power was reduced to 22 percent for a planned oil addition to the Reactor Coolant Pump P-50D. On June 11, 2002, a rapid downpower was initiated from 100 percent to 50 percent, due to the inadvertent loss of Cooling Tower Pump P-39B. Power was returned to 99 percent on the morning of June 14, 2002; however, power was again reduced on June 14, 2002, to 90 percent due to the emergent, sporadic opening and closing of Reheat Intercept Valve CV-0540. The plant was returned to full power on June 15, 2002, and remained essentially at full power for the remainder of the inspection period.

## 1. REACTOR SAFETY

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

#### 1R01 Adverse Weather (71111.01)

##### a. Inspection Scope

The inspectors assessed plant procedures to protect mitigating systems from high winds, tornado and hot weather condition risks for the site. The inspectors queried operations personnel regarding the actions that would be taken in response to notification of high wind conditions and reviewed the licensee's procedures utilized to mitigate weather induced risks.

The inspectors also verified that licensee personnel had completed the necessary actions in preparation for the onset of warm weather.

##### b. Findings

No findings of significance were identified.

#### 1R04 Equipment Alignment (71111.04Q)

##### .1 Quarterly Equipment Alignment Walkdowns

##### a. Inspection Scope

The inspectors performed partial walkdowns of the Emergency Diesel Generator 1-2, Low Pressure Safety Injection Pump P-67A and Auxiliary Feedwater Pumps P-8A and P-8B. The inspectors performed the walkdowns to verify proper system lineup. The Diesel Generator 1-2 walkdowns were performed while redundant plant equipment was



out of service. For the systems walked down, the inspectors verified that power was available, that accessible equipment and components were appropriately aligned, and that no discrepancies existed which would impact the systems' function. Portions of the system alignment inspection included discussions and system walkdowns with operations and engineering personnel.

The inspectors also reviewed condition reports related to equipment alignment issues to verify that the problems were appropriately characterized.

b. Findings

No findings of significance were identified.

1R05 Fire Protection Area Walkdowns (71111.05)

a. Inspection Scope

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

- Cable Spreading Room (Fire Area 2);
- Turbine Building (Fire Area 23);
- 1C Switchgear Room (Fire Area 4);
- Battery Room No. 2 (Fire Area 11); and
- Emergency Diesel Generator Room 1-2 (Fire Area 6).

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 fire areas corresponded with the equipment which was referenced in the applicable portions of the Final Safety Analysis Report, Section 9.6, "Fire Protection." Finally, for Fire Areas where compensatory actions were in place, the inspectors verified the compensatory actions were implemented.

b. Findings

No findings of significance were identified.

1R06 Flood Protection (71111.06)

a. Inspection Scope

The inspectors reviewed and assessed flood protection measures for external flooding events including plant areas with safety-related equipment which were below flood levels that were susceptible to groundwater ingress. The inspectors also reviewed

preventative maintenance activities that had been completed on watertight barriers for the areas below flood levels.

In addition, the inspectors reviewed applicable design basis documentation and relevant plant procedures to verify that the licensee's flooding mitigation plans and equipment were consistent with design requirements and the risk analysis assumptions. Further, the inspectors reviewed condition reports to verify that identified problems associated with flood protection activities were appropriately characterized and entered into the licensee's corrective action program.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification (71111.11Q)

.1 Quarterly Resident Inspector Licensed Operator Performance Observations

a. Inspection Scope

The inspectors observed licensed operator performance during annual requalification examinations on the plant simulator to assess the operators ability to complete required actions in off-normal and emergency operating procedures. The inspectors also reviewed the completed operator evaluations to assess the licensee evaluator's ability to identify and assess operator performance deficiencies.

In addition the inspectors reviewed condition reports to verify that identified problems associated with licensed operator requalification training activities were appropriately characterized.

b. Findings

No findings of significance were identified.

.2 Annual Operating Test Results (71111.11)

a. Inspection Scope

The inspectors reviewed the overall pass/fail results of individual Job Performance Measure operating tests and simulator operating tests (required to be given per 10 CFR 55.59(a)(2)) administered by the licensee during calendar year 2002. The biennial written examination was administered during calendar year 2001.

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 plant equipment designated as having high safety significance:

- Component Cooling Water System;
- 480-Volt AC Power System; and
- Control Room Heating, Ventilation and Air Conditioning.

The inspectors reviewed the licensee's maintenance rule performance indicators associated with the system's maintenance rule category status. In addition, the inspectors discussed various technical issues with the applicable system engineer.

Further, the inspectors reviewed selected condition reports to verify that the identified issues were appropriately characterized and were dispositioned in accordance with the licensee's Maintenance Rule program. The inspectors reviewed selected condition reports to verify that designated corrective actions were reasonable and had been implemented as scheduled.

b. Findings

No findings of significance were identified.

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

a. Inspection Scope

The inspectors reviewed, Operator's Risk Reports, Shift Supervisor logs, and maintenance activity schedules to verify that equipment necessary to minimize plant risk was operable or available as required. The inspectors also conducted plant tours to verify that equipment necessary to minimize risk was available for use during the following planned and emergent maintenance activities:

- Planned maintenance on High Pressure Safety Injection Pump P-66A and Service Water Pump P-7B;
- Emergent maintenance on a switchyard breaker in combination with emergent inclement weather;
- Planned maintenance on Emergency Diesel Generator 1-1 with ongoing planned switchyard work activities; and
- Emergent maintenance on 345-kiloVolt switchyard "R" Bus with an emergent Cooling Tower Pump P-39B Trip.

The inspectors discussed plant configuration control for the maintenance activities with operations, maintenance and work control center staff to verify that work activities were appropriately controlled.

In addition, the inspectors reviewed select condition reports to verify that 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.

1R14 Personnel Performance Related to Non-Routine Plant Evolutions and Events (71111.14Q)

.1 Loss of Cooling Tower Pump P-39B While at Full Power

a. Inspection Scope

The inspectors assessed operator performance in response to the inadvertent trip of Cooling Tower Pump P-39B trip on June 11, 2002. The inspectors observed the operators' actions in the control room in response to this pump trip and verified that the operators responded appropriately in accordance with Off Normal Operating Procedure - 14, "Loss of Condenser Vacuum," Off Normal Operating Procedure - 26, "Rapid Power Reduction," and the various annunciator response procedures. In addition, the inspectors verified the appropriate Technical Specifications were met for the subsequent rapid downpower of reactor power to 50 percent.

Further, the inspectors reviewed the resultant condition reports that were initiated to verify that this issue was entered into the corrective action program with the appropriated characterization and significance.

b. Findings

The inspectors identified one Green self-revealed finding that is being treated as a Non-Cited Violation of Technical Specifications 5.4, "Procedures," for the failure to establish and maintain the applicable procedure for electrical system equipment control, an activity contained in Appendix A to Regulatory Guide 1.33. Specifically, the licensee did not maintain the applicable procedure for electrical system equipment control, System Operating Procedure 30, Revision 32, "Station Power." The steps for the tag out of stored energy breakers from service did not provide adequate physical controls to prevent inadvertent system/component interactions. This, in turn, resulted in the tripping of Cooling Tower Pump P-39B on June 11, 2002, while the plant was at full power.

On June 11, 2002, the plant was at 100 percent power when the control room operators received unexpected alarms which indicated that 4160-Volt Bus 1G was in an under voltage condition and that Cooling Tower Pump P-39B, fed from Bus 1G, had tripped. The inspectors observed control room activities and noted that the operating crew responded appropriately to the alarms and initiated a rapid downpower of plant power to 50 percent. At the time this evolution occurred, the plant was in a degraded offsite power condition due to the loss of the switchyard "R" Bus on June 10, 2002, due to a failed lightning arrester on the "Y" phase of the Start-up Transformer.

The licensee later identified that at the time Pump P-39B tripped, an auxiliary operator and System Maintenance and Construction Services (SM&CS) personnel were verifying the tag out of Breaker 252-204 (Start-up Transformer 1-3 to Bus 1G Supply Breaker). System Operating Procedure 30, "Station Power," Section 8.4.1, provided instructions for the removal of the Allis-Chalmers 4160-Volt Breaker stored energy breaker from service. In accordance with that procedure, the operator attached the breaker fuse block and red personal protective tag to a "shower curtain hook." Within the breaker cubicle, the operator placed the "shower curtain hook," with the fuse block and red tag, through the breaker depressing lever (foot pedal). Breakers similar to Breaker 252-204 were located on all plant busses, including the safety-related busses, and were tagged out utilizing System Operating Procedure 30.

The auxiliary operators had tagged out the breaker in accordance with System Operating Procedure 30; however, upon closing the cubicle door for Breaker 252-204 and after showing clearance to the SM&CS personnel, the fuse block contacted the under voltage relays located on the bottom of the cubicle door. This, in turn, caused the control room to lose Bus 1G voltage indication and activated the under voltage relay for Bus 1G which, by design, tripped Pump P-39B. Based on these events, the inspectors concluded that System Operating Procedure 30 was not adequately maintained, in that, it did not provide adequate instructions to prevent an inadvertent system interaction with the removed fuse block.

The inspectors determined that the failure to maintain the appropriate, applicable procedure for electrical system equipment control could have a credible impact on safety, could be reasonably viewed as a precursor to a significant plant event such as a reactor or turbine trip, and that if left uncorrected, could become a more significant safety concern. The inspectors also determined that this issue could cause or increase the frequency of an initiating event. Therefore this issue was considered a licensee performance deficiency which was more than minor.

The inspectors assessed this finding using Manual Chapter 0609, "Significance Determination Process," Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations." The inspectors determined that the finding was a transient initiator contributor, in that, the activation of bus under voltage relays could lead to the loss of plant equipment which could result in either a reactor or turbine trip affecting the initiating event cornerstone. The inspectors determined that:

- The finding did not contribute to the likelihood of a Primary or Secondary system Loss of Coolant Accident initiator;
- The finding did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available; and
- The finding did not increase the likelihood of a fire or internal/external flood.

Therefore, the finding was determined to be of very low safety significance (Green).

Technical Specification 5.4.1, "Procedures," requires, in part, that written procedures be established, implemented, and maintained covering the activities and applicable procedures recommended in Regulatory Guide 1.33, Revision 2, February 1978. Appendix A to Regulatory Guide 1.33, lists equipment control (e.g. locking and tagging)

and onsite electrical systems as requiring written procedures. Contrary to this, licensee personnel did not establish and maintain the appropriate, applicable procedure for electrical system equipment control, in that, Section 8.4.1 of System Operating Procedure 30 was not appropriate to the circumstances for the tag out of stored energy breakers from service. This violation is associated with a self-revealed finding that is characterized by the significance determination process as having very low risk significance (Green) and is being treated as a Non-Cited Violation of licensee Technical Specifications 5.4.1, "Procedures," consistent with Section VI.A.1 of the NRC Enforcement Policy. (NCV 50-255/02-04-01)

This finding is in the licensee's corrective action program as Condition Report CPAL0202280, "Inadvertent Actuation of Under-Voltage Relay 227X-4 Causes P-39B Trip." The licensee took immediate corrective actions by requiring that all similar stored energy breakers be taken out of service by removing the breaker from the cubicle when tagged out of service.

.2 Other Non-Routine Evolutions

a. Inspection Scope

The inspectors observed and assessed operator performance in the control room in response to the following events which occurred during the inspection period:

- On June 10, 2002, the "R" or Rear Bus in the switchyard was deenergized due to the failure of a lightning arrester on the Start-Up Transformer "Y" Phase power lines between the switchyard and the plant. The lightning arrester failure caused Start-Up Transformer 1-2 to become inoperable, and the plant entered a 72-hour Limiting Condition for Operation under Technical Specification 3.8.1 to restore the "R" Bus.
- On June 14, 2002, Control Valve CV-0540, No. 2 Intercept Valve from Moisture Separator Reheater E-9A to the "A" Low Pressure Turbine began to spuriously open and close while the plant was near full power. The cycling of the intercept valve caused secondary plant feedwater transients which were abated when the test circuitry to Control Valve CV-0540 was determined.

The inspectors reviewed the applicable Off-Normal Procedures, System Operating Procedures, General Operating Procedures, and Technical Specifications for these events. Further, the inspectors reviewed the control room logs and the resultant condition reports which were initiated to verify that these issues were entered into the corrective action program with the appropriate characterization and significance.

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:

- Primary Coolant Pump Controlled Bleed-Off Line Isolation Valves;
- High Pressure Safety Injection Pump P-66B Breaker 152-113;
- Containment Air Cooler-4 Service Water Inlet Isolation Valve CV-0869; and
- Fire Penetration FZ-0126 in the Cable Spreading Room.

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.

1R16 Operator Workarounds (71111.16S)

a. Inspection Scope

The inspectors reviewed the operator challenges, operator workarounds, and control room deficiencies that have been identified by licensee personnel to assess the cumulative effects on the reliability, availability and potential for incorrect operation of accident mitigating systems. The inspectors assessed the cumulative effects on the operators ability to implement abnormal and emergency response procedures to verify that the operators could respond in a correct and timely manner to plant transients and accidents.

The inspectors also reviewed condition reports related to operator workarounds to verify that identified problems were appropriately characterized and to verify that corrective actions were reasonable and had been implemented as scheduled.

b. Findings

No findings of significance were identified.

## 1R19 Post Maintenance Testing (71111.19Q)

### a. Inspection Scope

The inspectors observed portions of post maintenance testing and reviewed documented testing activities following scheduled 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 and that the effect of testing on plant conditions was adequately addressed by control room staff. Post maintenance test activities were reviewed for the following:

- Component Cooling Water Pump P-52C;
- Emergency Diesel Generator 1-1;
- Containment Spray Pump P-54B;
- Startup Transformer 1-2; and
- Diesel Driven Fire Pump P-41.

The inspectors reviewed post maintenance testing criteria to verify that the test criteria was appropriate with respect to the scope of work performed and that the acceptance criteria were clear.

In addition, the inspectors reviewed the completed tests and procedures to verify that the tests adequately verified system operability. Documented test data was reviewed to verify that the data was complete and that the equipment met the procedure acceptance criteria, which demonstrated that the equipment was able to perform the intended safety functions.

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

### b. Findings

No findings of significance were identified.

## 1R22 Surveillance Testing (71111.22)

### a. Inspection Scope

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

- Auxiliary Feedwater System;
- Safety Injection System; and
- Emergency Diesel Generator 1-2.

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.

1E06 Emergency Plan Drill Evaluation (71114.06)

a. Inspection Scope

The inspectors observed performance of emergency response personnel in the simulator control room and the technical support center during a drill on May 1, 2002, and in the simulator control room and the emergency offsite facility during a drill on May 22, 2002. The observations were conducted to verify that emergency response personnel classified the event and completed appropriate offsite notifications in an accurate and timely manner. The inspectors also verified that emergency response personnel provided protective action recommendations to offsite authorities in accordance with emergency plan implementing procedures.

The inspectors observed the post-drill critique to verify that licensee evaluators adequately identified emergency response performance problems and reviewed the associated condition reports to verify that identified problems were appropriately characterized.

b. Findings

No findings of significance were identified.

**3. SAFEGUARDS**

**Cornerstone: Physical Protection**

3PP3 Response to Contingency Events (71130.03)

a. Inspection Scope

The inspector reviewed and evaluated the licensee's current Protective Strategy which included target set analysis, observation of weapon requalification and stress firing activities with assigned and contingency weapons at an offsite firing range. The inspector conducted a walk down of the protected area physical barrier and associated intrusion alarm system and observed testing of selected protected area intrusion alarm zones. The inspector observed and evaluated alarm station operator performance and

evaluated the assessment capability of the protected area closed circuit television system. Security defensive positions, as defined in the licensee's protective strategy, were observed and evaluated, and the inspector discussed with licensee security personnel their current defense strategy and associated response procedures. The inspector observed one licensee conducted table top exercise and reviewed selected procedures, training records, and licensee drill and exercise critiques pertaining to response to security contingency events.

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 following Performance Indicators:

- High Pressure Safety Injection Pump Unavailability;
- Unplanned Scrams; and
- Scrams With Loss of Normal Heat Removal.

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 April 2001 through April 2002, to verify that the licensee had accurately reported the high pressure safety injection pump unavailability performance indicator for these quarters.

The inspectors also reviewed Palisades Nuclear Plant monthly operating data from July 2001 until March 2002 to verify that the licensee accurately reported the unplanned scrams and the scrams with loss of normal heat removal performance indicators.

In addition, the inspectors discussed the data with the licensee staff responsible for gathering and reporting the information related to the performance indicators.

b. Findings

No findings of significance were identified.

#### 4OA2 Identification and Resolution of Problems (71152)

##### a. Inspection Scope

The inspectors reviewed the condition report evaluation and corrective actions associated with Condition Report CPAL0103678, "System Maintenance and Construction Services Laboratory Procedures not Included in Administrative Procedure 10.41, 'Procedure Initiation and Revision,' as Requiring Periodic Reviews."

The inspectors verified that this condition adverse to quality was entered into the corrective action program and that the appropriate corrective actions were identified and implemented by the licensee.

##### b. Findings

The inspectors identified a Green Finding that is being treated as a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Actions," for the failure to promptly identify and correct conditions adverse to quality regarding the licensee's review, acceptance and approval of licensee contractor's procedures utilized to perform work and testing on safety-related electrical components at the plant.

In November 2001, the inspectors observed the calibration of the Safeguards Bus 1C undervoltage and time delay relays performed by System Maintenance and Construction Services (SM&CS), a contractor for the licensee (NRC Inspection Report 50-255/01-14(DRP)). At Palisades, SM&CS personnel perform the majority of preventive, corrective and post maintenance testing on safety-related electrical components at the plant. After noticing some minor quality issues with the procedures SM&CS personnel used, the inspectors questioned licensee personnel regarding the availability and extent of the owner acceptance reviews the licensee performed of their contractor's SM&CS procedures.

The licensee subsequently determined that SM&CS procedures were not being reviewed in accordance with the licensee's procedures. Condition Report CPAL0103678, "SM&CS Lab Procedures not included in AP 10.41, 'Procedure Initiation and Revision' as Requiring Reviews," was initiated by licensee personnel.

The inspectors reviewed the completed condition report evaluation and corrective actions in April 2002 and noted that the conclusion of licensee personnel was that the contractor had reviewed their own procedures and, therefore, that the contractor's procedures did not require review by the licensee. The subsequent corrective action was the initiation of a procedure change request to exempt all SM&CS procedures from having to be reviewed by the licensee and approved by the Plant Review Committee, even though the procedures were utilized to perform the work and testing on safety-related electrical components in the plant.

However, the inspectors noted again that the contractor's procedures were utilized for work performed on safety-related electrical components. 10 CFR 50 Appendix B, Criterion V, "Procedures;" Administrative Technical Specification 5.4, "Procedures;" and also CPC-2A, "Quality Program Description for the Palisades Plant," required that all

work and maintenance on safety-related equipment be performed in accordance with approved, established, implemented and maintained procedures. Therefore, the licensee was required to review the SM&CS procedures and approve the procedures through the Plant Review Committee. The licensee's Nuclear Oversight Department also concurred with the inspectors' assessment.

The inspectors determined that this issue has existed since the mid-1990s when a procedure change inadvertently omitted previous requirements which specified that SM&CS procedures required licensee review. The inspectors also reviewed the licensee's corrective action system and noted numerous condition reports related to problems associated with the quality of SM&CS procedures and the quality of SM&CS oversight by licensee personnel. In addition, the inspectors noted that a causal factor in recent problems associated with the electric driven Fire Pump P-9A breaker maintenance was the quality of SM&CS procedures used during the activities (NRC Inspection Reports 50-255/01-17(DRP) and 50-255/02-02(DRP)).

The inspectors determined that the failure to promptly identify and correct conditions adverse to quality regarding the SM&CS procedures, utilized for work on all safety-related electrical equipment which were not reviewed and approved in accordance with the licensee's quality assurance program, could have a credible impact on safety, and that if left uncorrected could become a more significant safety concern. Therefore, this issue was considered a licensee performance deficiency which was more than minor. The inspectors also determined that this issue could credibly affect the operability, availability, reliability or function of a mitigating system, in that all mitigating systems utilize the safety-related electrical components worked on by SM&CS personnel.

The inspectors assessed the finding using Manual Chapter 0609, "Significance Determination Process," Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations." The inspectors determined that the finding affected the mitigating system cornerstone in that the procedures were utilized for work on all safety-related electrical equipment, used to supply the power source for mitigating system equipment. The inspectors determined that:

- The finding was not a design or qualification deficiency;
- The finding did not represent an actual loss of safety function of a system;
- The finding did not represent an actual loss of a safety function of a single train for greater than Technical Specification outage time;
- The finding did not represent an actual loss of a safety function of one or more Non-Technical Specification trains of equipment; and
- The finding did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event.

Therefore, the finding was determined to be of very low safety significance (Green).

10 CFR 50, Appendix B, Criterion XVI, "Corrective Actions," requires in part that conditions adverse to quality be promptly identified and corrected. Contrary to this, licensee personnel failed to appropriately identify and correct the condition adverse to quality documented in Condition Report CPAL0103678, "SM&CS Lab Procedures not included in AP 10.41, 'Procedure Initiation and Revision' as Requiring Reviews," in that,

the licensee inappropriately concluded that the review and approval of SM&CS procedures utilized to perform work on safety-related electrical equipment was not required and inappropriately initiated corrective actions to exempt these procedures from licensee review and approval. This violation is associated with an NRC identified finding that is characterized by the significance determination process as having very low risk significance (Green) and is being treated as a Non-Cited Violation of 10 CFR 50 Appendix B, Criterion XVI, consistent with Section VI.A.1 of the NRC Enforcement Policy. (NCV 50-255/02-04-02)

This finding is in the licensee's corrective action program as Condition Report CPAL0201265, "Inappropriate Result from the Analysis in Support of an Assigned Corrective Action."

#### 4OA3 Event Follow-up (71153)

##### (Closed) Licensee Event Report (LER) 50-255/01-003:

"Small Fire Within the Plant Protected Area". On May 18, 2001, a security officer, while conducting a routine security patrol, discovered a small fire in a trash barrel located inside a shop building within the protected area. The officer extinguished the fire. No damage to plant equipment or safety-related equipment occurred. No personnel injuries were identified. Investigative activities included an offsite corporate review and an investigation by the local law enforcement agency. The local office of the Federal Bureau of Investigation was notified of the event and associated investigation activities.

Investigation activities determined that the cause of the fire was suspicious (the building was unoccupied at the time), but no specific individual was identified. No violation of NRC requirements was identified. This Licensee Event Report is closed.

#### 4OA4 Cross-Cutting Issues

##### Corrective Actions

In Section 4OA2 of this report a Green finding (50-255/02-04-02) is documented for the failure to promptly identify and correct a condition adverse to quality which affected the Mitigating Systems Cornerstone.

#### 4OA6 Meetings

##### .1 Exit Meeting

The inspectors presented the inspection results to Mr. D. Cooper and other members of licensee management on June 27, 2002. Licensee personnel acknowledged the findings presented. The inspectors asked licensee personnel whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

.2 Interim Exit Meetings

The results of the review of licensed operator annual requalification examination results for calendar year 2002 were presented to Mr. R. Bender, Operations Requalification Training Supervisor on April 3, 2002. The inspector asked licensee personnel whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

The results of the Safeguards inspection were presented to Mr. D. Cooper and other members of the licensee's management on May 16, 2002. Licensee personnel acknowledged the inspector's comments. The inspector asked licensee personnel whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

## KEY POINTS OF CONTACT

### Licensee

T. Brown, Manager, Chemical and Radiological Services  
D. Cooper, Site Vice President  
D. Crabtree, Systems Engineering Manager  
B. Dotson, Licensing Analyst  
J. J. Fletcher, Security Manager  
P. Harden, Director, Engineering  
N. Haskell, Nuclear Oversight Manager  
G.W. Hettel, Manager, Maintenance and Construction  
L. Lahti, Licensing Manager  
D. G. Malone, Supervisor, Regulatory Assurance  
D. J. Malone, General Plant Manager  
T. O'Leary, Plant Support Director  
G. Packard, Operations Manager  
D. Vandewalle, Operations Superintendent  
E. Weinkam, Director Regulatory and Strategic Issues

### NRC

D. Passehl, Acting Branch Chief, RIII  
D. Hood, Project Manager, NRR

## LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

### Opened

50-255/02-04-01	NCV	Green. Technical Specification 5.4.1, "Procedures," licensee personnel did not maintain the appropriate, applicable procedure for electrical system equipment control, in that, the procedure steps were not appropriate to the circumstances for the tag out of certain stored energy breakers from service.
50-255/02-04-02	NCV	Green. 10 CFR 50, Appendix B, Criterion XVI, licensee personnel failed to promptly identify and correct the condition adverse to quality in CPAL0103678, in that, the licensee incorrectly concluded that review and approval of SM&CS procedures utilized to perform work on safety-related electrical equipment was not required.

### Closed

50-255/2001-003	LER	Small Fire Within the Plant Protected Area.
50-255/02-04-01	NCV	Green. Technical Specification 5.4.1, "Procedures," licensee personnel did not maintain the appropriate, applicable procedure for electrical system equipment control, in that, the procedure steps were not appropriate to the circumstances for the tag out of certain stored energy breakers from service.
50-255/02-04-02	NCV	Green. 10 CFR 50, Appendix B, Criterion XVI, licensee personnel failed to promptly identify and correct the condition adverse to quality in CPAL0103678, in that, the licensee incorrectly concluded that review and approval of SM&CS procedures utilized to perform work on safety-related electrical equipment was not required.

## LIST OF ACRONYMS USED

CFR	Code of Federal Regulations
CR	Condition Report
DRS	Division of Reactor Safety
FSAR	Final Safety Analysis Report
LER	Licensee Event Report
NCV	Non-Cited Violation
NRC	Nuclear Regulatory Commission
SM&CS	System Maintenance and Construction Services
SDP	Significance Determination Process



## LIST OF DOCUMENTS REVIEWED

### 1R01 Adverse Weather Protection

SOP-23	Attachment 10, "Warm Weather Checklist"	Revision 16
Procedure - 4	Administrative Procedure - Operations Organization, Responsibilities and Conduct	Revision 23
ONP-12	Off Normal Procedure - Acts of Nature	Revision 17
EOP-9	Functional Recovery Procedure	Revision 13
WO 24114158	Work Order - Remove Exterior Cold Weather Covers of Fans V-21D-H at the Intake Structure	

### Condition Reports Reviewed for Problem Identification Characterization and Corrective Actions

CPAL0001200	Misleading Information on Warm Weather Checklist	
CPAL0002346	Weaknesses Found in Warm Weather Checklist and Corrective Actions for CPAL9901204	
CPAL0202010	Possible Violation of FCC License Restrictions Associated with the Level Sensing Transmitters in the Screen House	

### 1R04 Equipment Alignment

#### Plant Procedures

SOP-22, CL 22.2	Fuel Oil System Checklist	Revision 31
SOP-22	Emergency Diesel Generators	Revision 31
SOP-3	Safety Injection and Shutdown Cooling System	Revision 19
SOP-12	Feedwater System	Revision 41
SOP-20	High Pressure Control Air System	Revision 19
4.00	Operations Organization, Responsibilities, and Conduct	Revision 23
4.02	Control of Equipment	Revision 18

Condition Reports Reviewed to Assess Problem Identification Characterization

CPAL0201565	Scaffold/Shielding Installation Interferes with Valve Chain Operator
CPAL0201549	Storage Racks for Handrails not Removed When Floor Plugs Removed Creating a Safety Hazard
CPAL0201548	Storage/ of Cleaning/Deconning Supplies on Safety-Related Equipment

1R05 Fire Protection

Plant Procedures

ONP-12	Off-Normal Procedure - Acts of Nature	Revision 17
AP-4.02	Administrative Procedure - Control of Equipment	Revision 18
ONP-25.1	Off-Normal Procedure - Fire Which Threatens Safety-Related Equipment	Revision 11
ONP25.2	Off-Normal Procedure - Alternate Safe Shutdown Procedure	Revision 17

Miscellaneous Documents

EA-PSSA-00-001	Palisades Plant Post Fire Safe Shutdown Summary Report, for Fire Areas 2, 23, 4, 11, and 6	Revision 1
Palisades Plant Fire Hazards Analysis	Analysis for Fire Areas 2, 23, 4, 11, 6	Revision 4
EA-APR-98004	Engineering Analysis - Analysis of Problems Concerning Fire Doors	June 30, 1998
RP0686-0269A-PPO3	Engineering Analysis - Generic Letter 86-10 Analysis of Fire Door Between Switchgear Room 1-C and 590' Elevation Auxiliary Building Corridor	
BTP ASB 9.5-1	U.S. NRC Branch Technical Position 9.5-1 - Guidelines for Fire Protection for Nuclear Power Plants	Revision 1
	Consumer Power Company - List of Changes and Response to Appendix A to Branch Technical Position APCSB 9.5-1 and Regulatory Guides 1.78 and 1.101	Revision 2 August 24, 1996

FSAR 9.6	Final Safety Analysis Report, Section 9.6 - Fire Protection	Revision 23
	U.S. NRC Fire Protection Safety Evaluation Report by the Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission in the Matter of Consumers Power Company Palisades Plant	September 1, 1978

Condition Reports Reviewed to Assess Problem Identification Characterization

CPAL0201341	Condition Report CPAL0201160 Classified at a Lower Significance Level than Appropriate
CPAL0201414	Inappropriate Significance Level Assigned to Corrective Action Documents

1R06 Flood Protection

Periodic and Predetermined Activity (Preventative Maintenance)

PPAC MSM071	Annual Inspection of Watertight Barriers	August 24, 1999; December 12, 2001
PPAC X-OPS014	Engineering Safeguard Pump Lube and Test	March 26, 2002
PPAC MSM091	5 Year Inspection of Watertight Barriers	June 22, 1998
PPAC RWS215	Clean and Test LS-5211 For Alarm ED-1354 and Pump Start/Stop	December 27, 2000

Miscellaneous Documents

DBD-7.08	Design Basis Document, "Plant Protection Against Flooding"	Revision 3
	Staff Evaluation Report of Individual Plant Examination of External Events Submittal on Palisades Nuclear Plant	April 22, 1999
MSM-M-16	Permanent Maintenance Procedure, "Inspection of Watertight Barriers"	Revision 9
FSAR 2.2.2	Final Safety Analysis Report, Section 2.2.2, "General Lake Hydrology"	
SOP-3, CL 3.4	Standard Operating Procedure 3, Checklist 3.4, "Plant Flood Door System Checklist"	Revision 47



Condition Reports Reviewed to Assess Maintenance Rule Evaluations

CPAL0101283	Unexpected EK-0239 Alarm, 'A' CRHVAC RIA1818A Hi-Rad/Fail
CPAL0101621	VDC-10 CRHAVC Condensing Unit Failed to Start
CPAL0104212	Unusual Noise and Smoke Coming from VC-11, Control Room HVAC Condensing Unit
CPAL0201122	Two Load Control Center 91 Breakers Were Sticking During Cycling for PPAC
CPAL0103999	Motor Control Center 5 Feeder Breaker 52-1303 Failed Closing and Trip Operation Test
CPAL0101346	X-Phase Failed to Connect During Breaker Swap
CPAL0102271	Breaker 152-116 (CCW P-52C) Failed to Close
CPAL0200014	CCW P-52C Breaker Tripped Open on Time Overcurrent
CPAL0200526	CCW Pump P-52C Failed Tech Spec Surveillance
CPAL0200527	Pieces of Hard Black Rubber Found Inside Pump Casing During Disassembly
CPAL0200546	Valve Seat Material Found Loose in CCW System
CPAL0200127	As Found Y Phase Time Overcurrent Relay for Breaker 152-116 Pump 52C HDO Setting Low

Miscellaneous Documents

EOP Supplement 25	Emergency Operating Procedure - Align Feedwater Purity Building Air to Plant Instrument Air Header	Revision 6
PPAC X-OPS392	Periodic and Predetermined Activity Control - Cycle Breakers on Load Center 91 completed on August 6, 1999 and March 21, 2002	

Condition Reports Reviewed to Assess Problem Identification Characterization

CPAL0202347	Incorrect Maintenance Rule Determination for Breaker 52-9107 Condition Documented on CPAL0201122
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CPAL0202383 PPACS X-OPS392(LC-91) & X-OPS396(IC-90)  
May Mask Breaker Functional Failures

1R13 Maintenance Risk Assessments and Emergent Work Evaluation

Plant Procedures

Admin. 4.02 Administrative Procedure 4.02 - Control of Equipment Revision 18

Other Documents

Operator's Risk Reports and Shift Supervisor Log Entries for April 1 through 5, 2002, During Maintenance Activities on High Pressure Safety Injection Pump P-66A and Service Water Pump P-7B

Operator's Risk Reports and Shift Supervisor Log Entries for April 15 through 19, 2002, During Emergent Maintenance Activities on Switchyard Breakers and Inclement Weather

Operator's Risk Reports, Shift Supervisor Log Entries, and Daily Work Schedules for May 6 Through 9, 2002, During Planned Maintenance Activities on Emergency Diesel Generator 1-1 with Ongoing Switchyard Work

Operator's Risk Reports, Shift Supervisor Log Entries, and Daily Work Schedules for June 10 Through 12, 2002, During Emergent Maintenance Activities for Loss of Switchyard "R" Bus and Emergent Cooling Tower Pump P-39B Trip.

Murray and Trettel Storm Warning Sheet April 17, 2002

Condition Reports Reviewed to Assess Problem Identification Characterization

CPAL0201511 Lack of Criteria Requiring Reevaluations of EOOS Risk Assessment for Severe Weather

CPAL0201425 Switchyard Breaker ABB 29H9 Removed from Service Due to Current Transformer Oil Leak

CPAL0201446 Work Week 2215, Emergency Diesel Generator 1-2 Outage Deferred Due to Degraded Switchyard Condition

CPAL0201551 Inadequate Bus Voltage Margin to Remove "Front" Bus from Service

#### 1R14 Non-Routine Plant Evolutions and Events

EOP Supplement 21	Emergency Operating Procedure - Restoration of 'F' or 'R' Buses	Revision 6
ONP-3	Off-Normal Procedure - Loss of Main Feedwater	Revision 18
SOP-8	System Operating Procedure - Main Steam System	Revision 54
SOP-30	System Operating Procedure - Station Power	Revision 32
	Troubleshooting Plans for the Loss of "R" Bus	June 11, 2002
ONP-14	Off-Normal Procedure, "Loss of Condenser Vacuum"	Revision 10
ONP -26	Off-Normal Procedure, "Rapid Power Reduction"	Revision 1
ONP-1	Off-Normal Procedure, "Loss of Load"	Revision 6
ONP-3	Off-Normal Procedure, "Loss of Main Feedwater"	Revision 17

#### Condition Reports Reviewed to Assess Problem Identification Characterization

CPAL0202236	Loss of 'R' Bus Due to Y-Phase Fault
CPAL0202238	Breaker 72-132 Trip
CPAL0202250	Trip of Cooling Tower Pump P-39B at Full Power
CPAL0202253	Unexpected Spike on P-50D Primary Coolant Pump LIA-0146B
CPAL0202254	Spurious Rod Drop Alarms During Rapid Downpower Event
CPAL0202280	Inadvertent Actuation of Under-Voltage Relay 227X-4 Causes P-39B Trip
CPAL0202287	While Installing Start-Up Power Breaker (152-106) into 1C Bus Nicked HS-152-106RLTS
CPAL0202288	Bent Retaining Ring Found on One of the Finger Assembly Clusters Associated with Circuit Breaker 152-202 (2400 Volt Bus 1D Startup Transformer Incoming Breaker).
CPAL0202320	Spurious Closures and Reopenings of CV-0540, #2 Intercept Valve from Moisture Separator Reheater E-9A to A-Low Pressure Turbine
CPAL0202321	Wiring to Solenoid Valve 0540, #2 Intercept Valve Found Swapped

### 1R15 Operability Evaluations

CPAL0103481	Assumed Isolation Capability of Primary Coolant Pump Controlled Bleed-Off Header per Emergency Operating Procedures is Invalid
CPAL0104082	High Pressure Safety Injection Pump P-66B Closing Coil Fuse/A113-2 Blew During Work Order Steps
CPAL0102086	CV-0869 Containment Air Cooler Inlet Valve Will Not Isolate Flow
CPAL0202278	Potentially Unacceptable Material Left in Conduit Associated with Fire Penetration FZ-0126 in the Cable Spreading Room

### Miscellaneous Documents

EOP-3.0	Emergency Operating Procedure - Station Blackout Recovery Basis	Revision 9
QO-19	Technical Specification Surveillance Test - Inservice Test Procedure - HPSI Pumps and ESS Check Valve Operability Test completed December 16, 2002	Revision 22
WO 24607385	Work Order - Troubleshoot/Identify All Wiring Within Breaker Cubicle 152-113	

### Condition Reports Reviewed to Assess Problem Identification Characterization

CPAL0201413	Condition Reports Not Generated as Required
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### 1R16 Operator Workarounds

PPAC X-OPS589	Assessment of Operator Workarounds	March 27, 2002
PPAC X-OPS589	Assessment of Operator Workarounds	April 29, 2002
PPAC X-OPS589	Assessment of Operator Workarounds Palisades Operator Challenges and Workarounds	February 27, 2002

### Condition Reports Reviewed to Assess Problem Identification Characterization

CPAL0201295	EARs Tracking Operator Workarounds and Challenges that Have Not Been Through the Work Review Group
CPAL0202421	Vaguely Worded Accident Analysis Description in FSAR



Condition Reports Reviewed to Assess Corrective Actions

CPAL0104051	Apparent Conflict Between Chapter 14 Loss of Feedwater Analysis and EOPs
CPAL0101904	DEH Control System Presents Unnecessary Challenges to Operators

1R19 Post Maintenance Testing

Plant Procedures

SOP-30	System Operating Procedure - Station Power	Revision 32
SPS-E-1	2400 Volt and 4160 Volt Allis Chalmers Circuit Breaker Auxiliary Switch Adjustments	Revision 12
WI-SPS-E-02	Insulation Resistance Testing of Electrical Equipment	Revision 1
SPS-E-4	Maintenance for 4160/2400 Volt Switchgear	Revision 10

Work Orders

WO 24113474	MV-ES3221, Dry Boric Acid at Packing, Clean/Adjust/Cycle
WO 24111914	PM 152-112 Breaker (Feeds P-54B Motor)
WO 24211931	Region Repair Testing of Transformer EX-04 (Startup Transformer 1-2)
WO 24211977	Replace Bent Retainer Ring on Breaker 152-202, 2400Volt Bus 1D to Startup Transformer Incoming Breaker
WO 24211932	Region Repair Testing of Transformer EX-05 (Startup Transformer 1-3)
WO 24211930	Region Repair Testing of Transformer EX-03 (Startup Transformer 1-1)
WO 24112919	Manual Valve MV-FP612 - Valve is Sticking in Mid-Position, Repair Valve
WO 24112539	Manual Valve FP-531 is Leaking By, Repair/Replace Valve
WO 24211745	Repack Diesel Driven Fire Water Pump P-41
WO 24211012	Fuel Oil Leaking from Fuel Pump on Diesel Driver K-10 for Fire Water Pump P-41
WO 24112712	D-26, Replace V-24A Back Draft Damper

WO 24112713	D-27, Replace V-24B Back Draft Damper
WO 24113144	K-6A, Oil Supply to Top of Cylinder 9R Leaking
WO 24114302	K-6A, Fuel Oil Pump, Cylinder 9L Leaks
WO 24210117F	K-6A, Remove and Replace Fuel Injector Pumps on Cylinder 1L
WO 24210117B	K-6A, Remove and Replace Fuel Injector Pumps on Cylinder 9R
WO 24113585	ASM-1B, Air Start Motor Replacement PM
WO 24210117H	K-6A, Adjust Pump Timing On All 18 Cylinders

Completed Post Maintenance Tests

QO-16	Technical Specification Inservice Test Procedure, Containment Spray Pumps completed May 10, 2002	Revision 20
MO-7B	Technical Specification Surveillance Test Procedure - Fire Water Pumps P-9A, P-9B, and P-41 completed June 12, 2002	Revision 25
MO-7A-1	Technical Specification Surveillance Test Procedure - Emergency Diesel Generator 1-1 completed on May 9, 2002	Revision 55

Condition Reports Reviewed to Assess Problem Identification Characterization and Corrective Actions

CPAL0200014	Component Cooling Water Pump P-52C Breaker Tripped Open on Time Overcurrent
CPAL0202218	Un-Annotated Sticky Note Attached to Tagging Order
CPAL0201888	Error In Calculation Results in Rework During Performance of Procedure SPS-E-1 on Breaker 152-112 (Containment Spray Pump P-54B)
CPAL0201708	Inadequate Mechanical Maintenance Planning for 1-1 EDG - P-67B Outages
CPAL0201830	K-6A, Cylinder 9L Banjo Joint To Fuel Oil Pump Leaked Extensively During Post Maintenance Testing of Diesel
CPAL0201806	Unable to Perform Scheduled Work Due to Equipment Condition

## 1R22 Surveillance Testing

### Completed Technical Specification Surveillance Tests

RT-711	Auxiliary Feedwater Class 2 and 3 System Functional/Inservice Test completed April 29, 2002	Revision 5
QO-1	Safety Injection System completed on May 24, 2002	Revision 47
RO-128	Technical Specification Surveillance Test - Diesel Generator 1-2 24-Hour Load Run, Completed June 20, 2002	Revision 5

### Miscellaneous Documents

QO-1	Technical Specification Surveillance Test Basis Document - Safety Injection	Revision 3
RO-128-2	Technical Specification Surveillance Test Basis Document - Diesel Generator 1-2 24-Hour Load Run	Revision 2

### Condition Reports Reviewed to Assess Problem Identification Characterization

CPAL0202444	Procedure Step Inadvertently Deleted from Surveillance Test Section 6.0 Acceptance Criteria
CPAL0202382	Procedure Step References Wrong Time for RO-128-1&2 24-Hour Load Time
CPAL0202394	Received Alarm EK-0557, Diesel Gen No. 1-2 Trouble Unexpectedly During RO-128-2
CPAL0202395	Received Alarm EK-0560, Diesel Gen Day Tank T-25B High/Low Level Unexpectedly During RO-128-2
CPAL0202396	Three Hours of 1-2 EDG Exhaust Temperature Logs Not Taken During RO-128-2
CPAL0202398	Digital Thermometer Model DT-300 Could Not Function in Diesel Generator Room 1-2 During RO-128-2 "Diesel Generator 1-2 24-Hour Load Run"

## 1E06 Emergency Plan Drill Evaluation

PRACTEX2002 Exercise Scope and Objectives for May 1 2002, and May 22, 2002

	Emergency Notification Forms completed during drills on May 1 2002, and May 22, 2002	
EI-1	Emergency Implementing Procedure 1, "Emergency Classifications and Actions"	Revision 40
EI-6	Emergency Implementing Procedure 6, "Offsite Dose Calculations and Recommendations for Protective Actions"	Revision 9
EI-3	Emergency Implementing Procedure 3, "Communications and Notifications"	Revision 18

Condition Reports Reviewed to Assess Problem Identification Characterization

CPAL0201783	Information Missing from Revision 10 of Emergency Implementing Procedure EI-6.13, "Protective Action Recommendations for Offsite Populations"
CPAL0201782	Failed Exercise Objective Regarding Protective Measures for Plant Personnel During PALEX2002 Drill
CPAL0201781	Unclear Communications Regarding Evacuation of Personnel During PALEX2002 Drill
CPAL0201780	During PALEX2002 Drill, Transfer of Command and Control Between the Site Emergency Director and the EOF Director Was Not Timely
CPAL0201779	TSC Communication Equipment Problems During PALEX2002 Drill
CPAL0201778	Discrepancy Between Utility Protective Action Recommendations and the State Protective Action Order During PALEX2002 Drill
CPAL0201772	Scenario Did Not Include Guidance for Conclusion of Evacuation of Non-Essential Personnel
CPAL0201771	PRACTEX2002 Drill Scenario and Scenario Control Did Not Provide Sufficient Data and Direction
CPAL0201770	PRACTEX2002 Drill Scenario Radiation Data and Plant Process Computer Did Not Agree
CPAL0201768	Notifications Were Not Made in 15-Minute Intervals to the State During the PRACTEX2002 Drill

CPAL0201767 Site Area Emergency Classification Notification Was Not Communicated to the State During the PRACTEX2002 Drill

CPAL0201766 Classification for General Emergency Was Not Timely During the PRACTEX2002 Drill

CPAL0201731 Site Siren Sound Fire Siren During Nuclear Drill

CPAL0201793 Failed PRACTEX2002 Drill Objective 5c, Complete Site Accountability Within Approximately 30 Minutes of the Alert

CAPL0201794 PRACTEX 2002, Service Building Lunchroom is Not Adequate to Establish an Operations Support Center

3PP3 Physical Protection

	Palisades Safeguards Event Logs	October 2001 - March 2002
STQP-1	Requirements for Weapon Qualification and Requalification	Revision 19
	Vital Target Success Path Security Reference Manual	
	Table Top Exercise Evaluations (21)	January-May 2002
	Defensive Position Response Evaluation (64)	January-May 2002
	Tactical Movements and Weapon Use Evaluation (45)	January-May 2002
	Condition Reports (Security Related)	October 2001-May 2002
	Security Personnel Training Files (11)	

4OA2 Identification and Resolution of Problems

Condition Reports Reviewed to Assess Corrective Actions

CPAL0103678 SM&CS Laboratory Procedures Not Included in Administrative Procedure 10.41, "Procedure Initiation and Revision," as Requiring Periodic Reviews

Condition Reports Reviewed to Assess Problem Identification Characterization

CPAL0201265 Inappropriate Result from the Analysis in Support of an Assigned Corrective Action

