Salem 1
1Q/2003 Plant Inspection Findings

Initiating Events

Significance: G Mar 29, 2003
Identified By: NRC
Item Type: FIN Finding
SALEM UNITS 1 AND 2 CONTROL AIR TRANSIENT
A self-revealing finding occurred when Salem Units 1 and 2 experienced a control air transient. Equipment anomalies during the transient revealed a valve configuration problem, an incomplete control air preventive maintenance item, and inadequate corrective action for a significant air leak. This finding was not a violation of NRC requirements, in that the performance deficiencies occurred on non-safety related systems. The finding had an actual impact on plant stability and operator actions were necessary to reseat a reactor coolant system letdown line relief valve. This finding screened to Green in phase 1 of the SDP, because mitigation equipment was not affected by the control air transient.
Inspection Report# : 2003003*(pdf)*

Mitigating Systems

Significance: G Mar 29, 2003
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO IDENTIFY EMERGENCY DIESEL GENERATOR ROOM ROOF LEAKS
The inspectors identified that PSEG did not initiate corrective action to ensure that the emergency diesel generators (EDGs) would remain unaffected by apparent roof leaks. This NCV of 10 Code of Federal Regulations (CFR) 50, Appendix B, Criterion XVI, "Corrective Action," is greater than minor, because it affected the mitigating systems cornerstone of equipment reliability and unavailability. The 1C EDG required corrective action to dry wetted safety-related electrical terminals prior to its operation. This finding was of very low significance, because the 1C EDG condition existed for less than the TS allowed outage time.
Inspection Report# : 2003003*(pdf)*

Significance: G Mar 29, 2003
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO PROPERLY EVALUATE AUXILIARY FEEDWATER PUMP SKID
The inspectors identified that temporary modifications to the 22 auxiliary feedwater (AFW) pump and the 13 AFW pump skids were not properly evaluated. This NCV of 10 CFR 50, Appendix B, Criterion III, "Design Control" was greater than minor, because it affected the mitigating system cornerstone and the reliability of two AFW pumps. This finding was determined to be of very low safety significance, because pump shaft leakoff conditions were such that the unauthorized modifications had not impacted pump operation.

Inspection Report# : 2003003*(pdf)*

Significance: G Mar 29, 2003
Identified By: NRC
Item Type: NCV NonCited Violation
EMERGENCY DIESEL GENERATOR DEFICIENT CORRECTIVE ACTIONS
A self-revealing finding was identified when the 1B emergency diesel generator (EDG) tripped during post-maintenance testing (PMT). The PMT was for separate test reasons and fortuitously revealed the EDG deficiency. The EDG deficiency involved a known electrical connector problem and inadequate interim corrective actions. This NCV of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," is greater than minor, because it affected the mitigating systems cornerstone of equipment reliability. This finding was of very low significance, because the inadequate interim corrective actions did not cause any EDG to be inoperable for greater than the TS allowed outage time.
Inspection Report# : 2003003*(pdf)*

Significance: G Mar 28, 2003
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO IMPLEMENT CORRECTIVE ACTIONS
The team identified a non-cited violation involving two examples where PSEG failed to correct conditions adverse to quality as required by 10 CFR 50, Appendix B Criterion XVI, Corrective Actions. Specifically, PSEG failed to evaluate and correct an adverse condition involving the protection of wires located inside of control room panels from an over-current condition, and also failed to correct an adverse condition involving a degraded component cooling water system pipe support. These findings were evaluated using the Phase 1 worksheet of the significance determination process and found to be of very low significance (Green) since they did not result in the actual loss of a mitigating system.
Inspection Report# : 2003004*(pdf)*

Significance: G Jan 30, 2003
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO IMPLEMENT CORRECTIVE ACTIONS FOR REPETITIVE FUEL OIL LEAKS ON EMERGENCY DIESEL GENERATORS
A non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified for the failure to identify the cause and prevent recurrence of emergency diesel generator (EDG) injection pump fitting fuel oil leaks. This resulted in repetitive EDG outages to repair fuel oil leaks. This finding is greater than minor because it adversely affected the equipment performance attribute of the mitigating systems cornerstone objective, in that the necessary repair activities for these fuel oil leaks resulted in an increased unavailability for the EDGs. The finding was of very low safety significance because the fuel oil leaks did not result in an actual loss of safety function for the EDGs. TBD. Ineffective implementation of corrective actions failed to prevent a recurrence of EDG turbocharger failure. Failure to identify the cause and prevent recurrence of the EDG turbocharger failures was a performance deficiency. This finding is greater than minor because it adversely affected the equipment performance attribute of the mitigating systems cornerstone objective, in that, the 1C EDG was incapable of performing its safety function for a period of time in excess of its technical specification allowed outage time. This finding was determined to have potential safety significance greater than very low because the likelihood of core damage due to a loss of AC power was significantly increased while the 1C EDG was not available to mitigate a loss of offsite power event. This finding is unresolved pending completion of a significance determination.

Inspection Report# : 2002010*(pdf)*

Significance: G Dec 28, 2002
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO PROPERLY TEST THE 12 COMPONENT COOLING HEAT EXCHANGER
A non-cited violation of 10 CFR 50, Appendix B, Criterion VI, "Test Controls," was identified for failure to properly establish the component cooling (CC) flowrate through the 12 CC heat exchanger during thermal performance testing. This finding is greater than minor because it affected the Mitigating System Cornerstone of equipment reliability, in that the failure to maintain adequate test controls could allow a degraded heat exchanger to go undetected. This finding was of very low significance because the CC heat exchangers remained operable when the flow measurement error was considered in the test evaluation.
Inspection Report# : 2002009*(pdf)*

Significance: G Dec 28, 2002
Identified By: NRC
Item Type: NCV NonCited Violation
PSEG FAILED TO MAINTAIN COMPLETE AND ADEQUATE MAINTENANCE RECORDS
A non-cited violation of Technical Specification 6.10.1.b was identified for failure to maintain quality records of principal maintenance activities performed on the 1PR2 valve and on the 22 containment fan cooling unit. This finding was similar to a non-cited violation identified in Inspection Report 2001-12 and indicated that previous actions to correct this problem had not been effective. This finding was greater than minor since it impacted the inspectors ability to independently assess the condition of these components following maintenance activities. This finding was of very low significance because the components performed properly during the post-maintenance testing.
Inspection Report# : 2002009*(pdf)*

Significance: G Dec 28, 2002
Identified By: NRC
Item Type: NCV NonCited Violation
SHUTDOWN COOLING LOOP INOPERABLE AND LESS THAN 3 FEET OF WATER ABOVE THE FUEL
A non-cited violation of Technical Specification 6.8.1 was identified for failure to establish and implement adequate procedures prior to the removal of the 11 CC pump room cooler fan from service for maintenance. This finding was greater than minor since it resulted in a condition where the two operable residual heat removal systems were not available when the reactor cavity water level was less than twenty-three feet above the top of the fuel as required by TS 3.9.8.2. The finding was evaluated by Regional and NRR Senior Reactor Analysts and determined to be of very low significance since the 11 CC pump remained functional during the period of time when the fan was out of service without the necessary compensatory measures.
Inspection Report# : 2002009*(pdf)*

Significance: G Dec 28, 2002
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO PROPERLY EVALUATE A TEMPORARY INSTALLATION TO THE 11 SERVICE WATER HEADER
A non-cited violation of 10 CFR 50, Appendix B, Criterion III, Design Controls was identified for the failure to

properly evaluate a temporary hose connection to an operable service water header. This finding was greater than minor since it challenged the operability of the only operable service water header while reactor de-fueling operations were in-progress. This finding was determined to be of very low significance since the service water header remained functional while the hose was attached.
Inspection Report# : 2002009*(pdf)*

Significance: G Sep 30, 2002
Identified By: NRC
Item Type: NCV NonCited Violation
PSEG NUCLEAR FAILED TO PROPERLY MAINTAIN ROOM ISOLATION BARRIERS AND IMPROPERLY IMPLEMENTED A MODIFICATION TO THE SWITCHGEAR PENETRATION AREA VENTILATION SYSTEM
An unresolved item was identified in Inspection Report 2002-07 for failure to properly maintain the automatic fire suppression system in six safety-related electrical areas as required by the fire protection program. The item remained unresolved to complete the risk assessment. A non-cited violation was identified in this report for failure to maintain the fire protection program as discussed above as required by License Conditions 2.C.5 (Unit 1) and 2.C.10 (Unit 2). The finding adversely impacted fire suppression equipment capability, affecting the reactor safety mitigating system cornerstone objectives, and therefore was greater than minor. The finding was determined to be of very low significance due to the multiple trains of mitigating systems which would survive postulated fire events.
Inspection Report# : 2002007*(pdf)*
Inspection Report# : 2002009*(pdf)*

Barrier Integrity

Significance: G Jun 29, 2002
Identified By: NRC
Item Type: NCV NonCited Violation
PSEG NUCLEAR FAILED TO TAKE ADEQUATE CORRECTIVE ACTIONS TO PRECLUDE REPETITION OF CONTROL VALVE FAILURES IN THE CONTAINMENT FAN COOLER UNIT SYSTEM
A violation of 10 CFR Part 50, Appendix B, Criterion XVI, dispositioned as a non-cited violation, was identified for the failure to take adequate corrective actions to preclude repetition of service water control valve failures in the containment fan cooler unit (CFCU) system, a significant condition adverse to quality. In response to a control valve (14SW223) failure in January 2001, the PSEG Nuclear modified portions of the valve's control air supply tubing that were susceptible to vibration-induced failure. However, the corrective actions did not adequately ensure all susceptible lines were modified. As a result, a subsequent failure of another control valve (11SW223) occurred in June 2002. PSEG Nuclear's failure to take adequate corrective actions to resolve the vibration-induced air line failure was a cross-cutting contributing cause that led to a repetitive control valve failure problem. The inspectors noted tubing on other CFCU control valves that were not properly configured, including an air tube to 15SW223 showed evidence of wear due to vibration induced rubbing. The risk of this finding is determined to be of very low safety significance, because the failure of valve 11SW223 did not impact the operability of other mitigating systems supported by service water. The finding is more than minor since the failure mechanism is common to all the CFCU control valves. This repetitive failure indicates that the problem resolution was not adequate to ensure the reliability of the valving associated with the service water system.
Inspection Report# : 2002006*(pdf)*

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

Miscellaneous

Last modified : May 30, 2003