

October 26, 2005

Mr. Paul A. Harden
Site Vice President
Nuclear Management Company, LLC
Palisades Nuclear Plant
27780 Blue Star Memorial Highway
Covert, MI 49043-9530

SUBJECT: PALISADES NUCLEAR PLANT
NRC INSPECTION REPORT 05000255/2005008

Dear Mr. Harden:

On September 30, 2005, the U. S. Nuclear Regulatory Commission (NRC) completed an inspection at your Palisades Nuclear Plant. The enclosed report documents the inspection findings which were discussed on October 5, 2005, 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, one self-revealed finding of very low safety (Green) was identified which involved a violation of NRC requirements. However, because the violation was of very low safety significance and because the issue has been entered into your corrective action program, the NRC is treating the violation as a Non-Cited Violation in accordance with Section VI.A.1 of the Enforcement Policy.

If you contest the subject or severity of a Non-Cited Violation, 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, 2443 Warrenville Road, Suite 210, Lisle, IL 60532-4352; the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at the Palisades facility.

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Sincerely,

/RA/

Christine A. Lipa, Chief
Reactor Projects Branch 4
Division of Reactor Projects

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

Enclosure: Inspection Report 05000255/2005008
w/Attachment: Supplemental Information

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

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

Report No: 05000255/2005008

Licensee: Nuclear Management Company, LLC

Facility: Palisades Nuclear Plant

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

Dates: July 1 through September 30, 2005

Inspectors: J. Ellegood, Senior Resident Inspector
J. Giessner, Resident Inspector
M. Garza, Resident Inspector
J. House, Senior Radiation Specialist
D. Jones, Reactor Engineer
R. Lerch, Project Engineer
R. Ruiz, Reactor Engineer
M. Parker, NRC Contractor
R. Winter, Reactor Engineer

Approved by: C. Lipa, Chief
Branch 4
Division of Reactor Projects

Enclosure

SUMMARY OF FINDINGS

IR 05000255/2005008; 07/01/2005 - 09/30/2005; Palisades Nuclear Plant; Maintenance Effectiveness.

This report covers a 3-month period of baseline inspections. The inspections were conducted by Region III inspectors and resident inspectors. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process (SDP)." Findings for which the SDP does not apply may be "Green" or be assigned a severity level after NRC management review. 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 and Self-Revealed Finding

Cornerstone: Mitigating Systems

- Green. A finding of very low significance (Green) was self-revealed on June 6, 2005, when the licensee discovered that a safety injection valve failed to close as expected. The licensee determined that the procedure used to reassemble the safety-related breaker for the valve was inadequate. This finding represented a Non-Cited Violation of Technical Specifications 5.4, "Procedures," in that procedures were not adequate to ensure the safety related breaker was adequately reassembled after maintenance. Corrective actions included correcting the beaker and looking at other possible breakers with similar failure mechanisms. The licensee entered the item in the Corrective Action Program. The deficiency was also an issue in the cross-cutting area of problem identification and resolution in that a previous event investigation from the same valve failing, and corrective actions from the event, were not effective.

The inspectors determined the issue was more than minor because the issue impacted the cornerstone attributes of equipment performance and procedure quality. The deficiency affected the mitigating system objective to ensure availability and reliability of systems that respond to events to prevent core damage. Specifically, some alternate functions, where the valve was shut in the Emergency Operating Procedures to control charging or ensure adequate hot leg injection, would not be available based on this deficiency. (Section 1R12)

B. Licensee-Identified Violations

None.

REPORT DETAILS

Summary of Plant Status

The plant operated at or near full power during the inspection period with the following exceptions:

- On September 1, 2005, the licensee shutdown the plant due to a hydrogen leak on the main generator. After repairing the leak, the licensee started the plant on September 2. The plant returned to full power on September 5.

1. REACTOR SAFETY

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

1R01 Adverse Weather (71111.01)

a. Inspection Scope

The inspectors reviewed the licensee's preventive maintenance of onsite lightning protection equipment. The inspectors verified that the licensee had lightning protection equipment on risk significant structures such as the high voltage transformers. Also, the inspectors verified that the lightning protection equipment was routinely inspected and tested.

This constitutes one sample.

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment

.1 Partial Walkdowns (71111.04Q)

a. Inspection Scope

The inspectors completed three equipment alignment inspection samples by performing partial walkdowns on the following risk-significant plant equipment:

- emergency diesel generator (EDG) 1-1 during inoperability of EDG 1-2 on August 10, 2005
- instrument air compressors C-2A and C-2C during inoperability of compressor C-2B
- auxiliary feedwater right train during planned work on the left train

During the walkdowns, the inspectors verified that power was available, that accessible equipment and components were appropriately aligned, and that no open work orders for known equipment deficiencies existed which would impact system availability.

The inspectors also reviewed selected condition reports related to equipment alignment problems and verified that identified problems were entered into the corrective action program with the appropriate significance characterization and that planned and completed corrective actions were appropriate and implemented as scheduled.

b. Findings

No findings of significance were identified.

.2 Complete Walkdown (71111.04S)

a. Inspection Scope

The inspectors completed one semi-annual equipment alignment inspection sample by performing a complete walkdown of the service water system. Utilizing piping and instrumentation diagrams and system checklists, the inspectors verified that accessible system components were correctly aligned. The inspectors also reviewed open maintenance work orders to verify that the equipment's safety function was not adversely impacted by pending work.

The inspectors reviewed selected condition reports associated with the service water system to verify that identified problems were entered into the corrective action program with the appropriate significance characterization. The inspectors also verified that planned and completed corrective actions were appropriate.

b. Findings

No findings of significance were identified.

1R05 Fire Protection

.1 Fire Area Walkdowns (71111.05Q)

a. Inspection Scope

The inspectors completed eleven fire protection inspection samples by touring the following areas in which a fire could affect safety-related equipment:

- C exterior walkdown of fire hydrants and post indicating valves
- C cooling tower water pump house
- C 'D' switchgear room
- C EDG 1-1 and 1-2 fuel oil day tank rooms
- C station battery rooms
- C cable spreading room
- C charging pump room

- C auxiliary building 590' elevation
- C emergency shutdown panel
- C electrical equipment room 725
- C track alley

The inspectors verified that transient combustibles and ignition sources were appropriately controlled, and that the installed fire protection equipment in the fire areas corresponded with the equipment which was referenced in the Updated Final Safety Analysis Report, Section 9.6, "Fire Protection." The inspectors also assessed the material condition of fire suppression systems, manual fire fighting equipment, smoke detection systems, fire barriers and emergency lighting units. For selected areas, the inspectors reviewed documentation for completed surveillances to verify that fire protection equipment and fire barriers were tested as required to ensure availability.

The inspectors reviewed selected condition reports associated with fire protection to verify that identified problems were entered into the corrective action program with the appropriate significance characterization. The inspectors also verified that planned and completed corrective actions were appropriate.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification (71111.11Q)

.1 Quarterly Review

a. Inspection Scope

The inspectors completed one inspection sample pertaining to licensed operator requalification by observing licensed operator actions in the control room simulator on August 10, 2005. The inspectors assessed the operators' ability to use plant procedures to respond to simulated plant alarms and emergency conditions. The inspectors assessed the operators' ability to evaluate plant conditions and determine the proper emergency action level. The inspectors assessed the licensee evaluators' ability to evaluate the operators' performance and to identify operator performance deficiencies.

b. Findings

No findings of significance were identified.

1R12 Maintenance Effectiveness

.1 Resident Inspector Quarterly Review (71111.12Q)

a. Inspection Scope

The inspectors evaluated the licensee's handling of selected degraded performance issues involving the following four risk-significant structures, systems, and components (SSCs):

- C auxiliary feedwater system
- C high pressure safety injection
- C diesel driven fire pumps
- C 2400v AC power system

The inspectors reviewed the licensee's implementation of the maintenance rule requirements to verify that component and equipment failures were evaluated and appropriately dispositioned. The inspectors also verified that the selected systems and components were scoped into the maintenance rule and properly categorized as (a)(1) or (a)(2) in accordance with 10 CFR 50.65.

The inspectors reviewed: the licensee's maintenance rule performance indicators to verify that the equipment status had been appropriately categorized in accordance with the maintenance rule program; a sample of related condition reports written over the last 24 months to verify that the corrective actions for identified problems were appropriate; completed work orders and work order histories to determine if there was an adverse trend in equipment performance that could be attributed to inappropriate work practices; and; documents to determine if there were any common cause issues that had not been addressed. Additionally, the inspectors reviewed the licensee's performance criteria to verify that the criteria adequately monitored equipment performance.

b. Findings

Introduction: A self-revealed finding of very low significance (Green) and an associated Non-Cited Violation of TS 5.4, "Procedures", occurred on June 6, 2005 when the HPSI discharge valve failed to close. The licensee determined that the procedure used to reassemble the safety-related breaker for the valve's motor operator was inadequate.

Description: On June 6, 2005 while filling the "C" safety injection accumulator, the HPSI discharge valve, MO-3064 failed to close. The licensee took actions in accordance with their procedures and closed the valve. After closing the valve, the licensee performed troubleshooting on the valve and determined that the pivot yoke in the breaker for the motor operator was misaligned and would intermittently prevent closure of the valve. The troubleshooting team confirmed the failure mechanism by repeating failures during bench testing of the breaker.

Further investigation by the licensee demonstrated that significant force was required to realign the pivot yoke. Therefore, the most reasonable cause for the misalignment was maintenance conducted in August 2004 (WO 24324712 - breaker clean and inspect).

At the time of the maintenance, the procedure used SPS-E-11 "480 Volt Breaker Inspection and Repair," which did not include direction to ensure proper alignment of the pivot yoke.

The licensee conducted an extent of condition review which revealed a population of breakers which had been worked and were of the same style. The inspection identified one additional breaker, for the west engineering safeguards sump pump breaker, with a misaligned pivot yoke. The licensee corrected the deficiency.

A failure to operate of valve MO-3064 had previously occurred on May 9, 2005 following refilling of the "C" Safety Injection tank after routine sampling. However, during this occurrence, the licensee declared an unusual event when a check valve unseated and caused primary leakage in excess of TS limits. This self-revealed finding was a Green NCV (2005006-04) for the use of inadequate procedures to depressurize a portion of the safety injection line creating a loss of coolant. In this investigation of the valve's failure to close, the licensee erroneously concluded that correction of a low torque switch setting would prevent recurrence.

Analysis: The inadequate procedure describing the breaker maintenance for a safety-related breaker was a performance deficiency which warranted a significance determination. The inspectors determined the issue was more than minor in accordance with Inspection Manual Chapter (IMC) 0612, Appendix B because the issue impacted the cornerstone attributes of equipment performance and procedure quality. The deficiency affected the mitigating system objective to ensure availability and reliability of systems that respond to events to prevent core damage because closure of the valve was included in Emergency Operating Procedures (EOP) for certain accident scenarios. Specifically, some EOPs specify shutting the valve to control charging or ensure adequate hot leg injection, however, the valve would not be available based on this deficiency. The deficiency also affected the cross-cutting area of problem identification and resolution in that the previous event's investigation and corrective actions were not effective.

Using IMC 0609, Appendix A, "SDP Phase 1 Screening Worksheet for IE [Initiating Events], MS [Mitigating Systems] and B [Barrier Integrity] Cornerstones" the inspectors determined the finding impacted the mitigating systems cornerstone. The inspectors answered no to the phase one questions; therefore, the finding was of very low safety significance (Green).

Enforcement: Technical Specification (TS) 5.4 required that procedures be established, implemented, and maintained as recommended in Regulatory Guide 1.33. Regulatory Guide 1.33 section 9 indicated procedures should be properly performed and written for work on safety-related equipment. Contrary to this requirement, procedure SPS-E-11, "480 Volt Breaker Inspection and Repair" was inadequate in ensuring the proper reassembly of the breaker.

Because this violation was associated with a finding of very low safety significance and because the finding was entered into the licensee's corrective action program (CAP 048210), this violation is being treated as an NCV, consistent with Section VI.A.1 of the NRC Enforcement Policy (NCV 05000255/2005008-01). The corrective action

included realigning the misaligned component and correcting a similar problem on another breaker.

.2 Periodic Evaluation (71111.12B)

a. Inspection Scope

The inspectors examined the periodic evaluation report completed for the period of August 2002 through July 2004. To evaluate the effectiveness of Maintenance Rule 10 CFR 50.65 (a)(1) and (a)(2) activities, the inspectors examined a sample of (a)(1) Action Plans, Performance Criteria, Functional Failures, and Condition Reports (CRs). These same documents were reviewed to verify that the threshold for identification of problems was at an appropriate level and the associated corrective actions were appropriate. Also, the inspectors reviewed the maintenance rule procedures and processes. The inspectors focused the inspection on the following four systems (samples):

- DC system;
- Critical Service Water system;
- Component Cooling system; and
- Main Feedwater system.

The inspectors verified that the periodic evaluation was completed within the time restraints defined in 10 CFR 50.65 (once per refueling cycle, not to exceed 24 months). The inspectors also ensured that the licensee reviewed its goals, monitored Structures, Systems, and Components (SSCs) performance, reviewed industry operating experience, and made appropriate adjustments to the maintenance rule program as a result of the above activities.

The inspectors verified that:

- the licensee balanced reliability and unavailability during the previous refueling cycle, including a review of high safety significant SSCs;
- (a)(1) goals were met, that corrective action was appropriate to correct the defective condition, including the use of industry operating experience, and that (a)(1) activities and related goals were adjusted as needed; and
- the licensee has established (a)(2) performance criteria, examined any SSCs that failed to meet their performance criteria, and reviewed any SSCs that have suffered repeated maintenance preventable functional failures including a verification that failed SSCs were considered for (a)(1).

In addition, the inspectors reviewed maintenance rule self-assessments that addressed the maintenance rule program implementation.

b. Findings

No findings of significance were identified.

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

a. Inspection Scope

The inspectors completed six inspection samples regarding plant risk assessments for the following planned and emergent maintenance activities.

- planned surveillance of HPSI pump P-66B during the week of July 24, 2005;
- emergent work on EDG 1-2 'A' Air Start Motor the week of August 1, 2005;
- planned outage of the P-7A service water pump and testing of the containment spray pump during the week of September 5, 2005;
- planned switchyard work on breaker ABB-29H9 and work on reheater drain tank valve positioner, POC-0554, during the week of September 9, 2005;
- emergent work on A main feedwater pump vibration sensor date; and
- EDG 1 -1 and PORV planned maintenance during the week of 26 September.

The inspectors also verified that condition reports related to emergent equipment problems were entered into the corrective action program with the appropriate significance characterization. Select condition reports related to risk management during maintenance activities were reviewed to verify that planned corrective actions were appropriate and had been implemented as scheduled.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15)

a. Inspection Scope

The inspectors completed five inspection samples by reviewing documented operability assessments for the following risk-significant plant equipment:

- EDG 1-1 Ventilation System;
C outside ambient air in excess of 95° F;
C steam generator pressure assumptions lower than measured value;
C containment structure during large break LOCA and
C intake structure from Lake Michigan

The inspectors interviewed the cognizant engineers and reviewed the supporting documents to assess the adequacy of the operability assessments for the current plant mode or past operability as applicable. The inspectors also reviewed the applicable sections of the TSs, Updated 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.

In addition, the inspectors verified that the condition reports generated for equipment operability issues were entered into the licensee's corrective action program with the appropriate significance characterization.

b. Findings

No findings of significance were identified.

1R16 Operator Work Arounds (71111.16)

a. Inspection Scope

The inspectors completed three inspection samples regarding operator work arounds. The operator work arounds reviewed were:

- C inaccurate Steam Generator Level instrument;
- C backwashing of the traveling screens due to a failed automatic backwash; and
- C operator equipment manipulated during operator rounds in identify undocumented work arounds.

The inspectors verified that the work arounds did not affect the functional capability of the systems nor adversely affect human reliability in responding to an initiating event.

b. Findings

No findings of significance identified.

1R17 Permanent Plant Modifications (71111.17A)

a. Inspection Scope

The inspectors completed an inspection of a permanent plant modification to replace pressurizer insulation. The inspectors reviewed the design change information and the 10 CFR 50.59 screening evaluation to verify that the modification did not degrade the design bases, licensing bases and performance capability of the facility. The inspectors reviewed the design and verified the licensee identified key attributes of the design and established methods to ensure the modification satisfied those attributes.

b. Findings

No findings of significance identified.

1R19 Post Maintenance Testing (71111.19)

a. Inspection Scope

The inspectors completed eight inspection samples pertaining to post maintenance testing by assessing testing activities that were conducted for the following maintenance activities:

- C emergency diesel generator 1-2 starting air pressure control valve replacement;
- C component cooling water pump oil change;
- C instrument air compressor C-2B drain valve replacement and I&C calibrations;
- C service water pump P-7A repack;
- C auxiliary feed water pump P-8A coupling inspection and regrease;
- C cubicle extension on 152-205 cubicle for service water pump P-7C;
- C west safeguards sump pump breaker replacement; and
- C charging pump discharge valve MO 3072 breaker replacement.

The inspectors observed portions of the post maintenance testing and reviewed documentation to verify that the tests were performed as prescribed by the work orders and test procedures; 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 the control room operators.

The inspectors reviewed documentation to verify that the test criteria and acceptance criteria were appropriate for the scope of work performed; reviewed test procedures to verify that the tests adequately verified system operability; and reviewed documented test data to verify that the data was complete, and that the equipment met the prescribed acceptance criteria.

Further, the inspectors reviewed condition reports to verify that post maintenance testing problems were entered into the corrective action program with the appropriate significance characterization. For select condition reports, the inspectors verified that the corrective actions were appropriate and implemented as scheduled.

b. Findings

No findings of significance were identified.

1R20 Refueling and Other Outage Activities (71111.20)

a. Inspection Scope

On September 1, 2005, control room operators manually tripped the reactor and licensee personnel entered a forced outage to address the accumulation of hydrogen gas around the main generator exciter. The hydrogen gas was a result of a leak from the drain line off the moisture collection system associated with the main generator. The inspectors observed control room activities during the manual trip of the reactor, operators' control of the reactor in hot shutdown and the operators' control of the reactor to critical and to the point of adding heat. The inspectors also completed a walkdown of accessible portions of containment with site personnel. The inspectors evaluated these activities to ensure licensee personnel was performing within TS requirements, plant procedures, and other applicable requirements. The inspectors completed one inspection sample.

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing (71111.22)

a. Inspection Scope

The inspectors completed ten inspection samples by assessing surveillance testing that was conducted on the following risk-significant plant equipment:

- C diesel driven fire pump P-9B;
- C service water pump P-7C;
- C testing of the transformer deluge system;
- C pressurizer low pressure safety injection signal;
- C reactor protective trip units;
- C power range safety channel calibration, channel B;
- C turbine driven auxiliary feedwater Pump, P-8B;
- C periodic cycling of shutdown cooling valves;
- C primary coolant leak rate determination;
- C fire protection monthly valve alignment verification

The inspectors observed portions of the testing to verify the use of appropriate test procedures and reviewed documented test data to verify that test acceptance criteria were satisfied.

The inspectors reviewed applicable portions of TSs, the Updated Final Safety Analysis Report, and design basis documents to verify that the surveillance tests adequately demonstrated that the plant equipment could perform required safety functions.

Further, the inspectors reviewed selected condition reports regarding surveillance testing activities. The inspectors verified that the identified problems were entered into the licensee's corrective action program with the appropriate significance characterization and that the planned and completed corrective actions were appropriate.

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications (71111.23)

a. Inspection Scope

The inspectors completed one baseline inspection sample by reviewing the following temporary modification:

- C Temporary Modification 2005-013, "Disable Steam Generator 'B' Level Transmitter LT-0704"

The inspectors reviewed the design documents, 10 CFR 50.59 safety screening, Updated Final Safety Analysis Report, and applicable TSs and their bases to verify that the temporary modifications did not affect the operability of the related systems and

other interfacing systems. The inspectors reviewed documentation and conducted plant walkdowns of accessible equipment using applicable procedures and plant drawings to verify that the modifications were implemented as designed. Post modification testing results were reviewed to verify that the systems functioned as intended after the modifications were implemented.

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 Review of Licensee Performance Indicators for the Occupational Exposure Cornerstone

a. Inspection Scope

The inspectors discussed performance indicators with the radiation protection (RP) staff and reviewed data from the licensee's corrective action program to determine if there were any performance indicators in the occupational exposure cornerstone that had not been reported and reviewed. There were none. This sample was credited in NRC Inspection Report 05000255/2005006.

b. Findings

No findings of significance were identified.

.2 Plant Walkdowns and Radiation Work Permit Reviews

a. Inspection Scope

The inspectors identified two radiologically significant work areas within contaminated areas, radiation areas, and potential airborne areas in the plant. Selected work packages and radiation work permits (RWP) were reviewed to determine if radiological controls including surveys, postings, air sampling data, and barricades were acceptable. Work packages and RWPs included:

RWP P050104: Charging Pump Maintenance Activities; Revision 1

RWP P050506: Maintenance-Containment Entries (At Power); Revision 1

This review represented one sample.

Two work areas were walked down and surveyed to determine if the prescribed RWP, procedures, and engineering controls were in place, that licensee surveys and postings

were complete and accurate, and that air samplers were properly located. This review represented one sample.

The inspectors reviewed selected RWPs and associated radiological controls used to access radiologically significant areas and evaluated the work control instructions and control barriers that were specified, in order to determine if the controls and requirements provided adequate worker protection. Site TS requirements for high radiation areas (HRA) and locked high radiation areas were used as standards for the necessary barriers. Electronic dosimeter alarm set points for both integrated dose and dose rate were evaluated for conformity with survey indications and plant policy. The inspectors determined whether pre-job briefings emphasized to workers the actions required when their electronic dosimeters noticeably malfunctioned or alarmed. This review represented one sample.

The inspectors reviewed the licensee's condition reports and job planning records, and interviewed licensee representatives to determine if there were airborne radioactivity areas in the plant with a potential for individual worker internal exposures of greater than 50 millirem committed effective dose equivalent. Barrier integrity and engineering controls performance, such as high efficiency particulate filtration ventilation system operation and use of respiratory protection, were evaluated for worker protection. Work areas having a history of, or the potential for, airborne transuranic isotopes were reviewed to determine if the licensee had considered the potential for transuranic isotopes and had provided appropriate worker protection. This review represented one sample.

The adequacy of the licensee's internal dose assessment process for internal exposures greater than 50 millirem committed effective dose equivalent was evaluated to ascertain whether affected personnel would be properly monitored utilizing calibrated equipment and that the data would be analyzed and internal exposures properly assessed in accordance with licensee procedures. For the current year there had been no exposures of this magnitude. This review represented one sample.

The inspectors examined the licensee's physical and programmatic controls for highly activated or contaminated materials (nonfuel) stored within the spent fuel or other storage pools. This included discussions with cognizant licensee representatives. This review represented one sample.

b. Findings

No findings of significance were identified.

.3 Problem Identification and Resolution

a. Inspection Scope

The inspectors reviewed the licensee's self-assessments, audits, and condition reports related to the access control program to determine if identified problems were entered into the corrective action program for resolution. This review represented one sample.

Corrective action reports related to access controls and HRA radiological incidents (non-performance indicator occurrences identified by the licensee in HRAs less than 1 Rem/hr) were reviewed. Staff members were interviewed and corrective action documents were reviewed to determine if follow-up activities were being conducted in an effective and timely manner commensurate with their importance to safety and risk based on the following:

- Initial problem identification, characterization, and tracking;
- Disposition of operability/reportability issues;
- Evaluation of safety significance/risk and priority for resolution;
- Identification of repetitive problems;
- Identification of contributing causes;
- Identification and implementation of effective corrective actions;
- Resolution of NCVs tracked in the corrective action system; and
- Implementation/consideration of risk-significant operational experience feedback.

This review represented one sample.

The inspectors evaluated the licensee's process for problem identification, characterization, and prioritization in order to determine if problems were entered into the corrective action program and resolved. For repetitive deficiencies and/or significant individual deficiencies identified in the problem identification and resolution process, the inspectors determined whether the licensee's self-assessment activities also identified and addressed these deficiencies. This review represented one sample.

The inspectors discussed performance indicators with the RP staff and reviewed data from the licensee's corrective action program to determine if there were any performance indicators for the occupational exposure cornerstone that had not been reported and reviewed. There were none. This sample was credited in NRC Inspection Report 05000255/2005006.

b. Findings

No findings of significance were identified.

.4 Job-In-Progress Reviews

a. Inspection Scope

The inspectors selected one job being performed in a contaminated radiation area for observation of work activities that presented a radiological risk to workers. The inspectors reviewed radiological job requirements including RWP and work procedure requirements and attended as low as is reasonably achievable job briefings. Job performance was observed with respect to these requirements to ascertain whether radiological conditions in the work area were adequately communicated to workers through pre-job briefings and radiological condition postings.

b. Findings

No findings of significance were identified.

.5 High Risk Significant, High Dose Rate High Radiation Area, and Very High Radiation Area Controls

a. Inspection Scope

The inspectors reviewed the licensee's performance indicators for high risk HRAs and very high radiation areas (VHRAs) to determine if workers were adequately protected from radiological overexposure. Discussions were held with RP management concerning high dose rate/HRA and VHRA controls and procedures, including procedural changes that had occurred since the last inspection. This was done to determine whether any procedure modifications would have substantially reduced the effectiveness and level of worker protection. This review represented one sample.

The inspectors evaluated the controls (including Procedures HP 2.5, "High Radiation Area Entry and Control," Revision 21, and HP 2.29, "Special Monitoring," Revision 11) that were in place for special areas that had the potential to become VHRAs during certain plant operations. Discussions were held with RP supervisors to determine how the required communications between the RP group and other involved groups would occur beforehand in order to allow corresponding timely actions to properly post and control the radiation hazards. This review represented one sample.

During plant walkdowns, the posting and locking of entrances to high dose rate HRAs and VHRAs were evaluated for adequacy. This review represented one sample.

b. Findings

No findings of significance were identified.

.6 Radiation Worker Performance

a. Inspection Scope

During job performance observations, the inspectors evaluated radiation worker performance with respect to stated RP work requirements. The inspectors also evaluated whether workers were aware of the significant radiological conditions in their workplace, the RWP controls and limits in place, and that their performance had accounted for the level of radiological hazards present. This review represented one sample.

Radiological problem reports, which found that the cause of an event resulted from radiation worker errors, were reviewed to determine if there was an observable pattern traceable to a similar cause and to determine if this perspective matched the corrective action approach taken by the licensee to resolve the reported problems. This review represented one sample.

b. Findings

No findings of significance were identified.

.7 Radiation Protection Technician Proficiency

a. Inspection Scope

The inspectors observed and evaluated RP technician performance with respect to RP work requirements. This was done to evaluate whether the technicians were aware of the radiological conditions in their workplace, the RWP controls and limits in place, and if their performance was consistent with their training and qualifications with respect to the radiological hazards and work activities. This review represented one sample.

Radiological problem reports, which found that the cause of an event was RP technician error, were reviewed to determine if there was an observable pattern traceable to a similar cause and to determine if this perspective matched the corrective action approach taken by the licensee to resolve the reported problems. This review represented one sample.

b. Findings

No findings of significance were identified.

2PS3 Radiological Environmental Monitoring Program (REMP) And Radioactive Material Control Program (71122.03)

.1 Inspection Planning

a. Inspection Scope

The inspectors reviewed the most current annual Radiological Environmental Operating Report dated May 12, 2005, and licensee assessment results to determine if the REMP was implemented as required by the Radiological Environmental TSs (RETS) and the Offsite Dose Calculation Manual (ODCM). The inspectors reviewed the report for changes to the ODCM with respect to environmental monitoring and commitments in terms of sampling locations, monitoring and measurement frequencies, land use census, interlaboratory comparison program, and data analysis. The inspectors reviewed the ODCM to identify environmental monitoring stations and evaluated licensee self-assessments, audits, licensee event reports, and interlaboratory comparison program results. The inspectors reviewed the Final Safety Analysis Report for information regarding the environmental monitoring program and meteorological monitoring instrumentation. The inspectors also reviewed the scope of the licensee's audit program to determine if it met the requirements of 10 CFR 20.1101(c). This review represented one sample.

b. Findings

No findings of significance were identified.

.2 Onsite Inspection

a. Inspection Scope

The inspectors walked down selected air sampling stations (>30 percent) and approximately 20 percent of the thermoluminescent dosimeter monitoring stations to determine whether they were located as described in the ODCM and to determine the equipment material condition. This review represented one sample.

The inspectors observed the collection and preparation of a variety of environmental samples including drinking water, air, and milk. The environmental sampling program was evaluated to determine if it was representative of the release pathways as specified in the ODCM and that sampling techniques were performed in accordance with station procedures. This review represented one sample.

The inspectors evaluated the condition of the meteorological instruments using observations and record reviews, and determined if the equipment was operable, calibrated, and maintained in accordance with guidance contained in the Final Safety Analysis Report, annual report, NRC Safety Guide 23, and licensee procedures. The inspectors determined if the meteorological data readout and recording instruments, including computer interfaces and data loggers, at the tower were operable; that readouts of wind speed, wind direction, delta temperature, and atmospheric stability measurements were available on the licensee's computer system, which was available in the control room, and that the computer system was operable. This review represented one sample.

The inspectors reviewed each event documented in the Radiological Environmental Operating Report which involved missed samples, inoperable samplers, lost thermoluminescent dosimeters, or anomalous measurements for the cause and corrective actions. The licensee reported no positive sample results (i.e., licensed radioactive material detected above the lower limits of detection). This review represented one sample.

The inspectors reviewed the ODCM for significant changes resulting from land use census modifications, or sampling station changes made since the last inspection. This included a review of technical justifications for changed sampling locations. The inspectors also determined if the licensee performed the reviews required to ensure that the changes did not affect their ability to monitor the impacts of radioactive effluent releases on the environment. This review represented one sample.

The inspectors reviewed the calibration and maintenance records for five air samplers. The inspectors reviewed a licensee audit of the vendor laboratory that analyzed the licensee's REMP samples as the licensee does not perform radio-chemical analyses of REMP samples. Additionally, results of the vendor's interlaboratory comparison program were reviewed to evaluate the effectiveness of the vendor's analytical and quality assurance programs.

The inspectors also evaluated the results of the licensee's interlaboratory comparison program to evaluate the adequacy of radio-chemical analyses performed by the

licensee. As the radiochemistry laboratory achieved all agreements in the interlaboratory comparison program, there were no deficiencies for the quality assurance organization to evaluate. The inspectors reviewed quality assurance audit results of the REMP to determine whether the licensee met the TS/ODCM requirements. This review represented one sample.

b. Findings

No findings of significance were identified.

.3 Unrestricted release of material from the Radiologically Restricted Area

a. Inspection Scope

The inspectors observed the access control location where the licensee monitored potentially contaminated material leaving the radiologically restricted area and inspected the methods used for control, survey, and release of material from this area. The inspectors observed the performance of personnel surveying and releasing material for unrestricted use to verify that the work was performed in accordance with plant procedures. This review represented one sample.

The inspectors verified that the radiation monitoring instrumentation was appropriate for the radiation types present and was calibrated with appropriate radiation sources that represented the expected isotopic mix. The inspectors reviewed the licensee's criteria for the survey and release of potentially contaminated material and verified that there was guidance on how to respond to an alarm indicating the presence of licensed radioactive material. The inspectors evaluated the licensee's equipment to determine if radiation detection sensitivities were consistent with the NRC guidance contained in IE Circular 81-07 and IE Information Notice 85-92 for surface contamination, and HPPOS-221 for volumetrically contaminated material.

The inspectors reviewed the licensee's procedures and records to verify that the radiation detection instrumentation was used at its typical sensitivity level based on appropriate counting parameters such as counting times and background radiation levels. The inspectors determined if the licensee had established a "release limit" by altering the instrument's typical sensitivity through such methods as raising the energy discriminator level or locating the instrument in a high radiation background area.

This review represented one sample.

b. Findings

No findings of significance were identified.

.4 Identification and Resolution of Problems

a. Inspection Scope

The inspectors reviewed the licensee's self-assessments, audits, condition reports, and special reports related to the radiological environmental monitoring program since the last REMP inspection to determine if identified problems were entered into the corrective action program for resolution. The inspectors also verified that the licensee's self-assessment program was capable of identifying and addressing repetitive deficiencies or significant individual deficiencies that were identified by the problem identification and resolution process.

The inspectors also reviewed corrective action documents related to the REMP that affected environmental sampling and analysis, and meteorological monitoring instrumentation. Staff members were interviewed and documents were reviewed to determine if the following activities were being conducted in an effective and timely manner commensurate with their importance to safety and risk:

- Initial problem identification, characterization, and tracking;
- Disposition of operability/reportability issues;
- Evaluation of safety significance/risk and priority for resolution;
- Identification of repetitive problems;
- Identification of contributing causes;
- Identification and implementation of effective corrective actions;
- Resolution of NCVs tracked in the corrective action system; and
- Implementation/consideration of risk significant operational experience feedback.

This review represented one sample.

b. Findings

No findings of significance were identified.

4. **OTHER ACTIVITIES (OA)**

4OA2 Identification and Resolution of Problems (71152)

.1 Routine Review of Identification and Resolution of Problems

a. Inspection Scope

As discussed in previous sections of this report, the inspectors routinely reviewed issues during baseline inspection activities and plant status reviews to verify that condition reports were being generated and entered into the corrective action program with the appropriate significance characterization. For select condition reports, the inspectors also verified that identified corrective actions were appropriate and had been implemented or were scheduled to be implemented in a timely manner commensurate with the significance of the identified problem.

b. Findings

No findings of significance were identified.

.2 Annual Sample for Follow-up Inspection

a. Inspection Scope

The inspectors completed one annual inspection sample of problem identification and resolution evaluations by reviewing root cause evaluations regarding plant issues that occurred due to human performance errors. The inspectors verified that planned and implemented corrective actions to address the human performance issues were reasonable.

b. Findings

No findings of significance were identified.

.3 Cross-References to PI&R Findings Documented Elsewhere

Section 1R12 describes a Finding which had as its primary cause the crosscutting area of PI&R due to the licensee's failure to resolve the underlying cause. Specifically, valve MO-3063 failed to operate on both June 6 and on May 9. The licensee incorrectly determined the cause of the May event to be an improper torque switch setting vice an improperly rebuilt breaker. After the May event, possible breaker failure mechanisms were not investigated and the intermittent fault was not detected.

4OA5 Other

Cornerstones: Initiating Events and Mitigating Systems

.1 Operational Readiness of Offsite Power (Temporary Instruction 2515/163)

The objective of Temporary Instruction (TI) 2515/163, "Operational Readiness of Offsite Power," was to confirm, through inspections and interviews, the operational readiness of offsite power (OSP) systems in accordance with NRC requirements. The inspectors reviewed licensee procedures and discussed the attributes identified in TI 2515/163 with licensee personnel during the 2nd Quarter of 2005. The results of the inspectors' review were forwarded to Office of Nuclear Reactor Regulation (NRR) for additional review and evaluation.

Following review and evaluation by the NRR staff, several follow-up questions were sent back to the inspectors for discussion with licensee personnel. The results of the inspectors' review and discussion of the follow-up questions, performed during the 3rd Quarter of 2005, were again forwarded NRR for evaluation.

The completion of this TI was documented in NRC Inspection Report 05000255/2005006 and represented one inspection sample. The follow-up questions

the inspectors discussed with licensee personnel during this inspection period were considered a part of the original inspection sample, and did not constitute an additional inspection sample for this TI.

4OA6 Meetings

.1 Exit Meeting

The inspectors presented the inspection results to Mr. P. Harden and other members of licensee management on October 3, 2005. 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 was conducted for:

- Maintenance effectiveness periodic evaluation with Mr. P. Harden, Site Vice President on September 2, 2005.
- The access control to radiologically significant areas program, and the radiological environmental monitoring program under the occupational and public radiation safety cornerstones inspection with Mr. P. Harden on August 12, 2005.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee

P. Harden, Site Vice President
M. Carlson, Engineering Director
G. Hettel, Plant Manager
L. Lahti, Licensing Manager
D. Malone, Regulatory Affairs
C. Moeller, Radiation Protection Supervisor
B. Patrick, Radiation Protection Manager
C. Plachta, Radiation Protection Supervisor
K. Smith, Operations Manager
M. Sullivan, Chemistry Supervisor
R. Tiffany, Site Maintenance Rule Coordinator
K. Yeager, Assistant Operations Manager

Nuclear Regulatory Commission

M. Padovan, Project Manager, NRR

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

| | | |
|---------------------|-----|--|
| 05000255/2005008-01 | NCV | Failure to Provide Adequate Instruction for Proper Breaker Reassembly (Section 1R12) |
|---------------------|-----|--|

Closed

| | | |
|---------------------|-----|--|
| 05000255/2005008-01 | NCV | Failure to Provide Adequate Instruction for Proper Breaker Reassembly (Section 1R12) |
|---------------------|-----|--|

Discussed

None

LIST OF DOCUMENTS REVIEWED

The following is a list of documents reviewed during the inspection. Inclusion on this list does not imply that the NRC inspectors reviewed the documents in their entirety but rather that selected sections or portions of the documents were evaluated as part of the overall inspection effort. Inclusion of a documents on this list does not imply NRC acceptance of the document or any part of it, unless this is stated in the body of the inspection report.

1R01 Adverse Weather Protection

PPAC SPS614; Region Repair Testing of Transformer EX-10; November 18, 2004
PPAC SPS212; Region Repair Testing of Transformers; November 18, 2004
PPAC MSE054; PM on Plant Lightning Protection System; August 2, 2004

1R04 Equipment Alignment

SOP-22; Emergency Diesel Generators; Revision 37
SOP-19; Instrument Air System; Revision 37
SOP-12; Feedwater System; Revision 44
Condensed Listing of Open Work Orders for the Service Water System as of July 12, 2005
Health and Status Report for the Critical Service Water System as of July 13, 2005
Drawing - 207, Sheet 2, "Piping and Instrument Diagram Auxiliary Feedwater System," Revision 35
CAP 047307; Kewaunee Operating Experience (CAP026448) - Emergency Diesel Generator Exhaust Duct Operation Concern
CAP 045834; CV-0884 Surveillance Missed When PPAC Moved into Grace Period
CAP 047261; Critical Service Water (CSW) Rating Downgraded to Red (Needs Improvement)

1R05 Fire Protection

Palisades Nuclear Plant Fire Hazards Analysis; Revision 5
EA-PSSA-00-001; "Palisades Plant Post Fire Safe Shutdown Summary Report" Revision 2
Fire Protection Surveillance Procedure-SI-1, Attachment 24, "Zones 12 and 17, Corridor 106 and Charging Pump Room Detector Locations," Revision 4
Fire Protection Surveillance Procedure-RO-9, Attachment 9, "Charging Pump Rooms #104, #104A, and # 104B Sprinkler Head Locations," Revision 1
Fire Protection Surveillance Procedure-RO-9, Attachment 3, "Cable Spreading Room #224 Sprinkler Head Locations," Revision 1
Fire Protection Surveillance Procedure-RP-11, Attachment 6, Fire Barrier Penetration Seal/Conduit Inspection Form-Cable Spreading and Battery Rooms; Revision 6
Fire Protection Surveillance Procedure-RP-11, Attachment 21, Fire Barrier Penetration Seal/Conduit Seal Inspection Form Auxiliary Building 590 Foot and 602 Foot; Revision 6

EA-APR-98-008, "Specific Penetration Anomalies That Do Not Cause Various Fire Barriers to be Inoperable," Revision 9
Fire Protection Program Report, Volume 3, Tab 12; June 1986
FPSP-RP-11; Fire Barrier Penetration Seal/Conduit Seal Inspection Form for Fire Areas 3, 11, 12; Revision 6
FPSP-RO-9; Fire Sprinkler System Inspection; Revision 1
FPSP-SI-1; Data Sheet for Alarm Bells and Ionization Smoke Detectors for Fire Areas 3, 11, 12; Revision 4
Drawing 216, Sheet 4, "Fire Protection Plan of Elevation 570 Foot and 590 Foot," Revision 9
Drawing 216, Sheet 5, "Fire Protection Plan of Elevation 602 Foot," Revision 7
Drawing 216, Sheet 9, "Fire Protection Reactor Building Sections A-A, B-B, C-C, D-D, and E-E," Revision 5

1R12 Maintenance Effectiveness

Health and Status Reports for Auxiliary Feedwater System and High Pressure Safety Injection System
List of Open and Closed Work Orders for Auxiliary Feedwater System and High Pressure Safety Injection System
MRE000377; MO-3064, Redundant HPSI to Reactor Coolant Loop 2A, Would Not Go Closed, June 9, 2005
Maintenance Rule Scoping Document - "2400 Volt AC Power System," August 16, 2005
Health and Status Report - "2400V AC Power," August 16, 2005
2400VAC System Health Assessment; August 24, 2005
CAP 045827, "SOER 99-01, Loss of Grid - Addendum," December 21, 2004
CAP039310, "Final Significance Determination for March 25, 2003 Loss of Offsite Power Event," January 5, 2004
CAP 045961, "Breaker Spring Charging Motor Failed to Operate," January 4, 2005
CAP 046154, "Breaker 152-205 (Service Water Pump P-7C) Charging Spring did not Discharge," January 16, 2005
CAP 046266, "WW 2503: Unexpected Electrical Grid Conditions Encountered on January 21, 2005," January 21, 2005
CAP 046318, "Grid Voltage Conditions Require Entry into LCO 3.8.1 for Startup Transformer," January 25, 2005
CAP 048013, "Unplanned Entry into Condition LCO 3.8.1.A due to 'R' Bus Inoperability," May 24, 2005
CAP 027772, "Water in Manholes #1, #2 and #4 and Cables in Water," June 10, 2005
Palisades Plant - Maintenance Rule Periodic Refueling Assessment; August 1, 2000 to July 31, 2002
Palisades Plant - Maintenance Rule Periodic Refueling Assessment; August 1, 2002 to July 31, 2004
List of Functional Failures for Assessment Period; December 2004
Maintenance Rule Category (a)(1) List from 2000 to 2005; August 2005
(a)(1) Action Plan; C-PAL-00-1890, Elevated Pump Seal Leakage on Main Feedwater Pump P-1A; June 17, 2000
(a)(1) Action Plan; CAP029749, Component Cooling Water System Maintenance (a)(1) Action Plan; July 24, 2002

(a)(1) Action Plan; CAP04694, Maintenance Rule Goal Setting and Monitoring for Service Water CV-0823 and CV-0826; March 2, 2005
Memo; Returning Service Water Pump P-7A and Motor Breaker 152-204 to Maintenance Rule (a)(2) Status; May 2, 2003
Expert Panel Meeting Minutes; January 8, 2003
Expert Panel Meeting Minutes; June 15, 2004
Health and Status Reports for 125V Vital DC Power; Critical Service Water; Component Cooling; and Main Feedwater System; August 2005
CAP 034133; Station Battery Charger #1 (ED-15, MCC-1) Output Breaker 72-15 Trip; March 17, 2003
CAP 035774; Evaluate Potential Adverse Maintenance Rule Trend - Service Water Valves; May 20, 2003
CAP 042352; P-1B Main Feed Pump Outboard Pump Seal Degraded; July 6, 2004
EM-25; Maintenance Rule Program; Revision 5
EM-25-01; Maintenance Rule; Revision 1
EGAD-EP-10; Maintenance Rule Scoping Document; Revision 4
FP-PE-PM-01; Preventive Maintenance Program; Revision 0

1R13 Maintenance Risk Assessments and Emergent Work Evaluation

Risk Management Work Week Evaluation 2538 (9/18/05 - 9/24/2005)
Control of Equipment, Palisades Administrative Procedure No 4.02; Revision 29
CAP 049831, Received Alarm EK-0145, FW PP P-1A TURB K-7A HI;
September 22, 2005

1R15 Operability Evaluations

CAP 048655, "Steam Generator Pressure Assumptions Lower Than Measured Value,"
July 8, 2005
CE 014053, "Steam Generator Pressure Assumptions Lower Than Measured Value,"
July 12, 2005
OPR 000103, "Steam Generator Pressure Assumptions Lower Than Measured Value,"
July 8, 2005
OPR 000104; Backdraft Damper D-27; Ventilator Fan V-24B, Diesel Generator 1-1;
Revision 0
OPR 000108; Outside Ambient Air Temperature in Excess of 95° F; Revision 0
OPR 000111; Reactor Core and Containment; Revision 0

1R16 Operator Workaround

WO 24522434; Troubleshoot LIA-0704; July 7, 2005
SOP-15, Attachment 11; Alternate Water Supply To Clean Traveling Screens;
Revision 36

1R17 Permanent Plant Modifications

Spec. —136; Furnishing and Installing Conventional Type Insulation; Revision 11
EAR-2004-0078; Replace Pressurizer Bottom Head Insulation Material; April 22, 2004

1R19 Post Maintenance Testing

WO 24522455; Emergency Diesel Generator 1-2 K-6B Starting Air Pressure Control Valve; August 3, 2005
WO 24521956; Instrument Air Compressor C-2B Drain Trap DT-1224 Inlet Valve; August 31, 2005
WO 24522332; Motor Driven Auxiliary Feedwater Pump Repack; September 13, 2005
WO 24521468; Motor Driven Auxiliary Feedwater Pump Coupling Inspection; September 13, 2005
WO 24422615; West Safeguards RM Sump P-73B Breaker; September 23, 2005
WO 24214481; Install Cubicle Extension on 152-205 Cubicle; September 29, 2005
WO 24422927; Charging Pump Discharge Valve MO 3072 Breaker Replacement; September 28, 2005,
MO-7A-2; Emergency Diesel Generator 1-2; Revision 58
QO-21; Inservice Test Procedure for Auxiliary Feedwater Pumps; Revision 25
QO-15B; Inservice Test Procedure for Component Cooling Pumps; Revision 21
QO-14; Inservice Test Procedure- Service Water Pumps; Revision 23
SWS-M—12; Service Water Pumps P-7A, P-7B and P-7C Repack; Revision 3
Control of Equipment, Palisades Administrative Procedure No 4.02; Revision 29

1R20 Refueling and Outage Activities

SOP-1A, Attachment 11; Containment Entry; Revision 2
CAP 049515, Active leak severity level three of one drop per second on MO-3049 stem/flange, September 2, 2005
EOP-1.0; Standard Post-Trip Actions; Revision 12
GOP-3; Mode 3 § 525EF to Mode 2; Revision 18
GOP-4; Mode 2 to Mode 1; Revision 15

1R22 Surveillance Testing

RO-52; Fire Suppression Water System Functional Test; Revision 22
MO-7B; Fire Water Pumps P-9A, P-9B, P-41; Revision 29
QI-4; Pressurizer Low Pressure Safety Injection Signal Initiation Functional Check, Revision 0
QI-9; Reactor Protective Trip Units; Revision 2
QO-42; Section XI Testing of Shutdown Cooling Control Valves; Revision 10
DWO-1, TS Surveillance Procedure, Operator Dailey and Weekly Items Mode 1,2,3 and 4, PCS Inventory Form, Attachment 8; Revision 71
DWO-1, TS Surveillance Procedure - Basis Document, Operator Dailey and Weekly Items Mode 1,2,3 and 4, PCS Inventory Form, Attachment 8; Revision 71
Drawing M204 Sheet 1, Safety Injection, Containment Spray and Shutdown Cooling System; Revision 6
RI-62B, "Power Range Safety Channel Alignment - Channel B," Revision 6
QO-21, "Inservice Test Procedure- Auxiliary Feedwater Pumps," Revision 25
Standard Operating Procedure (SOP) - 12, "Feedwater System," Revision 44
CAP 049250, "Out of Tolerance As Found Data in Tech Specs Test RI-62B," August 17, 2005
CAP 048798; Found Deteriorated Insulation on K-5 (P-9B Diesel Engine) Control Wires

CAP 048639; QO-14C Could Not Be Completed Due to Failed FI-1347

1R23 Temporary Plant Modifications

TM-2005-013; Disable Steam Generator 'B' Level Transmitter LT-0704; July 12, 2005
50.59 Evaluation of TM-2005-013; July 12, 2005
WO 24522434; Steam Generator E-50B Level Transmitter; July 22, 2005
CAP 048803; Evaluate Periodic Replacement of Non-Safety Related Transmitters

2OS1 Access Control to Radiologically Significant Areas

Performance Indicator Data; Occupational Exposure Control; August 8, 2005
P050506; Maintenance-Containment Entries (At Power); Revision 1
P050104; Charging Pump Maintenance Activities; Revision 1
Nuclear Oversight Observation Report 2005-002-8-005 Radiation Protection;
June 27, 2005
HP 8.9; DAC-Hours Dose Assignment; Revision 9
HP 8.2; Whole Body Count Evaluation; Revision 12
CAP 048154; Radioactive Material Found Outside RCA; June 2, 2005
CAP 047812; Entry Into Radioactive Materials Area Without Primary Dosimetry;
May 9, 2005
CAP 048203; INPO Chemistry Assist Visit Recommended Actions to Address Dose
Performance; June 6, 2005
CAP 048956; 10 CFR 61 Scaling Factors for Resin Needs Updated; July 29, 2005
CAP 047788; Lack Of Notification Results in Failure to Perform Required Rad Survey;
May 6, 2005
CAP 047283; Wrong RWP Used During Reactor Head Repairs; March 28, 2005
CAP 047275; Discrete Radioactive Particles Found in a Clean Area During Nightly
Routines; March 27, 2005
CAP 047076; Removal of Needed Radiation Shielding; March 11, 2005
HP 8.9; DAC-Hour Dose Assignment; Revision 9
Non-Fuel Items In Spent Fuel Pool; June 28, 2005
SA0011371; Sel-Assessment - Benefits of Ultrasonic Fuel Cleaning Benchmarking
Assessment; February 10, 2005
S05-48; RP/ALARA/Access Control Snapshot Self-Assessment; February 10, 2005
CAP 026186; Three Workers Performed Self-Decon Without RP Direction/Approval;
December 15, 2004
HP 2.5; High Radiation Area Entry and Control; Revision 21
HP 2.29; Special Monitoring; Revision 11

2PS3 Radiological Environmental Monitoring Program and Radioactive Material Control Programs

Annual Radiological Environmental Operating Report for 2004; May 12, 2005
HP 10.10; Palisades Radiological Environmental Program Sample Collection and
Shipment; Revisions 8 and 9
ODCM; Revision 20
QF-0406 R01; Snapshot Report SA011365; July 22, 2005
Nuclear Oversight Observation Report 2004-002-8-013 (REMP); June 10, 2005

CAP 046197; Service Water Compositor Inoperable; January 18, 2005
CAP 048361; Turbine Building Sump Compositor Not Working; June 15, 2005
CAP 048637; Failure to Verify Daily Flow to Turbine Sump and Service Water Compositors; July 7, 2005
CAP 048979; Turbine Sump Compositor Potentially Installed on Incorrect Valve; August 1, 2005
Gas Meter Test and Repair 6142; January 26, 2005
Gas Meter Test And Repair 3036143; October 11, 2004
Meteorological Tower Maintenance Date; March 17-18, 2005
NUPIC Joint Audit (18558) of Environmental Inc.; June 3, 2003
Analytics Cross Check Program 2003-2004
10 CFR Analysis Data; January 26, 2004
Environmental Inc. Interlab Comparison Results; January-December 2004 and July 2004-June 2005
CAP 048023; Monitoring Of Gloves From The RCA Inconsistent; May 24, 2005
CAP 048154; Rad Material Found Outside RCA; June 2, 2005
CAP 048488; Low Level Contamination Found in Carpets Around Access Control; June 23, 2005
W1-RSD-H-010; Release of Items; Revision 8
ODCM Appendix A; Relocated T/S; Revision 11
Procedure No 7.15; Contamination Control; Revision 10

4OA2 Problem Identification and Resolution

RCE000361; During In-Place Testing, RV-0709 'B' Steam Generator Code Safety Was Inadvertently Lifted
RCE000362; Pilot Operated Relief Valve PRV-1042B Failed Open
RCE000367; Inadvertent Safety Injection Actuation During Surveillance RO-12
RCE000378; Loss of Rear Bus Due to Testing

LIST OF ACRONYMS USED

| | |
|-------|---|
| ADAMS | Agency-Wide Document and Management System |
| AR | Action Request |
| CAP | Corrective Action Program |
| CFR | Code of Federal Regulations |
| DC | Direct Current |
| EDG | emergency diesel generator |
| EOP | Emergency Operating Procedures |
| HRA | High Radiation Area |
| IMC | Inspection Manual Chapter |
| NCV | Non-Cited Violation |
| NMC | Nuclear Management Company |
| ODCM | Offsite Dose Calculation Manual |
| PARS | Publicly Available Records |
| REMP | Radiological Environmental Monitoring Program |
| RETS | Radiological Environmental Technical Specifications |
| RP | Radiation Protection |
| RWP | Radiation Work Permit |
| SDP | Significance Determination Process |
| SSC | Structures, Systems, and Components |
| TI | Temporary Instruction |
| TS | Technical Specification |
| VHRA | Very High Radiation Area |