April 1, 2004

Mr. Daniel J. Malone
Site Vice President
Palisades Nuclear Plant
Nuclear Management Company, LLC
27780 Blue Star Memorial Highway
Covert, MI 49043-9530

SUBJECT: PALISADES NUCLEAR GENERATING PLANT
NRC PROBLEM IDENTIFICATION AND RESOLUTION INSPECTION
REPORT 05000255/2004004

Dear Mr. Malone:

On March 5, 2004, the U.S. Nuclear Regulatory Commission (NRC) completed a team inspection at the Palisades Nuclear Generating Plant. The enclosed report documents the inspection findings which were discussed on March 5, 2004, with you and members of your staff.

This inspection was an examination of activities conducted under your license as they relate to the identification and resolution of problems, compliance with the Commission's rules and regulations and with the conditions of your operating license. Within these areas, the inspection involved a selected examination of procedures and representative records, observations of activities, and interviews with personnel.

On the basis of the samples selected for review, there were no findings of significance identified during this inspection. In general, the issues reviewed during the inspection were properly categorized and evaluated, although some evaluations were narrowly focused and of limited effectiveness. Overall, the corrective actions reviewed during the inspection were appropriately implemented; however, some examples were identified where corrective actions were not fully implemented or fully effective in correcting the identified problems.

During this inspection, the inspectors found examples of corrective action program implementation weaknesses that were similar to those identified during the previous Problem Identification and Resolution inspection. However, the examples were limited in number and significance relative to our previous inspection. The inspectors noted that improvements have been demonstrated in the implementation of your corrective action program over the past year. It was also apparent during the review of internal assessments that your staff is focused on improving the corrective action program. Several positive observations during this inspection appear to be the result of your efforts to improve the implementation of your corrective action program in response to previously identified concerns.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

/RA/

Eric R. Duncan, Chief
Branch 6
Division of Reactor Projects

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

Enclosure: Inspection Report 05000255/2004004
w/Attachment: Supplemental Information

cc w/encl: J. Cowan, Executive Vice President
and Chief Nuclear Officer
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U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No:	50-255
License No:	DPR-20
Report No:	050000255/2004004
Licensee:	Nuclear Management Company, LLC
Facility:	Palisades Nuclear Generating Plant
Location:	27780 Blue Star Memorial Highway Covert, MI 49043-9530
Dates:	February 23 through March 5, 2004
Inspectors:	B. Kemker, Senior Resident Inspector, D. C. Cook A. Dunlop, Senior Reactor Engineer, RIII M. Garza, Resident Inspector, Palisades R. Ng, Reactor Engineer, RIII
Approved by:	Eric R. Duncan, Chief Branch 6 Division of Reactor Projects

Enclosure

SUMMARY OF FINDINGS

IR 05000255/2004004; 02/23/2004 - 03/05/2004; Palisades Nuclear Generating Plant; Baseline Inspection of the Identification and Resolution of Problems.

The inspection was conducted by resident and region-based inspectors. No findings of significance were identified. 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.

Identification and Resolution of Problems

The inspectors concluded that the licensee's corrective action program attributes enabled timely problem identification commensurate with the significance level and that the threshold for problem identification was sufficiently low. Nuclear Oversight assessment reports appropriately identified problems, including issues associated with corrective action implementation. The majority of issues reviewed during the inspection were properly categorized and evaluated, although some evaluations were narrowly focused and of limited effectiveness.

Overall, the corrective actions reviewed during the inspection were appropriately implemented; however, some examples were identified where corrective actions were not fully implemented or fully effective in correcting the identified problems. During this inspection, the inspectors found similar examples of corrective action program implementation weaknesses to those identified during the previous Problem Identification and Resolution Inspection. However, the examples were limited in number and significance relative to this previous inspection. The inspectors noted that improvements have been demonstrated in the licensee's corrective action program over the past year. It was also apparent during the review of internal assessments that the licensee was properly focused on improving the corrective action program.

REPORT DETAILS

4. OTHER ACTIVITIES (OA)

4OA2 Problem Identification and Resolution (71152)

.1 Effectiveness of Problem Identification

a. Inspection Scope

The inspectors reviewed NRC inspection report findings issued over the last 14 months, selected corrective action documents, Nuclear Oversight assessments, other self assessments, operating experience reports, and trend assessments to determine if problems were being entered into the licensee's corrective action program at the proper threshold. The inspectors also conducted focused plant walkdowns of the component cooling water, service water, and radiation monitoring systems to ensure that equipment problems were entered into the corrective action program.

b. Assessment

In general, the licensee's staff identified issues and entered them into the corrective action program at an appropriate level. The licensee appropriately used the corrective action program to document instances where previous corrective actions were ineffective or inappropriate.

b.1 Identification Threshold

The licensee defined the threshold for issues to be entered into the corrective action program in Palisades Nuclear Plant Administrative Procedure No. 3.03, "Corrective Action Process." In addition, Nuclear Management Company fleet procedure FP-PA-ARP-01, "Action Request Process," was recently adopted for use at Palisades. The current electronic database system, called TeamTrack, was implemented in August 2002. A corrective action document in TeamTrack was called an Action Request or CAP. Prior to TeamTrack, corrective action documents were called condition reports or CPALs. The generation rate for condition reports increased over the past year with 4820 CAPs generated in 2002 and 6554 CAPs generated in 2003. The licensee stated one reason for the increase was more involvement of several organizations after training was provided in the use of the TeamTrack process. The generation rate and significance level distribution of these condition reports appeared appropriate.

b.2 Operating Experience

The inspectors determined that the licensee adequately identified, evaluated, and developed corrective actions for industry operating experience that could potentially impact the plant. However, one example was identified where an evaluation did not address the extent of condition aspect of the issue. Condition report CAP 005116 was

associated with the preconditioning of main steam isolation valves (MSIVs) prior to inservice testing. Licensee personnel determined that this issue was applicable to Palisades and subsequently revised MSIV testing and maintenance practices to address the preconditioning issue. However, no extent of condition review was performed.

b.3 Nuclear Oversight Assessments

The inspectors reviewed Nuclear Oversight assessment reports and determined that the Nuclear Oversight staff, in general, effectively identified plant performance issues. In particular, the inspectors did not identify significant performance issues during the inspection that were not described in previous Nuclear Oversight assessment reports.

b.4 Trending

Based on a weakness with trending noted during the previous Problem Identification and Resolution (PI&R) inspection, the inspectors reviewed a number of trending condition reports. In general, the licensee's effort to determine whether trends existed has improved since the last PI&R inspection. However, in two condition report evaluations reviewed by the inspectors, the licensee identified that the coding of a number of condition reports was not properly completed to perform adequate trending. This had a potentially adversely impact on the ability to accurately trend issues within the corrective action program. One of the two condition report evaluations, an apparent cause evaluation, is discussed in Section 4OA2.2.b.2.1 of this report. The other condition evaluation is discussed below.

Condition Evaluation 003399 was written to evaluate a trend identified by Nuclear Oversight. This condition evaluation identified that skill-based errors were the most prevalent human error classification during 2002. The trend evaluation, however, determined that the data used to identify the trend was limited due to the incomplete coding on the condition reports. As a result of this evaluation, a corrective action was implemented that re-coded the previous 3 months of condition reports. The data was then re-evaluated. The results did not indicate an adverse skill-based error trend.

.2 Prioritization and Evaluation of Issues

a. Inspection Scope

The inspectors independently assessed the prioritization and evaluation of a sample of corrective action program documents. The inspectors reviewed previous inspection reports and corrective action program documents to verify that identified issues were appropriately characterized and prioritized. The assessment included a review of the category assigned, operability and reportability determinations, apparent cause and root cause evaluations, extent of condition evaluations, and the adequacy of the assigned corrective actions. The inspectors also attended several Condition Review Group meetings, during which condition reports were screened and assigned a significance level. The inspectors also attended Corrective Action Review Board meetings, which reviewed completed root cause evaluations and granted extensions for the completion of corrective actions.

b. Assessment

The inspectors verified that the issues reviewed were properly categorized and evaluated.

b.1 Overview of Prioritization and Evaluation Process

The corrective action process included a review of new condition reports by the Condition Review Group, whose membership included senior plant management. The Condition Review Group assigned a significance level to each condition report, with "A" being a significant condition adverse to quality requiring a root cause evaluation, "B" being a condition adverse to quality requiring an apparent cause evaluation, and "C" being a condition adverse to quality requiring a condition evaluation to determine appropriate corrective actions. A significance level "D" was also assigned for conditions that were not adverse to quality.

The backlog of open condition reports was about 1830 at the time of the inspection. This backlog included condition reports that required evaluation and condition reports for which the evaluations were completed, but the corrective actions had not been implemented. The inspectors noted that the backlog was relatively unchanged or had slightly increased since the last PI&R Inspection in November 2002. This number of open condition reports did not meet the licensee's goal of less than 1550 for the backlog, but appeared to be understood and was receiving appropriate management attention.

b.2 Apparent Cause Evaluations

The inspectors reviewed a sample of 27 apparent cause evaluations during the inspection. In general, the evaluations appropriately evaluated the problems and reasonable corrective actions were identified to address the conditions. However, the inspectors identified that some of the apparent cause evaluations reviewed were either narrow in scope or lacked quality.

The inspectors also found several examples where substantive comments provided by the reviewers on the Apparent Cause Evaluation Score Sheets to improve the quality of the evaluations were not consistently addressed. The inspectors noted that the licensee's program did not require score sheet comment resolution unless there was a failing grade on the score sheet. The inspectors considered this to be a missed opportunity to improve the quality of apparent cause evaluations and associated corrective actions.

Some specific observations with the apparent cause evaluations are described below.

b.2.1 Apparent Cause Evaluation 003221

The following apparent cause evaluation was narrow in scope and impacted the licensee's ability to perform an extent of condition review.

Apparent Cause Evaluation 003221 was written to evaluate a potential adverse trend with inappropriate mechanical maintenance department personnel radiation work practices based on three events that occurred in November and December 2003. The apparent cause evaluator searched the TeamTrack database for contamination control and dose control related incidents in 2003. The evaluation concluded that there was no adverse trend with contamination control or dose control within the mechanical maintenance department.

The inspectors reviewed the apparent cause evaluation and identified the following weaknesses:

- The inspectors noted that the scope of the evaluation was narrowed by the evaluator so that if an adverse trend existed, it would not have been identified. Because responsible department codes were not utilized for many of the condition reports, they were excluded from review during the evaluation. Only 16 of 67 contamination control incidents were coded with a responsible department and only 30 of 79 dose control incidents were coded with a responsible department code. Of those, only 3 of 16 contamination control incidents and 4 of 30 dose control incidents were coded for the mechanical maintenance department and were included in the review.

- The inspectors noted that a significant comment provided by the reviewer on the Apparent Cause Evaluation Score Sheet was not addressed. The reviewer disputed the results of the evaluation, stating that a short-term adverse trend existed based on three events within a 2-week period. However, because the evaluation score sheet had a passing score, no follow up action was initiated.

- The inspectors noted that because the evaluation scope was narrowed, an extent of condition review was not accomplished.

b.2.2 Apparent Cause Evaluation 002847

The following apparent cause evaluation was narrow in scope and impacted the licensee's ability to perform an extent of condition review.

Apparent Cause Evaluation 002847 was written to evaluate problems identified during the calibration of loop 1B pressurizer spray valve positioner POC-1057. Multiple entries were made into the containment building during a forced outage in December 2002 due to incorrect parts and positioner installation problems. The total dose received by the workers exceeded 1800 millirem, which surpassed the dose estimate by a factor of three. The evaluation concluded that the replacement positioner was not correct.

The inspectors reviewed the apparent cause evaluation and identified the following weaknesses:

- The inspectors noted that the scope of the evaluation was narrow and focused only on this particular valve positioner and an identical positioner for the loop 2A pressurizer spray valve. As a result, the corrective actions identified in the evaluation were limited to the replacement of these two positioners and the

procurement of correct replacement parts for these valve positioners and other valve positioners in the plant of the same make and model.

- The inspectors noted that because the evaluation scope was narrow, the extent of condition review only considered valve positioners in the plant of the same make and model.

- The inspectors noted that the limited scope of the cause evaluation and extent of condition review was a missed opportunity to prevent or reduce the number of maintenance work execution problems in general, and specifically those with potential dose consequences.

- The inspectors noted that corrective action CA 018452 was initiated to evaluate possible solutions to reduce the dose accumulated for occasions where maintenance on valve positioners is performed in high radiation areas. The purchase of equipment to support mockup training was reviewed by the licensee; however, the corrective action was closed without purchasing the materials and no other action was taken. Licensee personnel stated that they planned to purchase the mockup materials, but this was not tracked in the corrective action program.

b.2.3 Apparent Cause Evaluation 002857

The following apparent cause evaluation was closed to another tracking system. The inspectors identified this practice as a potential corrective action implementation vulnerability.

Apparent Cause Evaluation 002857 was written to evaluate repetitive problems with main turbine control valve mis-operation due to degraded wiring. The evaluation concluded that factors including vibration and disassembly during turbine maintenance resulted in wear to the wiring insulation.

The inspectors noted that the only corrective action for this issue was to upgrade the wiring to the reheat stop and intercept valves, which included the identification of termination points to support turbine maintenance activities. The licensee concluded that to implement this corrective action a project study included in a long-term contract with the turbine vendor was necessary. As a result, licensee personnel closed the corrective action without implementing any plant change to correct the problem. The inspectors noted that the system engineer was tracking the wiring upgrade plan in the System Health and Status Report.

b.2.4 Apparent Cause Evaluation 003152

The following apparent cause evaluation lacked technical rigor and did not identify the root cause of the issue. However, no adverse consequences occurred.

Apparent Cause Evaluation 003152 was written to evaluate a potential adverse trend identified with component cooling water system performance. The evaluation concluded that decreasing system resistence, which would lead to decreasing pump head, was the cause for slowly decreasing system discharge pressure.

The inspectors identified that the apparent cause of the potential component cooling water pump degradation proposed in the evaluation was not reasonably justified. The cause was determined to be decreasing system resistence, which would lead to decreasing pump head. However, the pump data for all three component cooling water pumps were not all decreasing or decreasing at the same rate. Therefore, it was not reasonable to conclude that the cause could be attributed to a system problem since all three pumps were tested within the same system and one would expect similar results for each pump. The inspectors agreed with the licensee's conclusion that the pumps were able to perform their design function.

b.2.5 Apparent Cause Evaluation 003098

The following apparent cause evaluation was determined to involve weaknesses with the resolution of comments by licensee reviewers.

Apparent Cause Evaluation 003098 was written to evaluate repetitive radiological effluent monitoring system sample pump failures.

The apparent cause evaluation was reviewed and received a very low quality score. The reviewer provided numerous comments on the Apparent Cause Evaluation Score Sheet, however the evaluation was not revised. These comments included:

- A corrective action for an identified contributor for the pump failures was removed from the evaluation because the evaluator did not believe a procedure change request could be used as a corrective action.
- There was no safety significance evaluation as required by the Apparent Cause Handbook.
- There was no internal operating experience search conducted for this evaluation as required by the Apparent Cause Handbook.
- The extent of condition review did not address all the equipment that may have been affected by the problem.

b.2.6 Apparent Cause Evaluation 002736

The following apparent cause evaluation was determined to involve weaknesses with the resolution of comments by licensee reviewers.

Apparent Cause Evaluation 002736 was written to evaluate the failure of feedwater purity air compressor C-903B.

The inspectors noted that the Apparent Cause Evaluation Score Sheet included a comment that the cause was not identified and compensatory or interim corrective actions were not addressed. In this case, troubleshooting was not completed on the compressor failure prior to closing the evaluation, but the actual cause was determined at a later date during the troubleshooting activities. There were no apparent actions taken to address the comments on the score sheet.

b.2.7 Apparent Cause Evaluation 002601

The following apparent cause evaluation did not fully address a potential extent of condition vulnerability.

Apparent Cause Evaluation 002601 was written to evaluate two issues with design calculations for the Air-Operated Valve Program.

The inspectors noted that the evaluation did not discuss or address both issues identified in the condition report description. First, the design basis calculations did not include margin for degradation of the valve and/or actuator. This issue was adequately addressed in the evaluation and a 5 percent margin was added to the design calculations. The second issue concerned a dimensional error on the piston area used in calculating the available thrust to close several valves. Although the associated calculations were revised using the correct piston diameter for the valves with the same actuator, the evaluation did not determine the cause for using incorrect values. Determining the cause for the incorrect dimension value (e.g. incorrect vendor information) may have expanded the extent of condition to other valves with different actuators whose calculations relied on similar information.

b.3 Root Cause Evaluations

The inspectors reviewed a sample of 14 root cause evaluations during the inspection. In general, the evaluations appropriately evaluated the problems and reasonable corrective actions were identified to address the issues. However, the inspectors identified that two of the root cause evaluations reviewed were either narrow in scope or lacked quality. Specific observations are discussed below.

b.3.1 Root Cause Evaluation 000330

Root Cause Evaluation 000330 was written to evaluate inappropriate radiation worker practices identified during the Spring 2003 refueling outage that resulted in violations of the requirements for the control and posting of high radiation areas. Two radiation workers entered a posted high radiation area without knowledge of area dose rates and removed radioactive material from the area. The workers relocated the materials to another area, creating an unposted high radiation area. The evaluation concluded that the workers used poor judgement and failed to follow plant procedures.

The inspectors reviewed the subject root cause evaluation and identified the following weaknesses:

- The inspectors identified that two corrective actions to prevent recurrence were inadequate. The first action was limited to counseling the individuals involved in the incident and would not prevent other workers from making similar mistakes. The second action prescribed an effectiveness review through tracking the number of incidents of unposted high radiation areas through the upcoming Fall 2004 refueling outage to determine if more in-depth training of workers on radiation protection standards would be necessary. The inspectors determined that this action would not prevent other workers from making similar mistakes until the next refueling outage was completed.

- The inspectors identified that a corrective action to establish the duties and standards for the selection of the Containment Area Coordinator position (CA 019960) was closed, but not completed. Although Plant Procedure 2.09, "Outage Planning, Scheduling and Management", Attachment 17, "Outage Organization Responsibilities," was revised to address a specific performance problem identified with the Containment Area Coordinator performing physical work, no standards for the selection of individuals assigned to the Containment Area Coordinator position were established. The need for appropriate standards was highlighted in the root cause evaluation because the Containment Area Coordinator involved in this incident had not performed work in the containment building since at least 1990.

- The inspectors noted that a corrective action to perform a training needs analysis for the duties of the Containment Area Coordinator position was completed which concluded that no additional training was needed. This conclusion was reached because only a limited change to the plant procedure delineating the Containment Area Coordinator's roles was implemented. The inspectors concluded that this was a missed opportunity to improve on the knowledge and qualifications of individuals selected to be Containment Area Coordinators since no new standards were provided to the plant's Training Department to evaluate as part of its training needs analysis.

- The inspectors noted that the root cause evaluation identified that both workers received dose rate alarms on their electronic dosimeters. Although individual condition reports were written for each worker, the root cause evaluation did not evaluate the cause for the alarms and identify appropriate corrective actions. This was noteworthy because one of the workers stated that he did not hear the alarm due to high background noise. The other worker stated that he heard the alarm but did not know that he was required to immediately leave the area and contact a radiation protection technician. The inspectors noted that the cause evaluations for the two individual condition reports were closed, and stated that the evaluations would be part of this root cause evaluation.

b.3.2 Root Cause Evaluation 000321

Root Cause Evaluation 000321 was written to evaluate an adverse trend identified with scaffolding installed in the plant that did not meet licensee installation standards. This root cause evaluation was intended to address problems associated with two separate condition reports. The first condition report, CAP 033667, "Seismic Scaffold Does Not

Meet Installed Plant Equipment Separation Requirement," specifically described problems identified with the seismic qualification of plant scaffolding. The second condition report, CAP 033677, "Adverse Trend in Scaffold-Related Issues," was written to address 15 condition reports describing scaffolding issues between November 2002 and February 2003. This condition report was subsequently closed referencing the first condition report.

The inspectors identified that while the root cause evaluation adequately addressed the seismic qualification aspects of the scaffolding issue described in the first condition report, it did not address the potential adverse trend aspects of other scaffolding problems identified in the second condition report. The evaluation concluded that the procedure for erecting scaffolding did not effectively represent the margin required to maintain a one inch separation criterion. Because the scope of the evaluation was narrow, the corrective actions that followed were limited to only addressing the seismic qualification of scaffolding.

.3 Effectiveness of Corrective Action

a. Inspection Scope

The inspectors reviewed corrective action documents and recent plant issues to determine if corrective actions were implemented in a timely, appropriate, and effective manner. The inspectors conducted a walkdown of the component cooling water, radiation monitoring and service water systems to assess the material condition of these systems and to verify that the licensee appropriately identified degraded conditions within the corrective action program. The inspectors reviewed historical fuel reliability issues to assess whether the licensee had identified and implemented appropriate corrective actions. Additionally, the inspectors evaluated the current status of corrective actions to improve a previously identified substantive cross-cutting issue in the area of PI&R.

b. Assessment

In general, the licensee's corrective actions for the samples of condition reports the inspectors reviewed were appropriate and appeared to have been effective. The inspectors noted that the licensee generated condition reports when a corrective action that was either inadequate or inappropriate was identified. The inspectors identified a vulnerability with examples of closing corrective actions to other tracking methods outside of the licensee's corrective action process, which could lead to incomplete actions.

b.1 Observations on the Effectiveness of Corrective Actions

The inspectors identified one case in where corrective actions were not fully effective in correcting the identified issue to prevent recurrence.

Level "A" condition report CAP 035210 was written in response to inappropriate radiation worker practices identified during the Spring 2003 refueling outage that resulted in violations of the requirements for the control and posting of high radiation

areas. This issue was discussed in Section 4OA2.2.b.3.1 of this report. During a review of the root cause evaluation associated with CAP 035210, the inspectors identified that two corrective actions to prevent recurrence were inadequate since they would not prevent other workers from making similar mistakes. The inspectors also identified that there was a corrective action to establish the duties and standards for the selection of the Containment Area Coordinator that was closed, but not completed.

b.2 Practice of Closing Condition Reports to Other Tracking Documents

The inspectors identified the following examples where corrective actions were closed to another tracking mechanism other than the corrective action program. This represented a potential vulnerability in the ability to implement effective corrective actions in a timely manner.

- CAP 032351 was written in response to problems identified during the calibration of the loop 1B pressurizer spray valve positioner during which the total dose received by workers exceeded the original dose estimate for the job by a factor of three. As discussed in Section 4OA2.2.b.2.2 of this report, the inspectors identified that a corrective action to reduce dose in high radiation areas was closed although licensee personnel stated that they planned on implementing the action.

- CAP 032426 was written in response to repetitive problems with main turbine control valve mis-operation due to degraded wiring. As discussed in Section 4OA2.2.b.2.3 of this report, the inspectors identified that the corrective action was closed without implementing any plant change to correct the condition. The inspectors noted that the system engineer was tracking a wiring upgrade plan in the System Health and Status Report.

- CAP 029158 was written to address a high energy line break barrier control issue. The inspectors noted that corrective action CA 015988 was initiated to add a new section to Design Basis Description 7.03, "Plant Protection Against High Energy Line Breaks." The corrective action was closed based on initiating Design Basis Description change request 1867, which was identified as an enhancement and was added to the licensee's Design Basis Description tracking list for future implementation. Based on the licensee's change process, enhancement changes would not be incorporated until after 10 changes were identified or the tracking list exceeded one page.

- CAP 033244 was written regarding an Emergency Preparedness self-assessment that identified a need for an effective feedback process to stakeholders. The inspectors identified that a corrective action, CA 018943, to develop a monthly newsletter and an Emergency Preparedness website was closed and was being tracked by the Emergency Preparedness Steering Committee Action Item Tracking List.

- CAP 031874 was written by Nuclear Oversight for several discrepant issues related to the raw water corrosion program. Nuclear Oversight identified two condition reports that contained corrective actions closed to procedure change travelers before the actual change was issued.

.4 Assessment of Safety Conscious Work Environment

a. Inspection Scope

The inspectors interviewed members of the plant staff representing all major work groups at various levels of responsibility. The inspectors conducted the interviews to assess whether there were impediments to the establishment of a safety conscious work environment. The interviews included questions similar to those listed in Appendix 1 of NRC Inspection Procedure 71152, "Suggested Questions for Use in Discussions with Licensee Individuals Concerning PI&R Issues." The inspectors also reviewed the station's procedures related to the Employee Concerns Program (ECP), and discussed the implementation of this program and selected concerns with the licensee's ECP Coordinator.

b. Assessment

Plant personnel interviewed did not express any concerns regarding a safety conscious work environment. They were generally aware of and familiar with the corrective action program and other plant processes, including the ECP, through which concerns could be raised. In general, the plant personnel interviewed considered the licensee's corrective action program to be successful in identifying and correcting issues. They also indicated that individuals were encouraged by their management to identify problems.

Most plant personnel interviewed stated that they initiated condition reports regarding issues they identify. The inspectors noted one potential weakness in that the security officers and some maintenance personnel interviewed stated that they did not initiate condition reports regarding issues that they identify. However, they stated that they did refer those issues to their immediate supervisors for entry into the corrective action program.

Most plant personnel interviewed stated that the initiators of the condition reports received feedback on the resolution of their issues. However, several plant personnel indicated that they did not receive feedback on issues. In particular, the inspectors noted that several maintenance department personnel stated that they did not receive feedback. This represented a potential weakness in the communication of the resolution of issues that were entered into the corrective action program.

Based on the interviews, the ECP Coordinator was appropriately focused on ensuring that plant personnel were aware of the ECP; reviewing individual concerns; and integrating, where appropriate, the ECP and corrective action program to resolve workers concerns.

.5 Resolution of Issues Documented in NRC Inspection Reports and Issues Identified During the Last PI&R Inspection

a. Inspection Scope

The inspectors reviewed selected corrective program documents related to issues previously discussed in NRC inspection reports, including the previous PI&R Inspection in November 2002.

b. Assessment

During the PI&R Inspection in November 2002, the inspectors identified several concerns with the implementation of the corrective action program, including the following:

- The plant identified issues and entered them into the corrective action process at an appropriate low level, although some exceptions to this practice were identified.
- The majority of issues reviewed were properly categorized and evaluated although some evaluations were narrowly focused, particularly for apparent cause evaluations and extent of condition reviews.
- Most corrective actions reviewed were appropriately implemented; however, some examples, including one inspection finding, were identified regarding corrective actions that were not fully implemented or fully effective in correcting the identified problem.
- Corrective action follow-through and effectiveness is one aspect of the corrective action process that could be strengthened to reduce repeat issues at the plant.

During this inspection, the inspectors found some similar examples to those identified previously. However, the examples were limited in number and were of only minor significance. It was also apparent during the inspectors' review of internal assessments that the licensee was properly focused on the continuing improvement of the corrective action program.

The inspectors also reviewed NRC inspection reports issued since November 2002 to determine if an adverse performance trend in problem identification and resolution existed. No adverse trend was noted.

4OA4 Cross-Cutting Issues

a. Inspection Scope

The inspectors reviewed NRC inspection reports issued since November 2002 to determine if the adverse performance trend in problem identification and resolution that was first identified during the 2001 annual assessment period had improved. Problem identification and resolution remained an area of concern during the 2002 annual

assessment period due to the continued identification of findings involving corrective action program performance issues. This substantive cross-cutting issue was recently closed at the end of the 2003 annual assessment period.

b. Assessment

The inspectors determined that corrective action program performance issues had decreased substantially over the past year and since the last PI&R Inspection was performed. Although there were several corrective action program related findings identified in the last quarterly inspection report of 2002, the number of findings for 2003 decreased significantly. There were only three corrective action related findings during 2003. The following findings associated with the identification and resolution of problems were documented since November 2002:

Initiating Events Cornerstone

- A finding of low to moderate safety significance (White) was identified for the failure to take effective corrective actions to address a series of events involving digging and excavating between the protected area and the switchyard that caused a loss of offsite power and loss of shutdown cooling event.

- A Non-Cited Violation was identified for the failure to rigorously evaluate industry operating experience information, which resulted in inadequate preventive maintenance activities being developed for the 345 kilovolt transmission lines that connect the plant and switchyard. This resulted in an automatic reactor trip due to the failure of a connector holding a static wire on one phase of the transmission lines.

Mitigating Systems Cornerstone

- A Non-Cited Violation was identified for the failure to adequately evaluate the root cause and implement effective corrective actions to prevent recurrence of a leak on the instrument line for safety injection tank T-82D. This resulted in the inoperability of important safety-related equipment.

- A Non-Cited Violation was identified for the failure to implement adequate corrective actions to prevent recurring problems with the seismic qualification of scaffolding near safety-related systems.

Barrier Integrity Cornerstone

- A Non-Cited Violation was identified for the failure to identify that significant motor bearing degradation had rendered a Containment Building air cooler fan inoperable. This was due to a lack of rigor in the technical evaluation to determine operability of the fan with degraded motor bearings and the subsequent return to service of the fan in an inoperable condition.

- A Non-Cited Violation was identified for the failure to promptly identify and correct problems with the operation of a door that affected the operability of the Control Room ventilation envelope.

Emergency Preparedness Cornerstone

- A Non-Cited Violation was identified for the failure to adequately critique two Drill and Exercise Performance Indicator opportunities that occurred during licensed operator training sessions.

The inspectors concluded that each of these issues was due to a common causal factor associated with the failure to promptly and effectively identify and resolve conditions adverse to quality. The licensee implemented improvement initiatives as part of their Excellence Plan to focus on improving the quality of evaluations and strengthening the Condition Review Group and Corrective Action Review Board. The inspectors recognized that improvements have been demonstrated in the licensee's corrective action program over the past year.

4OA6 Management Meetings

.1 Exit Meeting Summary

The inspectors presented the inspection results to Mr. D. J. Malone and other members of licensee management at the conclusion of the inspection on March 5, 2004. The licensee acknowledged the information presented. The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. Proprietary information was examined during this inspection, but is not specifically discussed in this report.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee

T. Anderson, Nuclear Oversight Supervisor
M. Carlson, Engineering Director
P. Harden, Site Director
G. Higgs, Maintenance Manager
L. Lahti, Regulatory Affairs Manager
D. Malone, Site Vice President
B. MacKenzie, Corrective Action Supervisor
G. Packard, Operations Manager
R. Remus, Plant Manager
C. Scott, Employee Concerns Program Manager
D. Williams, Chemistry and Radiation Safety Manager

Nuclear Regulatory Commission

E. Duncan, Chief, Reactor Projects Branch 6
J. Lennartz, Senior Resident Inspector

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

None

Closed

None

Discussed

None

LIST OF ACRONYMS USED

ADAMS	Agency-wide Document and Management System
AR	Action Request
ACE	Apparent Cause Evaluation
ALARA	As Low As Is Reasonably Achievable
CA	Corrective Action
CAP	Corrective Action Program
CFR	Code of Federal Regulations
CE	Condition Evaluation
DRP	Division of Reactor Projects
ECP	Employee Concerns Program
IR	Inspection Report
NRC	Nuclear Regulatory Commission
OE	Operating Experience
PARS	Publicly Available Records
PI&R	Problem Identification and Resolution
RCE	Root Cause Evaluation
WO	Work Order

LIST OF DOCUMENTS REVIEWED

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

4OA2 Identification and Resolution of Problems

Condition Reports Initiated As a Result of This Inspection

CAP 040129	Actions Linked to CAP 038447 After It Was Closed	02/23/2004
CAP 040203	Potential Concerns With the Completion of CA 019960 As Written	02/25/2004
CAP 040310	Data Entry Error for CAP 037616 Significance Level	03/02/2004
CAP 040314	Long Term Tracking for Closure of Corrective Actions	03/02/2004
CAP 040346	Narrowly Focused Apparent Adverse Trend Evaluation	03/03/2004
CAP 040385	Monitoring of Radioactive Gas Effluent Monitoring Performance Issues May Have Been Inappropriate	03/03/2004
CAP 040407	Condition Reports Not Initiated for Self Assessment Findings	03/03/2004

Condition Reports Reviewed

CAP 035178	Unanticipated Dose Rate Alarm	04/15/2003
CAP 035181	Unanticipated Dose Rate Alarm	04/15/2003
CAP 034286	Electronic Dosimeter Alarm Investigations Indicates Trend in Not Hearing Alarms	03/21/2003
CAP 031618	Door 16 Mechanical Equipment Room Failure Results in Technical Specification 3.7.10 Entry	10/10/2002
CAP 032426	Turbine Valve Degraded Wiring Trend	12/10/2002
CAP 032351	Calibration Difficulties with Positioner POC-1057, "Pressurizer Spray Loop 1B"	12/04/2002
CAP 039045	Apparent Trend in Electrical System Grid Related Challenges to Plant Operations	12/15/2003
CAP 030700	Human Performance Adverse Trend in Security	11/26/2001

CAP 029719	Inadequate Corrective Action Follow-through Is a Recurring Issue and a Nuclear Oversight Finding	07/22/2002
CAP 032006	Operable But Degraded Equipment Not Repaired Prior to Next Refueling Outage	11/07/2002
CAP 030729	CV-2115, Charging Loop 2A Stop Valve Stroke Time Outside of Acceptable Stroke Time	04/11/2001
CAP 039007	Weakness in Corrective Action Program Trend Report Graphs	12/11/2003
CAP 035168	Events During Refueling Outage 16 Have Potential Common Thread to Procedure Culture at Palisades	06/30/2003
CAP 030231	Untimely Implementation of Actions to Repair High Pressure Air Check Valve CK-CA-476	04/05/2002
CAP 030769	Insufficient Follow-up to Signs of Leakage From P-50C	12/29/2001
CAP 031641	Apparent Cause Quality Checks Not Being Completed In a Timely Manner	10/11/2002
CAP 029126	Failure to Adequately Address the Extent of Problem Aspects of Condition Report CPAL 01-0014	10/03/2001
CAP 030543	CV-0501 (E-50B Main Steam Isolation Valve) Failed to Fully Close When Preparing to Cool Down	06/21/2001
CAP 029911	Loss/Disruption of Power to Security Systems Caused by Lightning	07/24/2001
CAP 034187	Failure of Charging Pump P-55A Circuit Breaker and Fire Alert	03/19/2003
CAP 032361	Reported Thermo-luminescent Dosimetry Results for Radiation Worker Permit P020519, "Maintenance Weld Repair Near MV-ES-3157" Are Discrepant in Comparison to the Expected Dose	12/05/2002
CAP 032269	CV-0770 Was Made Inoperable During Solenoid Valve SV-0770 Replacement	11/27/2002
CAP 032186	During the NRC PI&R Inspection, an Inspector Noted That Palisades May Have Completed Floor Coating Activities That Were Not Recognized as Potentially Impacting the Fire Hazard Analysis	11/20/2002
CAP 029140	Emergency Operating Procedure Manual Valve Evaluation for Inservice Testing Surveillance Testing Applicability Is Inconclusive	12/01/2001
CAP 029158	Less Than Adequate High Energy Line Break Barrier Control	01/31/2002

CAP 029749	Component Cooling Water System Maintenance Rule (a)(1) Action	07/24/2002
CAP 029757	Review of Generic Letter 89-13 Response	07/24/2002
CAP 029842	P-52B Rotating Element Assembled Incorrectly	07/31/2002
CAP 029896	Control Valve Position Indication Failures Negative Trend	12/20/2001
CAP 029945	Feedwater Pump P-1A Degraded Inboard Seal	03/12/2000
CAP 030381	Installation Issues With Tophat for Primary Coolant Pump	04/08/2001
CAP 030752	Corrective Action From P-50A Casing Leak Inadequate	12/29/2001
CAP 030778	No Procedural Controls for Isolation of Component Cooling Water Flow to Shutdown Cooling Heat Exchanger	06/07/2001
CAP 030802	New Vendor Data for Auxiliary Feedwater Pump Gland Leak-off Not Consistent With Procedure	09/09/1999
CAP 031162	Compressor C-903B Failed to Start	09/05/2002
CAP 031468	Corrective Action to Prevent Recurrence for CAP 030822 Not Effectively Implemented	10/02/2002
CAP 031646	MO-7A-1 Emergency Diesel Generator 1-1 Test Acceptance Criteria Not Met	10/12/2002
CAP 032569	Containment Sump Level Rises Unexpectedly	12/18/2002
CAP 032579	Changes in Component Cooling Water Flow Cause Shield Cooling Heat Exchanger RV-2108 Lifting	12/19/2002
CAP 033035	Skill Based Errors Remain Above Industry Average	01/22/2003
CAP 033312	Less Than Adequate Performance on Corrective Action Close Out Within Performance Assurance	02/06/2003
CAP 034101	Tubercles in Service and Fire Water Systems Backup Supply to Auxiliary Feedwater	03/17/2003
CAP 034452	E-54-B Bonnet Seating Surfaces Eroded	03/24/2003
CAP 034777	Component Cooling Water Flow to P-54B and P-54C Found Low During T-223	04/01/2003
CAP 034779	Component Cooling Water Flow to P-66A and P-67B Found Low During T-223	04/01/2003
CAP 035500	Large Air Pocket Discovered in Component Cooling Water System	04/30/2003
CAP 035395	Potential Trend Appears to Exist in Configuration Control	04/23/2003

CAP 036611	Unintentional Breach of Control Room Boundary	02/25/2003
CAP 036936	Focused Self Assessment 30019 MNT-Maintenance Warning Flag Assessment	08/04/2003
CAP 037055	Supply Chain Identified Potential Trend-Vendor Performance	08/12/2003
CAP 037616	1-1 Diesel Generator Jacket Water Hoses Appear Old	09/17/2003
CAP 037878	Degrading Trend in Component Cooling Pump P-52A Differential Pressure	10/02/2003
CAP 037918	Possible Trend in 125 Volt Direct Current Breaker Testing	10/03/2003
CAP 039541	Potential Adverse Trend in Maintenance Work Performance	01/20/2004
CAP 032967	Less Than Effective Vendor Control and Change Management	01/20/2003
CAP 029913	Potential Fuel Failure Vulnerabilities (Self Assessment CA 2000-03)	07/17/2000
CAP 032204	Needs Analysis Corrective Actions	11/21/2002
CAP 030745	Allowed Axial Offset to Axial Shape Index Deviation Exceeded for NI-7	10/28/2000
CAP 029603	2002 Institute of Nuclear Plant Operations Evaluation Areas For Improvement – EN 5.1	07/11/2002
CAP 038447	Significant Operating Events Report 02-04, Recommendation 3 Followup – Debris Induced Fuel Failure	11/05/2003
CAP 033963	Debris Found in Spent Fuel Pool	03/13/2003
CAP 020202	Adverse Trend In Foreign Material Exclusion Program	11/03/1999
CAP 030704	Loss of Foreign Material Exclusion Control Resulted in Items Being Dropped into the Spent Fuel Pool	02/27/2002
CAP 034701	Dose Performance During the 2003 Refueling Outage	03/30/2003
CAP 038487	Plant Personnel Were Not Following AP10.03, "Procurement of Material"	11/07/2003
CAP 038488	Warehouse Signs Are Not Correct for Receipt of Radioactive Material	11/07/2003
CAP 038493	Area for Improvement - Electronic Dosimeter Dose Alarms During Refueling Outage 16	11/07/2003
CAP 038494	Area for Improvement - Personnel Contamination Incidents During Refueling Outage 16	11/07/2003
CAP 038495	Area for Improvement - PC-7 Portal Monitor Alarm Set Point	11/07/2003
CAP 038496	Inconsistent Procedural Requirements and Controls for Locked High Radiation Area Keys	11/07/2003
CAP 034633	RE-1817 Sample Pump Operated Without Suction Flow Path	03/29/2003

CAP 036485	Received EK-0231, Stack Effluent Trouble Due to Radioactive Gas Effluent Monitoring Sample P-2301A Trip	07/05/2003
CAP 036988	Radioactive Gas Effluent Monitoring System Tripped	08/06/2003
CAP 037200	Received EK-0231, EC-169/EC-172 Annunciator, When In Service Radioactive Gas Effluent Monitoring Pump Tripped	08/25/2003
CAP 037555	Received Alarm EK-0231, EC-169/EC172 Annunciator (Radioactive Gas Effluent Monitoring), Unexpectedly	09/12/2003
CAP 032733	Unexplained Rise in Containment Gas Monitor RIA-1817 Counts	01/06/2003
CAP 034701	Dose Performance During the 2003 Refueling Outage	03/30/2003
CAP 037154	Adverse Trend in Emergent Dose	08/20/2003
CAP 034401	Dose Rate Surveys Inaccurate	03/23/2003
CAP 032361	Discrepant Dosimetry Results	12/06/2002
CAP 033300	Effective Review for CAP 032361, "Discrepant Dosimetry Results"	02/06/2003
CAP 036118	> 20 Millirem of Unscheduled, or Emergent Dose Was Received During Work Week 2323	06/11/2003
CAP 036286	Work Week 2324 Actual Dose is Greater Than +/- 10% of the Estimate	06/20/2003
CAP 036319	Dose for Work Week 2325 Exceeded the Estimate by > 10%	06/23/2003
CAP 036418	Work Week 2326 Dose Under Projection by Greater Than 10 %	06/29/2003
CAP 036723	Actual Dose is Greater than +/- 10% of the Estimated Dose After Normalization	07/22/2003
CAP 036819	Actual Dose is Less Than 10% of the Estimate Dose After Normalization	07/28/2003
CAP 036939	Actual Dose Accrued in Work Week 2331 is > 10% Under the Estimate	08/04/2003
CAP 037047	> 20 Millirem of Unscheduled / Emergent Dose was Received During Work Week 2332	08/12/2003
CAP 037110	> 20 Millirem of Unscheduled / Emergent Dose was Received During Work Week 2333	08/17/2003
CAP 037290	> 20 Millirem of Unscheduled / Emergent Dose was Received During Work Week 2334	08/29/2003
CAP 037336	Actual Dose Accrued in Work Week 2335 is > 10% Under the Estimate	09/03/2003
CAP 037420	Work Week 2336 Total Normalized Dose was More Than 10% Under the Estimate	09/07/2003
CAP 037564	Actual Dose Accrued in Work Week 2337 is > 10% Over the Estimate	09/14/2003
CAP 037720	Work Week 2338 Dose > 10% of the Estimated Dose After Normalization	09/24/2003

CAP 037784	Work Week 2339 Normalized Dose > 10% Below the Normalized Dose Estimate	09/29/2003
CAP 033655	Dose Estimate for Work Week 2309 is Not Accurate	02/27/2003
CAP 037943	Work Week 2340 Normalized Dose > 10% Below the Normalized Dose Estimate	10/03/2003
CAP 038062	Work Week 2341 Normalized Dose > 10% Below the Normalized Dose Estimate	10/13/2003
CAP 038266	Work Week 2343 Normalized Dose > 10% Under Normalized Estimate	10/27/2003
CAP 038394	Actual Dose Accrued in Work Week 2344 is > 10% Under the Estimate	11/03/2003
CAP 038522	Work Week 2345 Normalized Dose was > 10% Below the Normalized Estimate	11/10/2003
CAP 038726	Work Week 2346 Actual Dose Performance was > 10% Below the Estimate	11/21/2003
CAP 038749	Work Week 2347 Normalized Dose was > 10% Below the Normalized Estimate	11/23/2003
CAP 038839	Work Week 2348 Normalized Dose was > 10% Below the Normalized Estimate	12/01/2003
CAP 038960	Work Week 2349 Normalized Dose was > 10% Above the Normalized Dose Estimate	12/08/2003
CAP 039082	Work Week 2350 Normalized Dose was > 10% Below the Normalized Dose Estimate	12/16/2003
CAP 039164	Work Week 2351 Normalized Dose was > 10% Below the Normalized Dose Estimate	12/21/2003
CAP 033394	Adverse Trend in Human Performance with Chemistry and Radiation Protection	02/12/2003
CAP 031337	Apparent Adverse Trend in Action Requests / Condition Reports Exceeding Dose Estimates	09/19/2002
CAP 033224	F-57 Clean Waste Filter Plugging	02/02/2003
CAP 036717	M-991: Trend Action Request to Document Repetitive Failures	07/21/2003

Corrective Action Program Documents

Procedure 3.03	Corrective Action Process	Revision 32
FP-PA-ARP-01	Action Request Process	Revision 3
FP-NO-IA-01	Internal Assessments	Revision 5
FP-PA-SA-01	Focused Self-Assessment Planning, Conduct and Reporting	Revision 0
FP-PA-SA-03	Snap Shot Self-Assessment Process	Revision 0

FP-NO-IA-03	Internal Assessment Quality Assurance Findings	Revision 2
FP-NO-IA-07	Assessment Scheduling	Revision 0
FP-NO-IA-02	Internal Assessments Implementation Guidance	Revision 4
	Palisades Plant Effectiveness Review Handbook	Revision 1
	CAP Trend Code Manual	Revision 1
	Palisades Plant Apparent Cause Evaluation Handbook	Revision 3
Apparent Cause Evaluation Score Sheet	CAP 038939 / ACE 003221	02/10/2004
Apparent Cause Evaluation Score Sheet	CAP 031618 / ACE 002785	02/03/2003
Apparent Cause Evaluation Score Sheet	CAP 032351 / ACE 002847	02/18/2003
Maintenance Rule Evaluations 000158	Radioactive Gas Effluent Monitoring System Tripped	08/11/2003
	Palisades Nuclear Plant, Station Trend Report 1st Quarter 2003	no date
	Palisades Nuclear Plant, Station Trend Report 2nd Quarter 2003	no date
	Palisades Nuclear Plant, Station Trend Report 3rd Quarter 2003	no date
	Palisades Nuclear Plant, Station Trend Report 4th Quarter 2003	no date

Root Cause Evaluations (RCE)

RCE 000330	Unposted High Radiation Area	05/27/2003
RCE 000341	Point Beach Operator Practices Issues	02/27/2004
RCE 000299	2002 Institute of Nuclear Power Operations Evaluation Area for Improvement - Corrective Action Program	10/04/2002
RCE 000328	Events During Refueling Outage 16 Have Potential Common Thread to Procedure Culture at Palisades	01/23/2004
RCE 000325	Failure of Charging Pump P-55A Circuit Breaker and Fire Alert	03/18/2003
RCE 000308	T-82D Safety Injection Tank Level Instrument Line Leak	11/13/2002
RCE 000331	Degrading Trend in Human Performance	05/21/2003

RCE 000321	Adverse Trend in Scaffold-Related Issues	02/28/2003
RCE 000260	Feedwater Pump P-1A Degraded Inboard Seal	03/12/2000
RCE 000316	Level Transmitter Pressure Effect Not Incorporated Correctly	02/21/2003
RCE 000320	Unintentional Breach of Control Room Boundary	06/24/2003
RCE 000317	Palisades Cycle 17 Reload Fuel Vendor and Nuclear Management Company Nuclear Fuel Analysis Issues	03/19/2003
RCE 000054	Adverse Trend In Foreign Material Exclusion Program	11/03/1999
RCE 000312	Discrepant Dosimetry Results	12/06/2002

Apparent Cause Evaluations (ACE)

ACE 003221	Mechanical Maintenance Inappropriate Radiation Worker Practice Trend	12/08/2003
ACE 002785	Door 16 Mechanical Equipment Room Failure Results in Technical Specification 3.7.10 Entry	10/11/2002
ACE 002857	Turbine Valve Degraded Wiring Trend	12/12/2002
ACE 002847	Calibration Difficulties with Positioner POC-1057, "Pressurizer Spray Loop 1B"	12/06/2002
ACE 003230	Apparent Trend in Electrical System Grid Related Challenges to Plant Operations	12/17/2003
ACE 003047	OE - (D. C. Cook Event Report) Plant Trip Due to Influx of Fish in Intake Screens	05/01/2003
ACE 002527	CV-2115, Charging Loop 2A Stop Valve Stroke Time Outside of Acceptable Stroke Time	04/11/2001
ACE 002547	Failure to Adequately Address the Extent of Problem Aspects of Condition Report CPAL 01-0014	10/03/2001
ACE 002568	Less Than Adequate High Energy Line Break Barrier Control	08/05/2002
ACE 002638	Component Cooling Water System Maintenance Rule (a)(1) Action	09/26/2002
ACE 002683	Review of Generic Letter 89-13 Response	08/19/2002
ACE 002725	P-52B Rotating Element Assembled Incorrectly	12/04/2002
ACE 002736	Compressor C-903B Failed to Start Twice	12/23/2002

ACE 002774	Corrective Action to Prevent Recurrence for CAP 030822 Not Effectively Implemented	03/12/2003
ACE 002864	Changes in Component Cooling Water Flow Cause Shield Cooling Heat Exchanger RV-2108 Lifting	02/08/2003
ACE 002999	Tubercules in Service and Fire Water Systems Backup Supply to Auxiliary Feedwater	02/26/2004
ACE 003152	Degrading Trend in Component Cooling Pump P-52A Differential Pressure	10/03/2003
ACE 002588	Potential Adverse Trend in Operations Department Work-Control-Related Condition Reports	06/03/2002
ACE 002669	2002 Institute of Nuclear Plant Operations Evaluation Areas For Improvement – EN 5.1	03/19/2003
ACE 003211	Older Fuel Assembly C139 Apparently Stuck in Spent Fuel Pool Cell	11/24/2003
ACE 003190	Significant Operating Experience Report 02-04 Rec 3 Followup – Debris Induced Fuel Failure	11/07/2003
ACE 003988	Dose Performance During the 2003 Refueling Outage	03/21/2003
ACE 002872	Unexplained Rise in Containment Gas Monitor R.A.-1817 Counts	01/07/2003
ACE 002988	Dose Performance During the 2003 Refueling Outage	03/31/2003
ACE 003126	Adverse Trend in Emergent Dose	08/22/2003
ACE 002926	Adverse Trend in Human Performance with Chemistry and Radiation Protection	02/14/2003
ACE 002760	Apparent Adverse Trend in Action Requests / Condition Reports Exceeding Dose Estimates	09/20/2002

Condition Evaluations (CE)

CE 005211	Unanticipated Dose Rate Alarm	04/16/2003
CE 005183	Unanticipated Dose Rate Alarm	04/15/2003
CE 004433	Electronic Dosimeter Alarm Investigations Indicates Trend in Not Hearing Alarms	03/22/2003
CE 003612	Significant Operating Events Report 02-04, Recommendation 2 Self Assessment Area for Improvement - Equipment Deficiencies	02/07/2003
CE 007255	Significant Event Notification 243 Air Bound Containment Spray Pumps	10/02/2003
CE 006049	OE - Adverse Trends in Radiological Protection Events	07/08/2003

CE 002398	Operable But Degraded Equipment Not Repaired Prior to Next Refueling Outage	11/08/2002
CE 003399	Skill Based Errors Remain Above Industry Average	02/24/2003
CE 005116	OE 15902 - Potential Main Steam Isolation Valve Preconditioning	05/19/2003
CPAL 0201343	Untimely Implementation of Actions to Repair High Pressure Air Check Valve CK-CA-476	05/30/2002

Corrective Actions (CA)

CA 019960	Establish Standards for the Selection and Roles of a Containment Area Coordinator	05/28/2003
CA 019961	Perform a Training Needs Analysis for Containment Area Coordinators	05/28/2003
CA 019959	Establish Process for Control of Post Outage Cleanup of Containment	05/28/2003
CA 018133	Develop and Present a Request for Phased Approval to Upgrade Wiring to Reheat Stop and Intercept Valves	01/14/2003
CA 018452	Evaluate Possible Solutions to Reduce Accumulated Dose for Cases Where Maintenance of Positioners Is Performed in High Radiation Areas	01/30/2003
CA 015186	Maintenance Rule (a)(1) Action-Replace Main Feedwater Pump Seals	07/29/2003
CA 015988	Less Than Adequate High Energy Line Break Barrier Control	03/14/2003
CA 019399	Conduct Flow Testing	Open
CA 019401	Add Flow Testing, Radiograph Testing to Future Outage Scope	10/07/2003
CA 019551	Submit Document Change Request for Drawings	09/25/2003
CA 021067	Track Completion of Design Change Request Changes for Drawings	Open

Operating Experience (OE) and Generic Communications

CAP 032738	OE 15262 - Byron Jackson Reactor Coolant Pump Casing to Cover Leakage	01/16/2003

CAP 035098	OE 15902 - Potential Main Steam Isolation Valve Preconditioning	04/11/2003
CAP 035663	OE 12199 - Single Barrier Appendix R Doors Installed Improperly	05/12/2003
CAP 035723	OE 16185 - Contaminated Governor Oil Causes Diesel Slow Start	05/15/2003
CAP 035451	OE - (D. C. Cook Event Report) Plant Trip Due to Influx of Fish in Intake Screens	04/28/2003
CAP 036093	OE - Adverse Trends in Radiological Protection Events	06/09/2003
CAP 033285	Significant Operating Events Report 02-04, Recommendation 2 Self Assessment Area for Improvement - Equipment Deficiencies	02/05/2003
CAP 033289	Significant Operating Events Report 02-04, Recommendation 2 Self Assessment Area for Improvement - Operating Experience Program Improvements	02/05/2003
CAP 037796	Significant Event Notification 243 Air Bound Containment Spray Pumps	09/29/2003
CAP 029046	Institute of Nuclear Power Operations Significant Operating Events Report 99-01, Loss of Grid	01/19/2000
CAP 037038	OE 13464 - (SONGS) Component Cooling Water Pump Bearing Degradation Due to Inadequate Lubrication	08/13/2003
CAP 036422	NRC Information Notice 2003-08, "Potential Flooding Through Unsealed Concrete Floor Cracks"	06/30/2003
CAP 036383	NRC Regulatory Issues Summary 2003-12, "Clarification of NRC Guidance for Modifying Protective Actions"	06/26/2003
CAP 032118	Significant Operating Experience Report 02-04 Reactor Pressure Vessel Head Degradation at Davis-Besse	11/14/2002
CAP 039660	Operating Experience Program Self-Assessment Issues	01/27/2004
CAP 031876	Refueling Outage Recurring Task on Stagnant Lines In Service Water System May Not Have Acceptance Criteria or Contingencies	10/29/2002
CAP 031874	Ineffective Generic Letter 89-13 PI&R: Same Issue Identified by Two Separate Entities	10/29/2002
CAP 033287	Adverse Trend In Safety Injection Tank In-Leakage Noted During Testing	02/05/2003

CAP 032331	Adverse Trend In Operations Excellence–Component Mispositioning Performance Indicator	12/03/2002
CAP 033677	Adverse Trend in Scaffold-Related Issues	02/28/2003
CAP 030753	Potential Adverse Trend In Operations Department Operations Practices Condition Reports	06/03/2002
CAP 030674	Potential Adverse Trend in Operations Department Work-Control-Related Condition Reports	06/03/2002
CAP 029635	Ineffective Corrective Action Associated with CPAL0100392	07/15/2002
CAP 030544	Momentary Drop in Shut-Down Cooling Return Temperature to Reactor Vessel During Restoration of Shut-Down Cooling Bypass CV-3006 to Auto-Control	04/12/2001

Effectiveness Reviews

CA 017999	Effectiveness Review of CAP 032073	No date
CA 017904	Effectiveness Review of CAP 032289	11/26/2003
CA 021044	Effectiveness Review of CAP 030791	12/26/2003

Audits and Assessments

2002-004-8	Q4/2002 Quarterly Assessment Plan	10/01/2002 through 12/31/2002
2003-001-8	Q1/2003 Quarterly Assessment Plan	01/01/2003 through 03/31/2003
2003-002-8	Q2/2003 Quarterly Assessment Plan	04/01/2003 through 06/30/2003
2003-003-8	Q3/2003 Quarterly Assessment Plan	07/01/2003 through 09/30/2003
2003-004-8	Q4/2003 Quarterly Assessment Plan	10/01/2003 through 12/31/2003
2002-004-8	Nuclear Oversight 2nd Quarter 2003 Assessment Report for Palisades Assessment Number 2002-004-8	10/01/2002 through 12/31/2002

2003-001-8	Nuclear Oversight 2nd Quarter 2003 Assessment Report for Palisades Assessment Number 2003-001-8	01/01/2003 through 03/31/2003
2003-002-8	Nuclear Oversight 2nd Quarter 2003 Assessment Report for Palisades Assessment Number 2003-002-8	04/01/2003 through 06/30/2003
2003-003-8	Nuclear Oversight 2nd Quarter 2003 Assessment Report for Palisades Assessment Number 2003-003-8	07/01/2003 through 09/30/2003
2003-004-8	Nuclear Oversight 2nd Quarter 2003 Assessment Report for Palisades Assessment Number 2003-004-8	10/01/2003 through 12/31/2003
Focused Self Assessment 30001	Significant Operating Events Report 02-04, Recommendation 2 and Organizational Effectiveness	01/13/2003 through 01/17/2003
Focused Self Assessment 30013	Historical Root Cause Assessment	07/21/2003 through 07/25/2003
Focused Self Assessment 30021	Focused Self-Assessment Radiation Protection Programs	11/07/2003
Focused Self Assessment 30005	Focused Self-Assessment on the Conduct of Operations	05/19/2003 through 05/22/2003
Focused Self Assessment 30002	Focused Self-Assessment on the First Quarter 2002 Palisades Emergency Preparedness White Indicator	01/10/2003 through 01/27/2003
Focused Self Assessment 30004	Relief Valve Program	05/22/2003
Focused Self Assessment 30032	Boric Acid Corrosion Control Program	09/04/2003
Focused Self Assessment 30033	Quality of Engineering Products	09/19/2003

Focused Self Assessment 040009	Pre NRC PI&R Assessment	02/02/2004 through 02/06/2005
Self Assessment ASAT02-00005	Operable But Degraded and Calculation Control Self Assessment	11/04/2002 through 11/07/2002
Self Assessment ASAT02-00010	Palisades Procedure Program Assessment	No date
Self Assessment NOOR 2002-004-8-022	Air Operated Valve Program	11/20/2002
	Palisades Operations Department Monthly Performance Report, January 2004	01/13/2004

Drawings

M209, Sheet A	Component Cooling System	Revision 6
M209, Sheet 1	Component Cooling System	Revision 62
M209, Sheet 2	Component Cooling System	Revision 32
M209, Sheet 3	Component Cooling System	Revision 48

Work Orders

WO 24323761	Outboard Mechanical Seal Leaks/Replace	09/11/2003
WO 24213335	Troubleshoot Compressor C-903B	07/30/2002
WO 24210524	Compressor C-903B, EAR-2002-0031	01/28/2002
WO 24321298	FS-2321: Verify Switch Operates Correctly	04/13/2003
WO 24212632	Calibrate Radiation Monitors Pressure Indicators	04/13/2003
WO 24322658	M-991; Wiper Failed to Operate Following B/O Dump to Hand Indicator Controller	07/20/2003
WO 24321342	M-991 Wiper is Broken Will Not Turn	04/11/2003

Other Procedures and Documents

Procedure 1.05	Fuel Integrity Program	Revision 2

Procedure 2.09	Outage Planning, Scheduling and Management	Revision 1
Procedure 5.09	Maintenance Cleanliness Standards	Revision 9
EPS-M-14	Diesel Generator Refueling Frequency Maintenance	Revision 4
EM-04-25	Fuel Integrity Monitoring	Revision 2
EM-04-35	Reload Design	Revision 7
R.A.-I-9	Area Monitor Functional Check	Revision 4
MI-6	Area Monitor Operational Check	Revision 7
DBD-1.01	Component Cooling Water System	Revision 7
	Health and Status Report for the Component Cooling Water System	02/20/2004
	Health and Status Report for the Turbine Generator and Crane System	02/09/2004
580-001	Chemistry and Radiation Protection Department Qualification Guide, Radioactive Material Control	Revision 14
P-21103	Radiation Work Permit, "Miscellaneous Forced Outage Work Activities in Containment," Revisions 0 through 5	12/02/2002 through 12/04/2002
	Dose Assessment for Radiation Work Permit 2002-1103, "Forced Outage Minor Work Activities in Containment"	12/02/2002 through 12/04/2002
	ALARA (As Low As Is Reasonably Achievable) In-Progress Review for Radiation Work Permit 2002-1103, "Miscellaneous Forced Outage Work Activities in Containment," Revision 2	12/03/2002
	ALARA In-progress Review for Radiation Work Permit 2002-1103, "Miscellaneous Forced Outage Work Activities in Containment," Revision 3	12/03/2002
	ALARA In-progress Review for Radiation Work Permit 2002-1103, "Miscellaneous Forced Outage Work Activities in Containment," Revision 4	12/04/2002