

## Palisades

### Initiating Events



**Significance:** Dec 28, 2002

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

#### **Failure to Rigorously Evaluate Industry Operating Experience Information which Resulted in Inadequate Preventive Maintenance Activities being Developed for the 345 KV Transmission Lines**

The inspectors determined that a self-revealed Green finding was associated with a Non-Cited Violation of 10 CFR 50 Appendix B, Criterion XVI, "Corrective Action," for the failure to rigorously evaluate industry operating experience information which resulted in inadequate preventive maintenance activities being developed for the 345 Kilo-Volt (KV) transmission lines that connect the plant and the switchyard. Consequently, on December 1, 2002, a connector holding a static wire on the 345 KV transmission line towers between the plant and the switchyard failed. As a result, the static line contacted one phase of the 345 KV lines as well as all three phases of the 345 KV Rear Bus in the switchyard which caused an automatic plant trip on loss of generator load and a loss of startup power. This self-revealed finding was determined to be of very low safety significance by the significance determination process because: (1) the finding did not contribute to the likelihood of a Primary or Secondary system Loss of Coolant Accident initiator; (2) the finding did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available; and (3) the finding did not increase the likelihood of a fire or internal/external flood.

Inspection Report# : [2002009\(pdf\)](#)



**Significance:** Jun 30, 2002

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

#### **TS 5.4.1, "Procedures," Licensee Personnel Did Not Maintain the Appropriate, Applicable Procedure for Electrical System Equipment Control**

The inspectors identified one Green self-revealed finding that is being treated as a Non-Cited Violation of Technical Specifications 5.4, "Procedures," for the failure to establish and maintain System Operating Procedure 30, "Station Power." This procedure is used for electrical system equipment control, an activity contained in Appendix A to Regulatory Guide 1.33. Specifically, steps for the tag out of stored energy breakers did not provide adequate physical controls to prevent inadvertent system/component interactions. This resulted in the independent tripping of Cooling Tower Pump P-39B on June 11, 2002, while the plant was at full power. This self-revealed finding was determined to be of very low safety significance by the significance determination process, because: (1) the finding did not contribute to the likelihood of a Primary or Secondary system Loss of Coolant Accident initiator; (2) the finding did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available; and (3) the finding did not increase the likelihood of a fire or internal/external flood.

Inspection Report# : [2002004\(pdf\)](#)

### Mitigating Systems



**Significance:** Dec 28, 2002

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

#### **Failure to Adequately Evaluate the Root Cause of a Leak in 1992 on the Instrument Line for Safety Injection Tank T-82D**

The inspectors determined that a self-revealed Green finding was associated with a Non-Cited Violation of 10 CFR 50 Appendix B, Criterion XVI, "Corrective Action," for the failure to adequately evaluate the root cause in 1992 of a leak that occurred on the instrument line for Safety Injection Tank T-82D. Consequently, past corrective actions were not adequate to prevent the leak from recurring on November 11, 2002. As a result, T-82D was rendered inoperable and unavailable to perform the intended safety function of injecting borated water to the reactor during a large break loss of coolant accident. In addition, a NOED had to be issued to extend Technical Specification Limiting Condition 3.5.1, "Safety Injection Tanks," allowed outage time by 24 hours so that repairs could be completed to restore T-82D to an operable status without having to shut down the plant. This self-revealed finding was determined to be of very low safety significance by the significance determination process because: (1) the safety injection tanks were only credited for large break loss of coolant accidents; and (2) the exposure time for the inoperable safety injection tank was less than 3 days.

Inspection Report# : [2002009\(pdf\)](#)

G**Significance:** Nov 22, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

**Failure to adequately implement procedural requirements for the control of scaffolding in the vicinity of safety-related equipment, contrary to the requirements of TS 5.4.1, "Procedures."**

The inspectors identified a finding of very low safety significance that is being treated as a Non-Cited Violation of Technical Specification 5.4.1 "Procedures." The licensee failed to adequately implement scaffold control requirements contained in procedure MSM-M-43, "Scaffolding." Seismic scaffolding erected over Component Cooling Water (CCW) pump P-52A was anchored to a safety related pipe support for CCW pump P-52B without engineering evaluation and approval. The finding was greater than minor because the finding would become a more significant concern if left uncorrected. The failure of scaffolding installed in the vicinity of safety-related equipment during a seismic event could result in damage to mitigating equipment. The finding was of very low safety significance because it did not result in the actual loss of the safety function of the train or system.

Inspection Report# : [2002010\(pdf\)](#)G**Significance:** Sep 30, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

**Failure to Ensure the Inspection and Maintenance of the Safety-Related Expansion Joints Utilized as Flood and High Energy Line Break Barriers**

The inspectors identified a Green Finding that is being treated as a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to ensure activities affecting quality were prescribed by documented procedures of a type appropriate to the circumstances. Specifically, the activities affecting quality dealt with the inspection and maintenance of the safety-related expansion joints utilized as flood and high energy line break barriers between the component cooling water and west engineered safeguards rooms. This issue was more than minor because if left uncorrected the safety-related expansion joints could degrade further, undetected, which could result in an inadequate flood and high energy line break barrier between the component cooling water and the west engineered safeguards rooms. The finding was determined to be a licensee performance deficiency of very low safety significance (Green) by the significance determination process because the finding: (1) was not a design or qualification deficiency; (2) did not represent an actual loss of safety function of a system; (3) did not represent an actual loss of a safety function of a single train for greater than Technical Specification outage time; (4) did not represent an actual loss of a safety function of one or more Non-Technical Specification trains of equipment; and (5) did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event.

Inspection Report# : [2002007\(pdf\)](#)G**Significance:** Sep 30, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

**Failure to Promptly Identify and Correct Conditions Adverse to Quality Regarding Flood Door-196A**

The inspectors identified a Green finding that is being treated as a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Actions," for the failure to promptly identify and correct conditions adverse to quality regarding Flood Door-196A which protected the safety-related equipment in the component cooling water room from a flood in the turbine building. This issue was more than minor because the licensee failed to take adequate corrective actions for a previously identified issue involving the degradation of Flood Door 196A which could potentially cause a flood in the turbine building to spread to the component cooling water room. The finding was determined to be a licensee performance deficiency of very low safety significance (Green) by the significance determination process because the finding: (1) was not a design or qualification deficiency; (2) did not represent an actual loss of safety function of a system; (3) did not represent an actual loss of a safety function of a single train for greater than Technical Specification outage time; (4) did not represent an actual loss of a safety function of one or more Non-Technical Specification trains of equipment; and (5) did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event.

Inspection Report# : [2002007\(pdf\)](#)G**Significance:** Jun 30, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

**10 CFR 50, Appendix B, Criterion XVI, Licensee Personnel Failed to Promptly Identify and Correct the Condition Adverse to Quality in CPAL0103678**

The inspectors identified a Green finding that is being treated as a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Actions," for the failure to promptly identify and correct conditions adverse to quality regarding the licensee's review, acceptance, and approval of licensee contractor's procedures utilized to perform work and testing on all safety-related electrical components at the plant. This inspector identified finding was determined to be of very low safety significance by the significance determination process, because: (1) the finding was not a design or qualification deficiency; (2) the finding did not represent an actual loss of safety function; (3) the finding did

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

Inspection Report# : [2002004\(pdf\)](#)

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**Significance:** Mar 31, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

**Licensee Personnel Failed to Promptly Identify and Correct the Repetitive Failures of the High Pressure Air System Check Valve CK-CA476**

The inspectors identified one Green finding that is being treated as a Non-Cited Violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Actions." Licensee personnel failed to promptly identify and correct repetitive failures of high pressure air system Check Valve CK-CA476, which had been occurring since the 1996 time frame. In addition, the most recent failure which occurred in April 2001, was a condition adverse to quality for which no apparent or root cause had been performed in accordance with the licensee's corrective action program. This inspector identified finding was determined to be of very low safety significance (Green) by the significance determination process, because: (1) the finding was not a design or qualification deficiency; (2) the finding did not represent an actual loss of safety function based on as-found check valve leakage; (3) the finding did not represent an actual loss of a safety function of a single train for greater than Technical Specification outage time; (4) the finding did not represent an actual loss of a safety function of one or more Non-Technical Specification trains of equipment; (5) the finding did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event; and (6) while the finding could potentially be a design or qualification deficiency, the licensee's operability determinations confirmed that the check valve leakage did not result in a loss of function per Generic Letter 91-18, Revision 1.

Inspection Report# : [2002002\(pdf\)](#)

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**Significance:** Mar 31, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

**Licensee Personnel Failed to Identify during an Apparent Cause Evaluation that Inadequate Post Maintenance Testing Activities**

Licensee personnel failed to identify during an apparent cause evaluation completed on February 4, 2002, for Condition Report CPAL0200059, "Fire Pump P-9A Tripped After Running For Approximately Three Minutes," that inadequate post maintenance testing activities were specified in a work order following electrical breaker maintenance for Fire Pump P-9A. Because the licensee's apparent cause failed to identify the inadequate post maintenance testing, there were no corrective actions developed to ensure that appropriate post maintenance testing would be specified on subsequent work orders for electrical breaker maintenance similar to that conducted on Fire Pump P-9A. This inspector identified finding was determined to be of very low safety significance (Green) by the significance determination process, because: (1) the finding was not a design or qualification deficiency; (2) the finding did not represent an actual loss of safety function in that two other fire pumps were always available; (3) fire protection pumps are not in the Technical Specifications, and therefore the finding did not represent an actual loss of a safety function of a single train for greater than Technical Specification outage time; (4) the finding did not represent an actual loss of a safety function of one or more Non-Technical Specification trains of equipment in that two other fire pumps were always available; (5) the finding did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event in that the finding did not involve the loss of degradation of equipment or function specifically designed to mitigate a seismic, flooding or severe weather initiating event; and (6) the finding did not involve the loss of a safety function that contributed to external event initiated core damage accident sequences from fires in that two fire pumps were always available.

Inspection Report# : [2002002\(pdf\)](#)

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**Significance:** Mar 31, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

**Licensee Failed to Assure that Measures for Checking the Adequacy of a Design Modification made to the Containment Sump Recirculation Check Valves**

The inspectors identified a Green finding that is being treated as a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the failure to ensure that the measures for verifying and checking the adequacy of the design for Specification Change SC-94-130 assured that the applicable regulatory requirements and the design basis of the containment sump check valves were met. This inspector identified finding was determined to be of very low safety significance (Green) by the significance determination process, because the finding was a design deficiency confirmed not to result in a loss of function per NRC Generic Letter 91-18, Revision 1. The licensee's past operability analysis credited the use of containment overpressure and calculated plant parameters following a design basis accident and concluded that the available net positive suction head was above that required for all engineered safeguards system pumps considering the most limiting design basis accident conditions. Therefore, the engineered safeguards system pumps would have been able to perform the intended safety function and were operable, but nonconforming in accordance with Generic Letter 91-18, Revision 1.

Inspection Report# : [2002002\(pdf\)](#)

G**Significance:** Jan 07, 2002

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

**The Failure To Follow Approved Work Instructions And Procedures During Corrective Maintenance On A Primary Coolant Pump Oil Cooler Associated With The Component Cooling Water System**

Green. The inspectors identified one Green finding that is being treated as a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to follow approved work instructions and procedures during corrective maintenance on a primary coolant pump oil cooler associated with the component cooling water system. The failure to accomplish the activities affecting quality in accordance with approved work instructions resulted in a self-revealed event in which approximately 300 gallons of component cooling water was lost when the component cooling water system was restored to containment. This self-revealed issue was determined to be of very low significance (Green) by the significance determination process because (1) the issue did not increase the likelihood of a loss of primary coolant system inventory; (2) the issue did not degrade the licensee's ability to terminate a leak path or add Reactor Coolant System (RCS) inventory when needed; and (3) the issue did not degrade the licensee's ability to recover decay heat removal once lost. Although the component cooling water system was required to maintain shutdown cooling, operator action mitigated the inventory loss from the component cooling water system. Consequently, the Shutdown Cooling System was not adversely affected as evidenced by constant primary coolant system temperatures. (Section 1R14.1)

Inspection Report# : [2001017\(pdf\)](#)G**Significance:** Jan 04, 2002

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

**The Failure To Follow Approved Work Instructions And Procedures During Corrective Maintenance On The Safety-Related Breaker For Electric-Driven Fire Pump P-9A.**

Green. The inspectors identified one Green finding that is being treated as a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to follow approved work instructions and procedures during corrective maintenance on the safety-related breaker for electric-driven Fire Pump P-9A. The failure to accomplish the activities affecting quality in accordance with approved work instructions resulted in a self-revealed event in which the fire pump was inappropriately returned to service and declared operable with the long-time overcurrent breaker trip setpoints incorrectly set. Consequently, seven days after the pump was declared operable, the pump was started and tripped after running for only three minutes. This self-revealed issue was determined to be of very low significance (Green) by the significance determination process because (1) the issue did not increase the likelihood of a loss of primary coolant system inventory; (2) the issue did not degrade the licensee's ability to terminate a leak path or add RCS inventory when needed; and (3) the issue did not degrade the licensee's ability to recover decay heat removal once lost. In addition, at least one fire pump was always operable and available to perform the designed safety function during the time that Pump P-9A was inoperable. (Section 1R19.1)

Inspection Report# : [2001017\(pdf\)](#)

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## Barrier Integrity

G**Significance:** Dec 28, 2002

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

**Failure to Promptly Identify and Correct Problems Regarding the Operation of Mechanical Equipment Room Door-16**

The inspectors determined that a self-revealed Green finding was associated with a Non-Cited Violation of 10 CFR 50 Appendix B, Criterion XVI, "Corrective Action," for the failure to promptly identify and correct problems regarding the operation of Mechanical Equipment Room Door-16, which resulted in the door failing in the open position of October 10, 2002. This self-revealed finding was determined to be of very low safety significance by the significance determination process because the finding represented a degradation of only the radiological barrier function for the control room.

Inspection Report# : [2002009\(pdf\)](#)

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## Emergency Preparedness

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## Occupational Radiation Safety

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## Public Radiation Safety

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## Physical Protection

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## Miscellaneous

**Significance:** N/A Nov 22, 2002

Identified By: NRC

Item Type: FIN Finding

### **Summary Conclusion PI & R Inspection**

In general, 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. Nuclear Oversight assessment reports identified issues for the plant to resolve, including issues with corrective action follow through. 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.

Inspection Report# : [2002010\(pdf\)](#)

**Significance:** N/A Feb 09, 2002

Identified By: NRC

Item Type: FIN Finding

### **Corrective Action Cross-Cutting Finding For Six Previous Findings Impacting the Initiating Events And Mitigating Systems Cornerstones.**

No Color. Issues with the implementation of the corrective action program were identified in the initiating event and mitigating system cornerstone areas. The inspectors determined that six findings in the past six months indicated an adverse performance trend regarding the implementation of corrective actions. The causal relationships regarding the findings were: (1) conditions adverse to quality were not promptly identified or corrected; and (2) corrective actions failed to preclude repetition of significant conditions adverse to quality. While the risk of the individual findings was very low (Green), the number of corrective action findings indicated an adverse performance trend pertaining to the implementation of the corrective action program. (Section 4OA4.2)

Inspection Report# : [2001017\(pdf\)](#)

**Significance:** N/A Feb 09, 2002

Identified By: NRC

Item Type: FIN Finding

### **Human Performance Cross-Cutting Finding For Maintenance Work Performed On Safety-Related Equipment, Six Previous Findings Impacting The Initiating Events, Mitigating Systems And Barriers Cornerstones.**

No Color. Several human performance errors were identified in the initiating event, mitigating system and barrier cornerstone areas. The inspectors determined that six findings in the past twelve months indicated an adverse performance trend regarding maintenance on safety related equipment. The trend indicated common causal factors for the issues with respect to the implementation of work performed, the control of work performed through work instructions or procedures, and the review and oversight of maintenance work performed. While the risk of the individual findings was very low (Green), the number of maintenance-related incidents indicated an adverse human performance trend pertaining to the implementation, control, review and oversight of maintenance activities on safety-related equipment. (Section 4OA4.1)

Inspection Report# : [2001017\(pdf\)](#)

Last modified : March 25, 2003