October 22, 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 USNRC INSPECTION REPORT 50-255/02-07(DRP)

Dear Mr. Cooper:

On September 28, 2002, the USNRC completed an inspection at your Palisades Nuclear Generating Plant. The enclosed report documents the inspection findings which were discussed on October 3, 2002, with you and other 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 USNRC is treating these issues as Non-Cited Violations in accordance with Section VI.A.1 of the USNRC' 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 U. S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, with a copy to the Regional Administrator, U. S. Nuclear Regulatory Commission - Region III, 801 Warrenville Road, Lisle, IL 60532-4351; the Director, Office of Enforcement, U. S. Nuclear Regulatory Commission, Washington, DC 20555-0001; and the Resident Inspector Office at the Palisades facility.

The USNRC has increased security requirements at the Palisades plant in response to the terrorist attacks on September 11, 2001. Although the USNRC is not aware of any specific threat against nuclear facilities, the USNRC issued an Order and several threat advisories to commercial power reactors to strengthen licensees' capabilities and readiness to respond to a potential attack. The USNRC continues to monitor overall security controls and will issue temporary instructions in the near future to verify by inspection the licensee's compliance with the Order and current security regulations.

D. Cooper

In accordance with 10 CFR 2.790 of the USNRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the USNRC Public Document Room or from the Publicly Available Records (PARS) component of USNRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <u>http://www.nrc.gov/reading-rm/adams.html</u> (the Public Electronic Reading Room).

Sincerely,

/RA/

Anton Vegel, Chief Branch 6 Division of Reactor Projects

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

Enclosure: Inspection Report 50-255/02-07(DRP)

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

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# U.S. NUCLEAR REGULATORY COMMISSION

# **REGION III**

Docket No: License No:	50-255 DPR-20	
Report No:	50-255/02-07(DRP)	
Licensee:	Nuclear Management Company, LLC	
Facility:	Palisades Nuclear Generating Plant	
Location:	27780 Blue Star Memorial Highway Covert, MI 49043-9530	
Dates:	July 1 through September 28, 2002	
Inspectors:	J. Lennartz, Senior Resident Inspector R. Krsek, Resident Inspector T. Madeda, Physical Security Inspector D. Nelson, Radiation Specialist	
Observers:	M. Castanedo, Nuclear Safety Intern J. Maynen, Physical Security Inspector	
Approved by:	Anton Vegel, Chief Branch 6 Division of Reactor Projects	

## SUMMARY OF FINDINGS

IR 05000255/02-07, Nuclear Management Company, LLC, on 07/01/2002 - 09/28/2002, Palisades Nuclear Generating Plant. Flood Protection.

This report covers a 3-month period of baseline resident inspection and announced baseline inspections in radiation safety and physical protection. The inspection was conducted by the resident inspectors, a regional radiation protection specialist inspector and a physical security inspector. Two Green Findings with associated Non-Cited Violations were identified during the inspection. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter 0609, "Significance Determination Process," (SDP). Findings for which the SDP does not apply may be "Green" or be assigned a severity level after USNRC management review. The USNRC'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. Inspection Findings

## **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 V, "Instructions, Procedures, and Drawings," for the failure to ensure activities affecting quality were prescribed by documented procedures of a type appropriate to the circumstances. Specifically, the activities affecting quality dealt with the inspection and maintenance of the safety-related expansion joints utilized as flood and high energy line break barriers between the component cooling water and west engineered safeguards rooms.

This issue was more than minor because if left uncorrected the safety-related expansion joints could degrade further, undetected, which could result in an inadequate flood and high energy line break barrier between the component cooling water and the west engineered safeguards rooms. The finding was determined to be a licensee performance deficiency of very low safety significance (Green) by the significance determination process because the finding: (1) was not a design or qualification deficiency; (2) did not represent an actual loss of safety function of a system; (3) did not represent an actual loss of a safety function of a single train for greater than Technical Specification outage time; (4) did not represent an actual loss of a safety function of one or more Non-Technical Specification trains of equipment; and (5) did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. (Section 1R06.1)

• 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 Flood Door-196A which protected the safety-related equipment in the component cooling water room from a flood in the turbine building.

This issue was more than minor because the licensee failed to take adequate corrective actions for a previously identified issue involving the degradation of Flood Door 196A which could potentially cause a flood in the turbine building to spread to the component cooling water room. The finding was determined to be a licensee performance deficiency of very low safety significance (Green) by the significance determination process because the finding: (1) was not a design or qualification deficiency; (2) did not represent an actual loss of safety function of a system; (3) did not represent an actual loss of a safety function of a single train for greater than Technical Specification outage time; (4) did not represent an actual loss of a safety function trains of equipment; and (5) did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. (Section 1R06.2)

### B. Licensee Identified Findings

Violations of very low safety significance, which were identified by the licensee have been reviewed by the inspectors. Corrective actions taken or planned by the licensee have been entered into the licensee's corrective action program. These violations and corrective action tracking numbers are listed in Section 4OA7 of this report.

## **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 with the following exceptions:

- On August 26, 2002, operations personnel identified a problem with the seal cooler for the non-safety related Heater Drain Pump P-10B. Plant power was reduced to approximately 88 percent and the pump was removed from service for repairs. Also, licensee personnel had been monitoring a previously identified oil leak on Primary Coolant Pump P-50D and on August 27, 2002, engineering personnel recommended, based on industry operating experience, that oil be added immediately to the lower oil reservoir because of a slight rise in the motor's lower bearing temperature. Therefore plant power was reduced to approximately 50 percent to address this emergent issue. Reactor power was raised to approximately 88 percent on August 28, 2002, following the oil addition to Primary Coolant Pump P-50D. On August 30, 2002, reactor power was raised to full power following the completion of repairs to the seal oil cooler for the non-safety related Heater Drain Pump P-10B.
- On September 21, 2002, operations personnel identified a ground on the non-safety related 2400 volt electrical Bus 1-E which was subsequently traced to Heater Drain Pump P-10B. Reactor power was reduced to approximately 88 percent and non-safety related Heater Drain Pump P-10B was removed from service to repair the ground. Following the repairs, reactor power was raised to full power on September 21, 2002.
- On September 28, 2002, reactor power was reduced to approximately 25 percent to conduct a planned oil addition to the Reactor Coolant Pump P-50D and the plant was returned to full power on September 29, 2002, following the oil addition.

## 1. **REACTOR SAFETY**

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

- 1R04 Equipment Alignment
- .1 <u>Quarterly Equipment Alignment Walkdowns</u> (71111.04Q)
- a. Inspection Scope

The inspectors performed partial walkdowns of accessible equipment for the High Pressure Air System, the Component Cooling Water System and the Containment Spray System. The train of high pressure air in the west safeguards room which contained High Pressure Air Compressor C-6B was walked down while the redundant High Pressure Air Compressor C-6A in the east safeguards room was out of service for maintenance during the week of July 15, 2002. The train of component cooling water which contained Pumps 52A and P-52C was walked down while the redundant Component Cooling Water Pump P-52B was out of service for planned motor replacement during the week of July 28, 2002. Containment Spray Pump P-54A was walked down during the week of August 18, 2002.

For the systems walked down, the inspectors verified that accessible equipment and components were appropriately aligned and that no discrepancies existed which would impact the systems' safety 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 and to verify that identified corrective actions were reasonable.

b. Findings

No findings of significance were identified.

- .2 <u>Semiannual Equipment Alignment Walkdowns</u> (71111.04S)
- a. <u>Inspection Scope</u>

The inspectors walked down the Auxiliary Feedwater System during the week of August 11, 2002. The inspectors utilized system operating procedures and Auxiliary Feedwater System checklists to verify that accessible system components were correctly aligned. The inspectors also reviewed active maintenance work requests, active design and engineering issues, including known operator workarounds and temporary modifications, to verify that the equipment's safety function was not adversely impacted.

b. Findings

No findings of significance were identified.

- 1R05 <u>Fire Protection Area Walkdowns</u> (71111.05)
- a. Inspection Scope

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

- East Engineered Safeguards Room (Fire Area 10);
- 1D Switchgear Room (Fire Area 3);
- Emergency Diesel Generator Room 1-2 (Fire Area 6);
- Auxiliary Feedwater Pump Room (Fire Area 24);
- Southwest Cable Penetration Room (Fire Area 26);
- Spent Fuel Pool Cooling Room (Fire Area 17); and
- Safety Injection Refueling Water Tank (Fire Area 32).

The inspectors assessed the material condition of the passive fire protection features and verified that transient combustibles and ignition sources were appropriately controlled. The inspectors reviewed documentation for randomly selected completed surveillances to verify that the fire suppression system, smoke detection system, and manual fire fighting equipment as contained in the these areas were available.

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, the inspectors verified that required compensatory actions were being implemented for designated fire areas.

The inspectors also reviewed condition reports related to fire protection activities to verify that the problems were appropriately characterized and to verify that identified corrective actions were reasonable.

b. Findings

No findings of significance were identified.

- 1R06 Flood Protection (71111.06)
- .1 Deficiencies Identified with Expansion Joints Utilized as Flood and High Energy Line Break Barriers Between the Component Cooling Water and West Engineered Safeguards Rooms
- a. Inspection Scope

The inspectors performed the internal flood protection features inspection in the west engineered safeguards and component cooling water rooms which contain risk significant structures, systems and components.

The inspectors conducted walkdowns and design reviews, including reviews of preventive maintenance activities for the following attributes associated with these rooms:

- Sealing of equipment below the floodline, such as electrical conduits;
- Holes or unsealed penetrations in floors and walls between flood areas;
- Adequacy of watertight doors between flood areas;
- Common drain system and sumps, including floor drain piping and check valves where credited for isolation of flood areas within plant buildings;
- Sources of potential internal flooding that are not analyzed or not adequately maintained, for example failure of flexible piping expansion joints, roof leaks, and failure of service water lines; and
- Condition and availability of temporary or removable flood barriers.

The inspectors also assessed condition reports related to identified flood protection issues to verify that the problems were appropriately characterized.

#### b. <u>Findings</u>

#### **Introduction**

The inspectors identified a Green Finding that is being treated as a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to ensure activities affecting quality, specifically the inspection and maintenance of the safety-related expansion joints utilized as flood and high energy line break barriers, were prescribed by documented procedures of a type appropriate to the circumstances and accomplished in accordance with those procedures.

#### **Description**

The inspectors reviewed Procedure MSM-M-16, "Inspection of Watertight Barriers," and preventive maintenance activities associated with the safety-related expansion joints in the component cooling water and west engineered safeguards rooms that had been completed. The expansion joints served as a flood barrier separating the component cooling water room from the west engineered safeguards room located one level below. The component cooling water room was susceptible to internal floods from a postulated failure of the main feed or service water lines or from a high energy line break of the main steam lines located in the room.

The inspectors walked down the components, and reviewed design basis information concerning the purpose and design requirements for the expansion joints. The inspectors also reviewed vendor manual information concerning recommended inspections and service life requirements and discussed these with cognizant engineering and maintenance personnel.

The inspectors identified numerous adverse issues associated with activities related to the safety-related expansion joints which included: (1) the adequacy of prescribed and recently completed inspections; (2) the adequacy of the current inspection program; (3) the adequacy of the frequency of inspection; and (4) the knowledge and skill level of personnel assigned to perform the inspections. Consequently, the inspectors concluded that the inspection and maintenance of the safety-related expansion joints had been inadequate. Some specific issues included the following:

- Inspection procedures and work instructions did not prescribe specific actions to ensure that the expansion joints were clean and free of debris which could hinder the ability to perform an adequate external visual inspection. Follow-up inspections determined the majority of expansion joints had not been cleaned in several years;
- Inspection procedures and work instructions did not ensure total inspection of the expansion joints and did not prescribe any techniques to ensure complete inspection of the expansion joints;
- Inspection of the internal portion of the expansion joints was not included or considered as part of the inspection process, even though degradation could

occur internally. In the 30-year service of these expansion joints, the internals had not been inspected;

- No basis existed for the current frequency of inspection which appeared contrary to vendor recommendations; and
- Inspection procedures did not contain appropriate quantitative or qualitative acceptance criteria for determining that activities were accomplished satisfactorily.

The inspectors also identified that Expansion Joints XJ-423 and XJ-425 had not been previously inspected as part of the licensee's program and that Expansion Joint XJ-432 was not inspected by licensee personnel in 1998 when the inspection was last performed because insulation covered the expansion joint. In response to these deficiencies, licensee personnel subsequently performed inspections on Expansion Joints XJ-432, XJ-432 and XJ-425 and all three failed the inspection acceptance criteria. Further analysis by the licensee determined that while the expansion joints were degraded, the joints could still perform their intended function.

The inspectors determined that the failure to ensure that inspections and maintenance of expansion joints utilized as flood and high energy line break barriers were prescribed by and being accomplished in accordance with documented procedures of a type appropriate to the circumstances was a licensee performance deficiency warranting a significance evaluation.

#### <u>Analysis</u>

The inspectors concluded that the finding was greater than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Disposition Screening," issued on April 29, 2002, because the finding would become a more significant concern if left uncorrected. Specifically, continued inadequate inspections and maintenance of the safety-related expansion joints could result in additional undetected degradation. Consequently, the mitigating systems objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences could be affected. Specifically, additional degradation of the safety-related expansion joints could potentially result in an internal flood or high energy line break in the component cooling water room to propagate to and adversely affect the safety-related mitigating equipment in the west engineered safeguards room.

The inspectors evaluated the finding using Manual Chapter 0609, "Significance Determination Process," Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations," Phase 1 screening, and determined that the finding:

- was not a design or qualification deficiency;
- did not represent an actual loss of safety function of a system;
- did not represent an actual loss of a safety function of a single train for greater than Technical Specification outage time;

- did not represent an actual loss of a safety function of one or more Non-Technical Specification trains of equipment; and
- 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).

## Enforcement

10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," requires, in part, that activities affecting quality be prescribed by documented procedures of a type appropriate to the circumstances and be accomplished in accordance with those procedures. Contrary to this, licensee personnel failed to ensure that activities affecting quality, specifically the inspection and maintenance of the safety-related expansion joints utilized as flood and high energy line break barriers separating the component cooling water and west engineered safeguards rooms, were prescribed by and accomplished in accordance with documented procedures of a type appropriate to the circumstances. 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 50-255/02-07-01)

This finding and associated Non-Cited Violation is in the licensee's corrective action program as Condition Reports CAP031186, "Expansion Joint XJ-423 (Bellows Expansion Joint for HB-23-16") Failed Visual Inspection," CAP031187,"Expansion Joint XJ-425 (Bellows Expansion Joint for HC-4-8") Failed Visual Inspection," and, CAP031188, "Expansion Joint XJ-432 (Bellows Expansion Joint for HB-23-24") Failed Visual Inspection." The licensee determined that the issues raised by the inspectors constituted a significant condition adverse to quality. Consequently, the licensee assigned the highest significance level to the condition report, "Level A," and formed a root cause evaluation team to determine the root and contributing causes for the finding raised by the inspectors.

- .2 <u>Failure to Implement Adequate Corrective Action for Previously Identified Flood Barrier</u> <u>Deficiencies</u>
- a. Inspection Scope

The inspectors walked down the component cooling water room to verify the adequacy of watertight doors between flood areas. The inspectors also assessed previous corrective action documents, maintenance work control documents and recent inspections associated with Flood Door-196A which separated the component cooling water room from the turbine building.

#### b. Findings

#### **Introduction**

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 Flood Door-196A which protects the safety-related equipment in the component cooling water room from a flood in the turbine building.

## **Description**

In January 2001, the inspectors performed a flood protection inspection and identified a degraded condition associated with the watertight seals for Door-196A which separated the turbine building flood zone from the component cooling water room flood zone. At that time, licensee personnel entered this issue into the corrective action program as Condition Report CPAL0100142, "Some Flood Barriers Not Included in Procedure for Inspection of Watertight Barriers." The January 2001 inspection sample was documented in NRC Inspection Report 50-255/01-02(DRP) Section 1R06.

During walkdowns of the component cooling water room in September 2002, the inspectors identified that watertight seals for Flood Door-196A were in a condition worse than previously noted in January 2001, in that, physical gaps existed around the perimeter of the door and the watertight seal.

The inspectors subsequently reviewed the apparent cause evaluation and corrective actions for CPAL0100142. The corrective actions included adding Flood Door-196A to the inspection procedure for watertight barriers but the condition report evaluation did not identify any corrective actions to fix the degraded condition of the watertight seal. In December 2001, licensee personnel implemented the revised inspection procedure and identified the same deficient conditions for Flood Door 196A that the inspectors identified in January 2001.

Condition Report CPAL0104118, "Watertight Door 196A Failure, Turbine Building/Component Cooling Water Room 590 Jailhouse Door," was generated and entered into the corrective action program after Flood Door-196A failed to meet the acceptance criteria during the December 2001 inspection. Subsequently, Work Order 24114391 was implemented in July 2002 as a corrective action to replace the watertight seals. However, the inspectors concluded that the corrective actions were inadequate in that Flood Door 196A was left in a degraded condition worse than previously identified in January 2001. Specifically, physical gaps, which did not previously exist, were identified between the door and the new watertight seal.

The inspectors determined that the failure to promptly identify and correct conditions adverse to quality regarding Flood Door-196A was a licensee performance deficiency warranting a significance evaluation.

### <u>Analysis</u>

The inspectors concluded that the finding was greater than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Disposition Screening," issued on April 29, 2002, because the finding: (1) involved the protection against external factors (flood protection) and human performance attributes of the mitigating systems cornerstone; (2) affected the mitigating systems objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences because a flood in the turbine building could potentially spread to the component cooling water room; and (3) the licensee failed to take adequate corrective actions for a previously identified minor violation. The inspectors also determined that this finding affected the cross-cutting issue of problem identification and resolution.

The inspectors evaluated the finding using Manual Chapter 0609, "Significance Determination Process," Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations," Phase 1 screening, and determined that the finding:

- was not a design or qualification deficiency;
- did not represent an actual loss of safety function of a system;
- did not represent an actual loss of a safety function of a single train for greater than Technical Specification outage time;
- did not represent an actual loss of a safety function of one or more Non-Technical Specification trains of equipment; and
- 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 promptly correct the condition adverse to quality documented in Condition Reports CPAL0100142 and CPAL0104118 initiated in January 2001 and December 2001, respectively, as evidenced by the degraded water tight seal for Flood Door 196A. 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 50-255/02-07-02)

This finding and associated Non-Cited Violation is in the licensee's corrective action program as Condition Report CAP031146, "Gaps Identified in Flood Door 196A to Component Cooling Water Room."

## 1R11 Licensed Operator Requalification (71111.11Q)

### .1 Quarterly Resident Inspector Licensed Operator Performance Observations

#### a. Inspection Scope

The inspectors observed licensed operator performance during an evaluated simulator scenario on September 25, 2002. The inspectors assessed the licensed operator's ability to respond, in accordance with applicable emergency operating procedures, to a Loss Of Coolant Accident concurrent with a loss of safety-related 2400 Volt Electrical Bus 1C and three stuck rods. The inspectors also observed the post-scenario critique to assess the licensee evaluator's ability to identify deficient operator performance.

#### b. <u>Findings</u>

No findings of significance were identified.

## 1R12 <u>Maintenance Effectiveness</u> (71111.12Q)

#### a. <u>Inspection Scope</u>

The inspectors reviewed the licensee's maintenance effectiveness for the Emergency Diesel Generator Heating Ventilation and Air Conditioning System which was designated as having high safety significance.

The inspectors reviewed work order histories and selected condition reports written against the system over the last 4 years to verify that licensee personnel completed maintenance and addressed system problems appropriately. Completed work orders were reviewed to determine if there was an adverse trend in system performance that could be attributed to inappropriate work practices and to determine if there were any common cause issues that had not been addressed.

The inspectors reviewed selected condition reports and associated maintenance rule evaluations to verify that the identified system problems were appropriately characterized and were dispositioned in accordance with the licensee's maintenance rule program. The inspectors also verified that designated corrective actions were reasonable and had been implemented as scheduled.

#### b. Findings

No findings of significance were identified.

### 1R13 <u>Maintenance Risk Assessments and Emergent Work Evaluation</u> (71111.13Q)

#### a. <u>Inspection Scope</u>

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 Component Cooling Water Pump P-52B concurrent with emergent maintenance on Emergency Diesel Generator 1-2;
- Planned maintenance on Fuel Oil Transfer Pump P-18A and Containment Spray Pump P-54B;
- Planned maintenance on the Switchyard Front, "F," Bus
- Planned maintenance and surveillance activities on Emergency Diesel Generator 1-1; and
- Planned maintenance on High Pressure Safety Injection Pump P-66A and High Pressure Air Compressor C-6A, concurrent with emergent troubleshooting activities due to a ground on non safety-related 2400 Volt Electrical Bus 1E.

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 <u>Personnel Performance Related to Non-Routine Plant Evolutions and Events</u> (71111.14Q)

a. <u>Inspection Scope</u>

The inspectors observed and assessed performance by radiation protection personnel, maintenance personnel and operations personnel during the following non-routine evolutions which occurred during the inspection period:

- Spent resin sluice from Tank T-100 to a high integrity container on July 16, 2002;
- Containment entries to add oil to Primary Coolant Pump P-50D on August 28, and September 28, 2002, while the plant was at 50 percent and 25 percent power respectively;
- Troubleshooting activities for an electrical ground on non-safety related 2400 Volt Electrical Bus 1E on September 19, 2002. Plant operators reduced reactor power to 88 percent to repair the affected equipment after significant troubleshooting on electrical equipment identified the location of the electrical ground.

The inspectors reviewed radiation work permits and radiation planning that was in place to keep personnel radiation dose during the oil additions to the primary coolant pump and the spent resin sluice as-low-as-reasonably-achievable. The inspectors also reviewed radiation dose records after the evolutions to verify that the radiation planning efforts were effective.

The inspectors reviewed the applicable Off-Normal Procedures, System Operating Procedures, General Operating Procedures, Administrative Procedures and Technical Specifications for these events to verify that procedural guidance was appropriately followed. 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:

- Emergency Diesel Generator 1-2;
- Multiple Auxiliary Feedwater and Emergency Core Cooling System Check Valves;
- Safety-Related Fire Protection Suction of the Auxiliary Feedwater Pumps; and
- Expansion Joints Utilized for Flood and High Energy Line Break Protection between the Component Cooling Water and West Engineered Safeguards Rooms.

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 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. <u>Findings</u>

No findings of significance were identified.

### 1R19 Post Maintenance Testing (71111.19Q)

#### a. <u>Inspection Scope</u>

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 operators. The inspectors reviewed the following post maintenance test activities:

- Emergency Diesel Generator 1-2;
- Component Cooling Water Pump P-52B;
- Fuel Oil Transfer Pump P-18A;
- High Pressure Air Compressor C-6B;
- Safeguards Transformer EX-07; and
- Thermal Margin Monitor Channel "C".

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 <u>Surveillance Testing</u> (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:

- Service Water Pump P-7B;
- Station Batteries ED-01 and ED-02;
- Anticipated Transient Without Scram System;
- Fire Protection Pumps P-9A, P-9B and P-41; and
- Safety Injection and Refueling Water Tank Level Instrumentation.

The inspectors 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.

- 1R23 <u>Temporary Plant Modifications</u> (71111.23A)
- a. <u>Inspection Scope</u>

The inspectors reviewed the temporary modification package and associated 10 CFR 50.59 evaluations for the following temporary modifications:

- TM 1999-032, Reactor Head Temperature Monitoring;
- TM 2000-006, Isolate Alternate Steam Supply Line to Auxiliary Feedwater Pump P-8B

The inspectors walked down accessible equipment to verify that the temporary modifications were installed in the plant as described, that plant equipment was aligned in accordance with the temporary modification requirements and that the temporary modifications did not adversely impact other safety-related equipment. The inspectors also verified that the temporary modifications were being controlled in accordance with Administrative Procedure 9.31, "Temporary Modification Control," requirements.

In addition, the inspectors reviewed condition reports to verify that identified problems regarding temporary modifications were appropriately characterized.

b. Findings

No findings of significance were identified.

- 1E06 <u>Emergency Plan Drill Evaluation</u> (71114.06)
- a. Inspection Scope

The inspectors observed a licensed operator simulator training session on September 25, 2002, in which the Shift Supervisor was required to implement the Emergency Plan in response to the simulated plant conditions during the scenario. The inspectors verified that the Shift Supervisor declared the emergency condition and completed the required notifications to State and Local Police authorities, and the NRC in an accurate and timely manner in accordance with the licensee's emergency plan.

b. Findings

No findings of significance were identified.

### 2. RADIATION SAFETY

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

- 2OS1 Access Control to Radiologically Significant Areas (71121.01)
- .1 Plant Walkdowns and Radiological Controls
- a. <u>Inspection Scope</u>

The inspectors reviewed the radiological conditions of work areas within radiation areas and high radiation areas in the radiologically restricted area to verify the adequacy of radiological boundaries and postings. This included walkdowns of high and locked high radiation area boundaries in the Auxiliary Building and the Spent Fuel Pool. The inspectors performed independent measurements of area radiation levels and reviewed associated licensee controls to determine if the controls (i.e., surveys, postings, and barricades) were adequate to meet the requirements of 10 CFR Part 20 and the licensee's Technical Specifications.

The inspectors reviewed the licensee's records to determine if highly activated or contaminated materials (non-fuel) were stored in the spent fuel pool. Since no highly activated or contaminated materials were currently stored in the spent fuel pool, the inspectors reviewed the licensee's procedures to evaluate the effectiveness of the physical and programmatic controls for storage of highly activated or contaminated materials in the spent fuel pool.

b. Findings

No findings of significance were identified.

- .2 Job in Progress Reviews
- a. Inspection Scope

The inspectors reviewed all radiological job requirements including radiation work permit requirements and work procedure requirements for maintenance activities on the T-100 Spent Resin Storage Tank. The inspectors attended the pre-job briefing for the maintenance activities to determine if the radiological conditions in the work area were adequately communicated to the workers. Following the briefing, the inspectors observed activities at the work site to verify the adequacy of radiological controls

including required surveys, radiation protection job coverage, and contamination controls.

b. Findings

No findings of significance were identified.

### .3 Radiation Worker Performance

### a. Inspection Scope

The inspectors observed radiation worker practices during maintenance activities on the T-100 Spent Resin Storage Tank to determine if the workers were aware of the significant radiological conditions in their workplace and the radiation work permit controls/limits in place. The inspectors also evaluated whether the workers' performance reflected the level of radiological hazards present.

The inspectors reviewed condition reports and action requests to determine if there had been radiological incidents that resulted from radiation worker errors. The inspectors reviewed each to determine if there had been an observable pattern traceable to a similar cause for the errors and whether or not the corrective action program had addressed those causes.

b. Findings

No findings of significance were identified.

- .4 Radiation Protection Technician Proficiency
- a. Inspection Scope

The inspectors observed radiation protection technician (RPT) performance during maintenance activities on the T-100 Spent Resin Storage Tank to determine if the RPTs enforced radiation protection work requirements at the work site. The inspectors also determined if the RPTs were aware of the significant radiological conditions in their workplace, and the radiation work permit controls/limits, and that their performance was consistent with their training and qualifications with respect to the radiological hazards and work activities.

The inspectors reviewed action requests that documented incidents that resulted from RPT errors. The inspectors reviewed each to determine if there was an observable pattern traceable to a similar cause for the incidents and whether the corrective action program addressed those causes.

## b. Findings

No findings of significance were identified.

## 2OS2 As-Low-As-Is-Reasonably-Achievable (ALARA) Planning and Controls (71121.02)

## .1 Radiological Work/ALARA Planning

## a. Inspection Scope

The inspectors reviewed post job ALARA reports for reinstalling seismic restraints on Control Rod Drive Upper Housings and for reinstalling 45 Control Rod Drive Upper Housings during the 2001 Spring Refueling and Inspection Outage (REFOUT01). The inspectors evaluated the accuracy of exposure estimates in the ALARA plans for those activities, 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 inspectors reviewed the exposure history for each activity as well as the post job ALARA reports to determine if management had monitored the exposure status of each activity, to determine if in-progress ALARA job reviews were needed and performed, to determine if additional engineering/dose controls had been established, and to determine if required corrective documents had been generated.

b. Findings

No findings of significance were identified.

- .2 Verification of Exposure Estimate Goals and Exposure Tracking System
- a. Inspection Scope

The inspectors reviewed the post job ALARA reports for reinstalling seismic restraints on Control Rod Drive Upper Housings and for reinstalling 45 Control Rod Drive Upper Housings during the 2001 Spring Refueling and Inspection Outage (REFOUT01) to evaluate the methodology and assumptions used by the licensee for each activities' exposure estimates and exposure goals. Actual job exposure data was compared with estimates to verify that the licensee had projected and, thus, controlled radiological exposure. The inspectors also reviewed the licensee's exposure tracking system to verify that the level of exposure tracking detail, exposure report timeliness, and exposure report distribution were sufficient to support control of collective exposures for each activity.

b. Findings

No findings of significance were identified.

## .3 Source-Term Reduction and Control

#### a. <u>Inspection Scope</u>

The inspectors evaluated the licensee's source-term reduction program in order to verify that the licensee had an effective program in place, and was knowledgeable of plant source term and techniques for its reduction. Areas of review included:

- The installation of permanent shielding in Auxiliary Building;
- The hot spot reduction program;
- The installation of additional steam generator platforms; and
- Elimination of the Radwaste Evaporators.

The inspectors also reviewed the results of source-term reduction initiatives implemented prior to REFOUT01 to determine if the program had been successful in reducing system wide source-term.

b. Findings

No findings of significance were identified.

- .4 Identification and Resolution of Problems
- a. Inspection Scope

The inspectors reviewed a Chemical and Radiological Services focused self-assessment of the ALARA Program to evaluate the effectiveness of the self-assessment process to identify, characterize, and prioritize problems. The inspectors also reviewed corrective action documentation (condition reports and action requests) to verify that access control and ALARA related issues were adequately addressed.

b. Findings

No findings of significance were identified.

## 3. SAFEGUARDS

## **Cornerstone: Physical Protection (PP)**

- 3PPI Access Authorization (AA) Program (Behavior Observation Only) (71130-01)
- a. Inspection Scope

The regional security inspector interviewed five supervisors and five non-supervisors (both licensee and contractor employees) to determine their knowledge and practice of implementing licensee behavior observation program responsibilities. Selected procedures pertaining to the implementation of the Behavior Observation Program and associated training activities were also reviewed. Also, the licensee's most recent

fitness-for-duty semi-annual test results were reviewed. In addition, the inspector reviewed a sample of assessments, audits, and security logged events that pertained to the licensee's behavior observation program. The inspector also interviewed selective licensee and security contractor managers to evaluate their knowledge and use of the licensee's corrective action system.

b. Findings

No findings of significance were identified.

- 3PP2 <u>Access Control (Identification, Authorization and Search of Personnel, Packages, and Vehicles)</u> (71130.02)
- a. Inspection Scope

The regional security inspector reviewed the licensee's protected area access control testing and maintenance programs and related procedures. The inspector observed licensee testing of all in-service access control equipment located at the licensee's protected area portal to determine if testing and maintenance practices were effective and performance based. On at least two occasions, during peak ingress periods, the inspector observed in-processing search of personnel, packages, and vehicles at the licensee's protected area portal to determine if those practices were conducted in an effective manner and were in accordance with regulatory requirements. Interviews with randomly selected security personnel were conducted and records were reviewed to verify that security staffing levels were consistently and appropriately implemented. The inspector also reviewed the licensee's process and practice for limiting access to only authorized personnel to the protected area and vital equipment through a selected sample of personnel access authorization lists and actual protected and vital area entries. The inspector reviewed the licensee's program to control hard-keys, and computer input of security-related personnel data.

The regional security inspector reviewed a random sample of licensee assessments, audits, maintenance records, and security logged events for identification and resolution of problems. In addition, the inspector interviewed several licensee and contract security managers to evaluate their knowledge and use of the licensee's corrective action program.

b. Findings

No findings of significance were identified.

### 3PP3 Response to Contingency Events (71130.03)

The Office of Homeland Security (OHS) developed a Homeland Security Advisory System (HSAS) to disseminate information regarding the risk of terrorist attacks. The HSAS implements five color-coded threat conditions with a description of corresponding actions at each level. NRC Regulatory Information Summary (RIS) 2002-12a, dated August 19, 2002, "NRC Threat Advisory and Protective Measures System," discusses the HSAS and provides additional information on protective measures to licensees.

#### a. Inspection Scope

On September 10, 2002, the NRC issued a Safeguards Advisory to reactor licensees to implement the protective measures described in RIS 2002-12a in response to the Federal government declaration of threat level "Orange." Subsequently, on September 24, 2002, the OHS downgraded the national security threat condition to "Yellow" and a corresponding reduction in the risk of a terrorist threat.

The inspector interviewed licensee personnel and security staff, observed the conduct of security operations, and assessed licensee implementation of the threat level "Orange" protective measures. Inspection results were communicated to the region and headquarters security staff for further evaluation.

## b. Findings

No findings of significance were identified.

## 4. OTHER ACTIVITIES (OA)

- 4OA1 Performance Indicator Verification (71151)
- .1 <u>Safety System Unavailability Performance Indicators</u>
- a. Inspection Scope

The inspectors verified that the performance indicator data submitted by the licensee was accurate and complete regarding the unavailability of the Auxiliary Feedwater System and the Residual Heat Removal System.

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 components taken out of service in the auxiliary feedwater and residual heat removal systems, to verify that the licensee had accurately reported the system's unavailability time for July 2001 through July 2002.

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.

## .2 <u>Physical Protection Performance Indicators</u>

## a. Inspection Scope

The regional security inspector reviewed the data for the Physical Protection Performance Indicators pertaining to Fitness-For-Duty/Personnel Reliability, Personnel Screening Program, and Protected Area Security Equipment Performance. Specifically, a sample of plant reports related to security events, security shift activity logs, fitness-forduty reports, and other applicable security records were reviewed for the period between January 2002 and July 2002. In addition, appropriate licensee security management personnel were interviewed regarding their interpretation and application regarding the data submitted for the physical protection performance indicators.

## b. Findings

No findings of significance were identified.

## .3 Radiation Safety and Reactor Coolant System Activity Performance Indicators

## a. Inspection Scope

The inspectors verified the licensee's assessment of its performance indicators for the previous four calendar quarters for the occupational and public radiation safety cornerstones as well as the reactor coolant system (RCS) specific activity. No reportable elements were identified by the licensee for the 3<sup>rd</sup> and 4<sup>th</sup> quarters of 2001 or 1<sup>st</sup> and 2<sup>nd</sup> quarters of 2002. The inspectors compared the licensee's data with the previous four quarters' condition reports, public dose records, and RCS specific activity records to verify that there were no occurrences during those quarters concerning the occupational and public radiation safety cornerstones and the RCS specific activity.

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

## a. <u>Inspection Scope</u>

The inspectors reviewed apparent and root cause evaluations associated with the following Condition Reports:

- CPAL0101862, "Incorrect Wire Lifted in SPS-E-12 Resulted in Current Transformer Circuit Being Open Circuited."
- CPAL0201832, "Service Water System Filter F-1005 Plugged Up with Sand."

The inspectors verified that the following attributes were adequately addressed in the licensee's evaluations and associated corrective actions:

- Consideration of extent of condition, generic implications, common cause and previous occurrences;
- Classification and prioritization of the resolution of the problem, commensurate with safety significance;

- Identification of the root and contributing causes of the problem;
- Identification of corrective actions which were appropriately focused to correct the problem;
- Completion of completed corrective actions in a timely manner commensurate with the safety significance of the issue; and
- Implementation of longer term corrective actions appear appropriate and adequate compensatory actions were in place to minimize a problem until the permanent action was completed.

The inspectors also discussed the corrective actions and associated evaluations with applicable site personnel including the condition report evaluators and system engineers.

b. Findings

No findings of significance were identified.

## 4OA4 Cross-Cutting Findings

- .1 A finding described in Section 1R06.2 of this report had, as its primary cause, a problem identification and resolution deficiency, in that, the licensee failed to promptly correct a condition adverse to quality associated with flood barriers between the turbine building and component cooling room previously identified by the inspectors in January 2001.
- 40A6 Meetings
- .1 Exit Meeting

The inspectors presented the inspection results to Mr. D. Cooper and other members of licensee management on October 3, 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

Interim exit meetings were conducted for:

- Safeguards inspection with Mr. R. Remus, Assistant Plant Manager, on August 15, 2002
- As-Low-As-Is-Reasonably-Achievable Planning and Controls, and Access Control to Radiologically Significant Areas with Mr. R. Remus, Assistant Plant Manager on August 22, 2002

### 40A7 Licensee Identified Violations

The following violations of very low significance were identified by licensee personnel and are violations of NRC requirements which meets the criteria for Section VI of the NRC Enforcement Manual, NUREG-1600, for being dispositioned as Non-Cited Violations.

## **Cornerstone: Mitigating Systems**

Conditions adverse to quality are required by 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," to be promptly identified and corrected. As described in Condition Reports, CPAL0202723, "Oil Leakage From Differential Pressure Switch DPS-1487/ Housekeeping Issue - Emergency Diesel Generator 1-2," and CPAL0202862, "Conduit on 1-2 Diesel Generator Found Full of Oil," licensee personnel failed to promptly identify and correct a condition adverse to quality.

On July 25, 2002, as a corrective action for CPAL0202723, Work Order 24212928 was completed which replaced the differential pressure switch that was leaking oil. Maintenance personnel, while completing Work Order 24212928, had documented that the differential pressure switch was full of oil, that oil was running down the conduit, that the oil would continue to leak out of the conduit until the conduit was replaced or cleaned out and that the only oil noted during the post maintenance test was the oil that was coming out of the conduit. A work request was written to replace or clean the conduit at an undetermined later date. However, no further actions were taken to evaluate extent of condition and no condition report was generated to enter the issues documented in the work package into the licensee's corrective action program.

On July 31, 2002, operations personnel identified oil leaking from the conduit and approximately two to three gallons of oil was drained from the conduit during troubleshooting. Operations personnel subsequently generated Condition Report CPAL0202862 and declared Emergency Diesel Generator 1-2 inoperable because of poor material condition with the potential to adversely affect required attendant instrumentation.

Consequently, this resulted in entry into an unplanned technical specification action statement for the inoperable emergency diesel generator and emergent work on safety-related plant equipment. The condition adverse to quality, oil in the conduit, that adversely affected emergency diesel generator operability could have been addressed during the scheduled maintenance on July 25, 2002, had licensee personnel addressed the problems that were documented in the work package within the corrective action program.

## **KEY POINTS OF CONTACT**

## <u>Licensee</u>

- T. Brown, Manager, Chemical and Radiological Services
- D. Cooper, Site Vice President
- D. Crabtree, Systems Engineering Manager
- P. Harden, Director, Engineering
- G. W. Hettel, Manager, Maintenance and Construction
- L. Lahti, Licensing Manager
- D. G. Malone, Supervisor, Regulatory Assurance
- D. J. Malone, General Plant Manager
- G. Packard, Operations Manager
- R. Remus, Assistant Plant Manager
- J. Waddell, NMC/Acting Security Manager

### <u>NRC</u>

- J. Eads, Project Manager, NRR
- D. Hood, Project Manager, NRR
- D. Passehl, Acting Branch Chief, RIII
- S. Reynolds, Deputy Division Director, Division of Reactor Projects, RIII
- A. Vegel, Branch Chief, RIII

## LIST OF ITEMS OPENED AND CLOSED

#### **Opened**

- 50-255/02-07-01 NCV Green. 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to ensure the inspection and maintenance of the safety-related expansion joints utilized as flood and high energy line break barriers were prescribed by and accomplished in accordance with documented procedures of a type appropriate to the circumstances.
- 50-255/02-07-02 NCV Green. 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Actions," for the failure to promptly identify and correct conditions adverse to quality regarding Flood Door-196A which protects the safety-related equipment in the component cooling water room from a flood in the turbine building.

#### <u>Closed</u>

- 50-255/02-07-01 NCV Green. 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to ensure the inspection and maintenance of the safety-related expansion joints utilized as flood and high energy line break barriers were prescribed by and accomplished in accordance with documented procedures of a type appropriate to the circumstances.
- 50-255/02-07-02 NCV Green. 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Actions," for the failure to promptly identify and correct conditions adverse to quality regarding Flood Door-196A which protects the safety-related equipment in the component cooling water room from a flood in the turbine building.

# LIST OF DOCUMENTS REVIEWED

# 1R04 Equipment Alignment

Plant Procedures

MO-29	Technical Specification Surveillance Procedure and Basis Document - Engineered Safety System Alignment	Revision 33 and 9
SOP-12	Feedwater System	Revision 41
Checklist CL 12.5 SOP-12 Attachment 14	Auxiliary Feedwater System Supply (Except K-8 Steam Supply)	Revision 41
Checklist CL 12.5 SOP-12 Attachment 15	Except K-8 Steam Supply Checklist	Revision 41
T-345	Completed Special Test T-345 - AFW Pumps P-8A/B Firemain Backup Line Flush, completed May 13, 1994	Revision 2
AP-4.00	Operations Organization, Responsibilities, and Conduct	Revision 23
SOP-20	High Pressure Control Air System	Revision 19
Checklist CL 3.1 SOP-3 Attachment 10	Engineered Safeguards System Checklist	Revision 47
Checklist CL 16 SOP-16 Attachment 2	Component Cooling System Checklist	Revision 22
AP-4.02	Control of Equipment	Revision 18
SWSO-4, Attachment 2	Fire Protection System - Molluscide Treatment for Zebra Mussels	Revision 5
Miscellaneous Docu	ments	
DBD 1.03	Design Basis Document - Auxiliary Feedwater	Revision 5
	Control Room Deficiency, Operator Work-Around and Operator Challenges Reports	August 15, 2002
WO24211178	Accurate Temperature Indication/Detection of Tanks T-2 and T-81 is suspect	

EAR-1999-0174	Review and Revise CIS Design Information in Sections 5.8, 6.7, Table 5.8-4 and Figure 6-6 of FSAR	
M-207, Sheet 11	Piping and Instrument Diagram - Feedwater and Condensate System	Revision 1
M-207, Sheet 2	Piping and Instrument Diagram - Auxiliary Feedwater System	Revision 31
M-205, Sheet 2	Piping and Instrument Diagram - Main Steam and Auxiliary Turbine Systems	Revision 62
M-220, Sheet 1	Piping and Instrument Diagram - Makeup Domestic Water and Chemical Injection Systems	Revision
M-204, Sheet 1A	Piping and Instrument Diagram - Safety Injection Containment Spray and Shutdown Cooling System	Revision 27
M-204, Sheet 1	Piping and Instrument Diagram - Safety Injection Containment Spray and Shutdown Cooling System	Revision 73
M-204, Sheet 1B	Piping and Instrument Diagram - Safety Injection Containment Spray and Shutdown Cooling System	Revision 31
M-203, Sheet 2	Piping and Instrument Diagram - Safety Injection Containment Spray and Shutdown Cooling System	Revision 27
M-209, Sheet 2	Piping and Instrument Diagram - Component Cooling System	Revision 30
Condition Reports Re	eviewed to Assess Problem Identification Characteria	zation
CPAL0002701	Steam Leaking Past Auxiliary Feedwater Pump Normal Steam Supply Valve CV-0522B Disc/Seat	
CAP031154	Corrective Action from CPAL0000625 Not Properly Implemented	
CAP031074	Emergency Feed Supply Line to Auxiliary Feedwater Pumps Subjected to Sand Accumulation	
CAP031446	Broken U-Bolt Identified on Common Drain to Steam Generator Code Safeties	

Condition Reports Reviewed to Assess Cause Evaluations

CPAL970478	Runout of Fire Pumps and or Tank-2 Overpressure Concerns During Auxiliary Feedwater System Crosstie	
CPAL0000625	Auxiliary Feedwater Pump P-8A Outboard Motor Bearing Contained Metal Shavings	
CPAL0002607	Contaminant Found in Bottom of Auxiliary Feedwater Pump P-8A Inboard and Outboard Pump Bearing Oilers	
1R05 Fire Protection	on	
Plant Procedures		
FP-MS-1	Fire Protection Check Sheet - Monthly Inspection and Testing of Fire Doors for Fire Areas 17, 24, 26	Revision 2
FPSP-RM-5	Palisades Plant Fire Damper Data Sheet - Fire Area 3	
FPSP-SI-1	Data Sheet for Alarm Bells and Ionization Smoke Detectors for Fire Areas 3,10, 17, 26	Revision 2
FPSP-RP-11	Fire Barrier Penetration Seal/Conduit Seal Inspection Form for Fire Areas 3, 17, 10, 24, 26	Revision 4
FPSP-MO-1	Fire Suppression Water System Valve Alignment - Verification Checkoff Sheet for MV-FP147	Revision 3
FPSP-QO-2	Fire Protection Sprinkler System Water Flow Switch Alarm Check Sheet for Fire Areas 3, 26	Revision 1
FPSP-SO-2	Safety-Related Fire Door Data Sheet for Fire Area 24, 26	Revision 0
FPSP-AO-2	Fire Suppression Water System Fire Valve Operation Data Sheet	Revision 3
FPSP-RO-9	Sprinkler Head Locations, Fire Areas 3, 26	Revision 0
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
PFM-E-1	Emergency Post-Fire Repair For Appendix R Equipment	Revision 4

ONP25.2	Off-Normal Procedure - Alternate Safe Shutdown Procedure	Revision 17
Miscellaneous Docur	<u>ments</u>	
EA-PSSA-00-001	Palisades Plant Post Fire Safe Shutdown Summary Report, for Fire Areas 10, 3, 5, 24, 26, 17, and 32	Revision 1
Palisades Plant Fire Hazards Analysis	Analysis for Fire Areas 10, 3, 5, 24, 26, 17, and 32	Revision 4
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
EA-FPP-95-056	Engineering Analysis - Evaluation of the Effects of a Fire Occurring in the SIRW Tank Area (Fire Area 32) on Associated Fire Barriers	Revision 0
EA-FPP-95-041	Engineering Analysis - Analysis of Combustible Loading for Fire Area 32, SIRW Tank and CCW Roof Area	Revision 1
X-NECO/FP009	Preventative Maintenance Activity, Inventory of Appendix R Emergency Parts	
Condition Reports R	eviewed to Assess Problem Identification Characteria	zation
CPAL0202678	Nitrogen Bottles For N2 Station #6 Secured with Rubber Tie Down Strap	
CPAL0202717	FSAR Table 9-10 Incorrectly Indicates the Number of Water Flow Switches Associated With the 1-D Switchgear Room 223 Automatic Fire Suppression System	

CPAL0202542	Fire Door 71 From Bus 1C to Diesel Generator 1- 1 Room Found Partially Open	
CPAL0202646	Deficiencies Note During NRC Walkdown of West Safeguards	
CAP031435	Drawing Inaccuracies on P&ID M-216, Sheet 7 for Fire Area 32	
CAP031260	Inadequate Installation of Connector on Appendix R Spare Cables	
Condition Reports Reviewed to Assess Corrective Actions		
CPAL0102818	Apparent Trend of the "Hotbutton" Fire Protection	
CPAL0200253	Apparent Decline in Engine Speed For Diesel Engine K-5 / Fire Pump P-9B	

## 1R06 Flood Protection

Periodic and Predetermined Activity (Preventative Maintenance)

MSM-071	Preventive Maintenance for the Inspection of Watertight Barriers	
24714345	Work Order - Completion of MSM-071 1998 Inspections	June 1998
24614409	Work Order - Completion of MSM-071 1997 Inspections	July 1998
24512369	Work Order - Completion of MSM-071 1996 Inspections	March 1996
24111281	Work Order - Annual Inspection of Watertight Barriers	December 2001
MSM-091	5-year Preventive Maintenance for the Inspection of Watertight Barriers	
Miscellaneous Docume	<u>nts</u>	
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"	Revisions 9, 8, 7

M0384 0010	Vendor Manual - Garlock Inc. Installation and Maintenance Instructions for Expansion Joints	
	Bechtel Original Civil/Structural High Energy Line Break (HELB) Outside Containment Design Calculations	May 27, 1975
5935-M-139	Requisition Number for Engineered Safeguards Pump Room Pipe Penetration Seals and Expansion Joints	December1969
24812207	Work Order - Inspect Expansion Joint XJ- 0430 per MSM-M-16	October 1999
24812204	Work Order - Inspect Expansion Joint XJ- 0431 per MSM-M-16	October 1999
289549	Work Request - Remove Insulation from XJ- 432 and inspect expansion joint	
C-100	Construction Print - Standard Concrete Details	Revision 5
C-88	Construction Print - Architectural Details	Revision 1
C-48	Construction Print - Architectural Auxiliary and Reactor Buildings	Revision 19
Condition Reports Revi	ewed to Assess Problem Identification Character	ization
CAP031146	Gaps Identified in Flood Door 196A to Component Cooling Water Room	
CAP031150	June 1998 Expansion Joint Inspection Results Not Effectively Documented/Reviewed	
CAP031164	Flood Doors Dogging Requirements	
CAP031186	Expansion Joint XJ-423 (Bellows Expansion Joint for HB-23-16") Failed Visual Inspection)	
CAP031187	Expansion Joint XJ-425 (Bellows Expansion Joint for HC-4-8") Failed Visual Inspection)	
CAP031188	Expansion Joint XJ-432 (Bellows Expansion Joint for HB-23-24") Failed Visual Inspection)	
CAP031355	Non-Engineering Documentation to Support Operability Determinations	

Condition Reports Reviewed to Assess Corrective Actions

CPAL0202352	Inspection Discrepancy Results for Expansion Joint XJ-0432 in MSM-M-16 Performed in June 1998
CPAL0100142	Some Flood Barriers Not Included in Procedure for Inspection of Watertight Barriers
CPAL0104137	Potential Adverse Trend: Material Condition of Watertight Doors
1R11 Licensed Opera	tor Requalification

SPE-Y	Simulator Performance Exam - LOCA with loss of Bus 1C and Stuck Rods	Revision 1
	Documented results for simulator performance evaluation, Shift 3	September 25, 2002

## 1R12 Maintenance Effectiveness

# Miscellaneous Documents

	Emergency Diesel Generator Room Fans Maintenance Rule Scoping Document and Related Maintenance Rule Performance Indicators
	Online Work Review Report - Work Orders for work weeks 2242 and 2244
EAR 98-0050	Engineering Assistance Request - V-24 Fan Motor Conduit Repairs
Work Orders	
24513530	V-24A, K-6A Diesel Generator Room Vent Fan
24513529	V-24B, K-6A Diesel Generator Room Vent Fan
24513531	V-24C, K-6A Diesel Generator Room Vent Fan
24013808	PM-Breaker / Starter 52-2425 V-24C
24013711	PM-Breaker / Starter 52-2435 V-24D
24112399	1-2 EDG Air Dampers D-28, D-29 and D-22 PM
24112713	V-24B Gravity Damper

Condition Reports Reviewed to Assess Corrective Actions

CPAL9800118	V-24D Motor Conduit Flange Bolts Broken/Missing	
CAPL9800124	Breaker 52-2545 (V-24B) Found in Tripped Condition	
CPAL9800321	V-24B Cycling Frequently In Auto	
CPAL0200504	Work Orders for Diesel Generator Room Ventilation Backdraft Damper Replacement Needs TM to Maintain EDG Operability	
CPAL0103706	D/G Room Vent Fan Would Not Start In Hand	
CPAL0001121	Diesel Generator Room Ventilation Temperature Setpoints in Question	
CPAL9801398	Breaker 52-2435 (V-24B) Connector Loose	
Condition Reports Reviewed to Assess Problem Identification Characterization		
CAP031029	Equipment Control During Maintenance - Diesel Generator Cooling Fans	
CAP031031	Incomplete MOD Package EAR-98-0050 - Corrective Action Incomplete	

## 1R13 Maintenance Risk Assessments and Emergent Work Evaluation

#### Plant Procedures

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

### Miscellaneous Documents

Operator's Risk Reports, Shift Supervisor Log Entries, and Daily Work Schedules for July 29, 2002, through August 1, 2002, during emergent maintenance on Emergency Diesel Generator 1-2 concurrent with a planned outage on Component Cooling Water Pump P-52B

Operator's Risk Reports, Shift Supervisor Log Entries, and Daily Work Schedules for August 20<sup>th</sup> through 22<sup>nd</sup>, 2002, During Planned Maintenance Activities on Fuel Oil Transfer Pump P-18A Operator's Risk Reports, Shift Supervisor Log Entries, and Daily Work Schedules for September 6<sup>th</sup> during planned maintenance activities in the switchyard and on Emergency Diesel Generator 1-1

Operator's Risk Reports, Shift Supervisor Log Entries, and Daily Work Schedules for September 11-13, 2002, during a planned outage on the switchyard Front Bus and safeguards transformer

Operator's Risk Reports, Shift Supervisor Log Entries, and Daily Work Schedules for September 17<sup>th</sup> through 20<sup>th</sup>, 2002, During Planned Maintenance Activities on High Pressure Safety Injection Pump P-66A and High Pressure Air Compressor C-6A, in addition to emergent maintenance on Electrical Bus 1-E

Condition Reports Reviewed to Assess Problem Identification Characterization

CAP031305	Degraded Motor Condition Found While
	Performing Preventive Maintenance on
	Compressor C-6A Motor

CAP031313 Spurious Alarm EK-3519, "Diesel Fire Pump P-41 Engine Trouble"

## 1R14 Non-Routine Plant Evolutions and Events

# Plant Procedures

SOP-18B	Radioactive Waste System - Solid	Revision 18
WI-RSD-R-008	Spent Resin Transfers To Resin Liners In Track Alley	Revision 7
SOP-2B	Chemical and Volume Control System Purification and Chemical Injection	Revision 14
Miscellaneous Documents		
	Spent Resin Transfer pre-job checklist	July 15, 2002
P020524	Radiation Work Permit - Sluice T-100 resin to a HIC in a shipping cask in Track Alley	Revision 0
A-CMT-97-068	Action item record - Reply to Notice of Violation, inadequate procedure for the operation of the solid radwaste system	September 8, 1997

	Radiation dose summary for T-100 resin sluice	
P020518	Radiation Work Permit - Perform Surveys and Add Oil to Primary Coolant Pump P-50D	Revision 1
	Radiological Survey Sheet - "B" Steam Generator Platform (618' / 624')	August 26, 2002
	Radiation dose summaries for oil additions to PCP P-50D	
Condition Reports Re	eviewed to Assess Problem Identification Characteria	zation
CPAL0202715	Enough Clean Radwaste Filters Not Available for T-100 Spent Resin Storage Tank Sluice	
CPAL0202712	Valve Stem Sheared on MV-DMW737, Primary Makeup Water to T-100, During T-100 Spent Resin Storage Tank Sluice	
CPAL0202688	Spent Resin Tank T-100 Sluice Results in Elevated Dose Rates In Various Radwaste Systems	
CPAL0202641	F-57A, Primary Drain Tank Filter Became Clogged While Draining Water From T-100 Radwaste Spent Resin Storage Tank	
CAP031331	Unexpected Alarms due to Bus 1E Ground	
CAP031363	Breaker 152-306 Failed to Close from the Control Room When Restored from Bus 1E Troubleshooting	
CAP031367	Bus 1E Ground Identified on X-Phase Bolted Connection of Heater Drain Pump P-10B	
CAP031281	Primary Coolant Pump P-50D Lower Oil Reservoir Change	
CAP031282	Fuel Oil Found in Diesel Fire Pump P-41 Lube Oil Sump	

## 1R15 Operability Evaluations

CPAL0003231	DPS-1487 (K-6B Lube Oil Differential Pressure Switch) Found Leaking During Calibration
WO24212928	Work Order - K-6B Lube Oil Filter Differential Pressure, DPS-1487

CPAL0202723	Condition Report Evaluation - Oil Leakage From Differential Pressure Switch DPS-1487 / Housekeeping Issue - Emergency Diesel Generator 1-2	
CPAL0202862	Condition Report Evaluation - Conduit on 1-2 Diesel Generator Found Full of Oil	
CAP031009	Multiple Check Valves Incorrectly Modeled in System Hydraulic Analyses	
CAP031074	Emergency Feed Supply Line to Auxiliary Feedwater Pumps Subjected to Sand Accumulation	
CAP031150	June 1998 Expansion Joint Inspection Results Not Effectively Documented/Reviewed	
CAP031164	Flood Doors Dogging Requirements	
CAP031186	Expansion Joint XJ-423 (Bellows Expansion Joint for HB-23-16") Failed Visual Inspection)	
CAP031187	Expansion Joint XJ-425 (Bellows Expansion Joint for HC-4-8") Failed Visual Inspection)	
CAP031188	Expansion Joint XJ-432 (Bellows Expansion Joint for HB-23-24") Failed Visual Inspection)	
Miscellaneous Docu	ments	
SWSO-4, Attachment 2	Fire Protection System - Molluscide Treatment for Zebra Mussels	Revision 5
EA-A-PAL-94-095	Engineering Analysis - Auxiliary Feedwater Pumps Net Positive Suction Head	Revision 0
EA-C-PAL-95- 0053B-01	Engineering Analyses - Incorporation of a Higher Auxiliary Feedwater Pump Low Suction Pressure Trip Setpoint from the Tank-2/-81 Inventory Calculations Using the RETRAN Program	Revision 2
Condition Reports F	Reviewed To Assess Problem Identification Characte	erization
CAP026576	Diesel Past Operability Not Documented Under CPAL0202862	

# 1R19 Post Maintenance Testing

# Plant Procedures

QO-15	Inservice Test Procedure - Component Cooling Water Pumps and associated basis document	Revision 16
EM-09-04, Attachment 4	Pump Test Hydraulic Circuits	Revision 19
EM-09-04, Attachment 2	Table 2, Allowable Ranges of Test Quantities	Revision 19
SOP-22	System Operating Procedure - Emergency Diesel Generators	Revision 32
Work Orders		
24113333	Replacement of I/I-1010C; Replace TMM Channel "C" Delta "T" Power Deviation Isolator with a New Replacement	
24212973	K-6B Lube Oil Filter Differential Pressure Switch	
24210985	Component Cooling Water Pump P-52B Motor	
24210890	Pump P-18A Pump Coupling Inspection, Lubrication and Preventive Maintenance	
24111602	Repair EX-07, Safeguards Transformer 1-1, Disconnect MOD-24F1	
24114065	Repair EX-07, Safeguards Transformer 1-1, Minor Hot Spots on Bolted Connections	
24211241	Compressor C-6B, Routine PM Breaker 52-771	
24114433	Compressor C-6B, Drill Slots in Compressor Box to Allow Proper Sheave	
24210840	Compressor C-6B Aftercooler/Air Dryer/Valve Preventive Maintenance	
24112484	Compressor C-6B Breaker 52-771 Cycled When Unit Reached High Pressure Shutdown	
Miscellaneous Docur	<u>ments</u>	
SHO-1		
EAR-200-0403	Engineering Assistance Request - Replacement/Redesign of Thermal Margin Monitor Isolators	
	VT-2 Examiner Certification Records	July 31, 2002

M0034 0075	Vendor Manual - Falk Corporation Installation
	and Maintenance Instructions for Steel Flex
	Couplings Type T10

Condition Reports Reviewed to Assess Problem Identification Characterization

CAP026573	Post Maintenance Testing For 1-2 Diesel
CPAL0202881	Threaded Connection for MV-CC189 (P-52B Discharge Drain) Found Loose During RTS for P- 52B
CPAL0202867	Gaskets Found on P-52B Rotating Element Not on Design Document
CPAL0202868	P-52B Rotating Element Assembled Incorrectly
CAP030858	Data Rounding and Editorial Changes Associated With TSSP QO-15

## 1R22 Surveillance Testing

Completed Technical Specification Surveillance Tests

QO-14	Technical Specification Surveillance Procedure - Inservice Test - Service Water Pumps, completed July 1, 2002 for Service Water Pump P-7B	Revision 18
QO-14	Technical Specification Surveillance Procedure Basis Document - Inservice Test - Service Water Pumps	Revision 12
QE-35	Technical Specification Surveillance Test - ED-01 and ED-02 Battery Checks - Quarterly, Completed July 23, 2002	Revision 5
QE-35	Technical Specification Surveillance Test Basis ED-01 and ED-02 Battery Checks - Quarterly, Completed July 23, 2002	Revision 3
RO-52	Fire Suppression Water System Functional Test and Fire Pump Capacity Test - Completed September 13, 2002	Revision 20
RO-52	Fire Suppression Water System Functional Test and Fire Pump Capacity Test - Completed October 26, 2001 for Fire Pump P-9B	Revision 20

RO-52	Fire Suppression Water System Functional Test and Fire Pump Capacity Test - Completed November 29, 2001 for Fire Pump P-41	Revision 20
RO-52	Fire Suppression Water System Functional Test and Fire Pump Capacity Test - Completed July 20, 2001	Revision 19
RI-38	Technical Specification Surveillance and Special Test - Safety Injection Refueling Water Tank Level Instrument Calibration - Completed September 23, 2002	Revision 12
RPS-I-7	Anticipated Transient Without Scram (ATWS) Calibration / Functional Testing	Revision 3
Miscellaneous Docur	nents	
	Certificates of Calibration for the following pieces Measuring and Testing Equipment : 006907, 003569, and 008303	various test dates
RO-52	Fire Suppression Water System Functional Test and Fire Pump Capacity Test Basis Document	Revision 9
RI-38	Technical Specification Surveillance and Special Test Basis Document - Safety Injection Refueling Water Tank Level Instrument Calibration	Revision 7
DBD-2.05	Design Basis Document - Reactor Protective System Safety Injection Signal Anticipated Transient Without Scram	Revision 3
Condition Reports Reviewed to Assess Problem Identification Characterization		
CAP031279	Issues Associated With Execution of RO-52 Fire Pump Capacity Test	
CAP031316	Relief Valve Setting Procedural Discrepancies Noted in Test RO-52 Rev. 20	
CAP031328	Potential Technical Specification Surveillance Procedure RO-52 Frequency Reduction Opportunity	
CAP031329	Technical Specification Procedure RO-52 Inadequacies	

1R23 Temporary	Plant Mo	difications	
Plant Procedures			
AP-9.31	Temp	porary Modification Control	Revision 19
Temporary Modif	fication F	Packages	
TM-2000-006	Isolat Supp	e Auxiliary Feedwater Pump Turbine Steam ly from Pressure Control Valve CV-0522A	
TM-99-032	Read	tor Head Temperature Research Project	
Condition Reports	s Review	ed To Assess Problem Identification Charact	erization
CAP031113	Temp Hang	borary Modification TM 2000-06 Tag #5 Not ing in the Plant	
1E06 Emergency	<u>Plan Dril</u>	I Evaluation	
Plant Procedures			
EI-3	Com	munications and Notifications	Revision 19
EI-1	Emer	gency Classification and Actions	Revision 40
20S1 Access Con	trol to R	adiologically Significant Areas	
<u></u>		Dose Reduction Action Plan	August 19, 2002
RWP 2002-0517		T-100 Spent Resin Storage Tank Maintenance	Revision 1
RWP 2002-0517		RWP Scope Addition Form, T-100 Spent Resin Storage Tank Maintenance	Revision 0
AP Procedure No.	. 7.03	Radiation Work Permit	Revision 15
20S2 As-Low-As-	Is-Reasc	nably-Achievable (ALARA) Planning and Co	ntrols
RWP 2001-1035		ALARA Post-Job Review, Reinstall Seismic Restraints on the Control Rod Drive Upper Housings	September 17, 2002
RWP 2001-1034		ALARA Post-Job Review, Reinstall Control Rod Drive Upper Housings	September 19, 2002

	Refueling Outage 2001 ALARA Report	Revision 1
	Dose Reduction Action Plan	August 19, 2002
	Palisades Nuclear Plant Self-Assessment Report, Hot Spot Program 11.28.01 - 12.12/01	
AP Procedure No. 7.17	Hot Spot Program	Revision 2
AP Procedure No. 7.02	ALARA Program	Revision 11

<u>3PPI</u>	<u>PI Physical Protection - Access Authorization (AA) Program</u>			
NGA0 <sup>2</sup>	1FO001H	NMC Plant Access Training	May 31, 2002	
FP-S-A	A-001	Access Authorization Program - CBOP	Revision 4	
FFD-0	1	FFD Requirements and Responsibilities	Revision 13	
		AA/FFD - Condition Reports (13)	January - August 2002	
02-002	2-8-043	FFD/AA - Nuclear Oversight Observation Report	July 9, 2002	
		Westinghouse Access Programs Fitness-For-Duty Program	January 18, 202	
		Condition Reports - Security Related	January - July 2002	

<u>3PP2</u> Physical Protection	on - Access Control	
SIP-18	Security Systems and Equipment Testing	August 17, 2001
SIP-4	Personnel Access	April 29, 2002
SIP-5	Search Procedures and Property Removal Requirements	August 3, 2001
SIP-7	Photo Badging	July 27, 2001

SIP-16	Locks, Keys, and Photo Badge Control	July 21, 2000		
	Palisades Safeguards Event Log	January - July 2002		
	Condition Reports - Security Related	January - July 2002		
PAP-10.24	NMC Access Authorization Program			
	Vehicle Search Detection Drill - 23	January - July 2002		
	Access Search Detection Drill - 28	January - July 2002		
40A1 Performance	Indicator Verification - Physical Protection			
3.09	Data Collection, Review and Reporting for NRC Performance Indicator Program - Physical Protection Program	Revision 5, April 11, 2002		
	Performance Indicator Log - Physical Protection	January - July 2002		
	Safeguards Event Logs	January - July 2002		
Performance Indicator Verification - Safety System Unavailability				
	AFW Unavailability Data Reported To NR 3 <sup>rd</sup> Quarter 2000 thru 2 <sup>nd</sup> Quarter 2002	C from		
Control Room Log Entry Reports 3 <sup>rd</sup> Quarter 2000, and 1 <sup>st</sup> and 2 <sup>nd</sup> Quarter 2002				
	RHR Unavailability Data Reported To NRC 2 <sup>rd</sup> Quarter 2001 thru 2 <sup>nd</sup> Quarter 2002	C from		
	RHR System Engineer's Compilation of Unavailability Data from 2 <sup>rd</sup> Quarter 2001 Quarter 2002	thru 2 <sup>nd</sup>		
NEI 99-02	Regulatory Assessment Performance Indi Guideline	cator Revisions 0, 1 and 2		

## Plant Procedures

	RO-127	Auxiliary Feedwater System 18 Month Test		
	QO-21	Inservice Test Procedure - Auxiliary Feedwater Pumps		
	Work Orders			
	24014930	P-8A Perform Alignment of Pump P-8A to Motor EMA-1104		
	24914012	P-8B Packing Failed, Replace Outboard Packing and Shaft O-Ring		
	24014258	P-8C, Pump Coupling Inspection/Lube PM		
	Condition Reports R	eviewed To Assess Corrective Actions		
	CPAL0202435	Adverse Trend In INPO Indicator for Auxiliary Feedwater		
(	Condition Reports Re	viewed To Assess Appropriate Characterization		
	CAP031443	Errors Identified in the Maintenance Rule Performance Indicator for Containment Spray Pump P-54C		
	CAP031475	NRC Performance Indicator Data for RHR System		
l	Performance Indicator Verification - Radiation Safety and RCS Activity			
		NRC Occupational Exposure Control Effectiveness Reports (Action Request Reviews)	Apr July July Sep Oct Dec Dec	

April 13, 2001, July 10, 2001, July 15, 2001, September 28, 2001, October 31, 2001, December 4, 2001, December 31, 2001, January 22, 2002, February 1, 2002, February 28, 2002, March 28, 2002, March 28, 2002, May 30, 2002, July 1, 2002

March 2002

Palisades 2001 Annual Radioactive Effluent Release and Waste Disposal Report

	1 <sup>st</sup> and 2 <sup>nd</sup> Quarter Offsite Dose Reports	August 2002
CPAL0200359	Failure of Workers' ED to Record Dose in High Radiation Area	January 24. 2002
CPAL0200441	Door Handle to VCT Door, a Locked High Radiation Area Was Loose	January 31, 2002
CPAL0201659	Unintentional and Nonmalevalent Exit From Vital Area	April 26, 2002
CPAL0201685	Individual Received Entry Level Dose Alarm	April 29, 2002
CPAL0201972	Telemetric Dosimeter Did Not Function Properly	May 19, 2002
CPAL0202506	Electronic Dosimeter Entry Dose Limit Alarm (EDL) Set Point Exceeded	July 2, 2002

## 4OA2 Identification and Resolution of Problems

## Condition Reports Reviewed to Assess Corrective Actions

CPAL0101862	Incorrect Wire Lifted in SPS-E-12 Resulted in
	Current Transformer Circuit Being Open Circuited

CPAL0201832 Service Water System Filter F-1005 Plugged Up with Sand and associated corrective action documents

# Miscellaneous Documents

EOP - 1.0	Emergency Operating Procedure - Standard Post Trip Actions	Revision 12
EOP - 9.0, MVAE- AC-1	Functional Recovery Procedure - Maintenance of Vital AC Power -Offsite Power	Revision 14
EOP - 9.0, MVAE- AC-2	Functional Recovery Procedure - Maintenance of Vital AC Power -Diesel Generators	Revision 14
ONP - 6.1	Off Normal Procedure - Loss of Service Water	Revision 10