## **Hope Creek 1 4Q/2004 Plant Inspection Findings**

## **Initiating Events**

Dec 31. 2004 Significance: Identified By: NRC Item Type: FIN Finding FAILURE TO ADEQUATELY EVALUATE AND CORRECT A FAILED OPEN LEVEL CONTROL VALVE IN THE MOISTURE SEPARATOR DRAIN SYSTEM

A finding of low to moderate safety significance was identified where engineering staff did not properly evaluate and correct a degraded level control valve for the 'A' moisture separator drain tank, as required by station procedures. In addition, engineers did not properly consider a similar occurrence from 1988. The level control valve failed 25 days prior to the event and caused the moisture separator drain system to operate in a condition outside its design. As a result, an 8-inch pipe in that system failed and caused the event on October 10, 2004.

This issue is greater than minor because it is associated with the Equipment Performance attribute of the Initiating Events cornerstone and affected the objective of limiting the likelihood of events that upset plant stability and challenge critical safety functions. A Significance Determination Process Phase 2 risk analysis determined that this finding had low to moderate safety significance based on the increased frequency of a transient with the loss of the power conversion system initiating event over the 25-day exposure period. Inspection Report# : 2004013(pdf)



Mar 30, 2004 Significance: Identified By: NRC

Item Type: NCV NonCited Violation

INADEQUATE PROCEDURAL GUIDANCE RELATED TO ELECTRICAL CONNECTOR CONTRIBUTES TO CAUSE OF **REACTOR SCRAM** 

A self revealing finding occurred on January 12 when the primary containment isolation system (PCIS) actuated during a sensor calibration on the reactor building exhaust (RBE) radiation monitoring system (RMS). The operators manually scrammed the reactor when two main steam isolation values drifted off their full open positions due to a PCIS isolation. An evaluation determined that the PCIS actuated due to an inadequately made-up electrical connection to an RBE RMS detector. This finding was determined to be a non-cited violation (NCV) of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings."

This finding was more than minor because it affected the procedure quality attribute of the initiating events cornerstone. The finding was of very low safety significance because the inadequate procedure or work instruction guidance did not contribute to a primary or secondary system loss of coolant accident initiator, did not increase the likelihood of a fire or flooding condition, and did not contribute to a loss of mitigation equipment functions.

Inspection Report# : 2004002(pdf)

## **Mitigating Systems**



Identified By: NRC

Item Type: FIN Finding

SCOPE OF SIMULATION ON THE HOPE CREEK SIMULATOR FAILED TO MEET THE STANDARDS AS SPECIFIED IN ANSI/ANS-3.5-1993

The inspectors identified that PSEG did not include the core monitoring system in the scope of simulation or conduct a formal assessment to document a deviation of the simulator compared to the plant as specified in ANSI/ANS 3.5 1993. The finding was not a violation of NRC requirements.

Traditional enforcement does not apply because the issue did not have any actual safety consequences or potential for impacting the NRC's regulatory function and was not the result of any willful violation of NRC requirements. The finding was more than minor because it was associated with the human performance attribute of the mitigating systems cornerstone and affected the cornerstone objective to ensure the availability and reliability of mitigating systems equipment. Specifically, in this case how the operators actually monitored the core during a reactor startup was different in the simulator. The inspectors determined the finding to be of very low safety significance (Green) in accordance with IMC 0609, Appendix I, "Operator Requalification Human Performance Significance Determination Process." The discrepancy did not

have an adverse impact on operator actions such that safety-related equipment was inoperable during normal operations or in response to a plant transient. Inspection Report# : 2004005(pdf)

Dec 31, 2004 Significance:

Identified By: NRC

Item Type: FIN Finding SIMULATOR PERFORMANCE TESTING ON THE HOPE CREEK SIMULATOR FAILED TO MEET THE STANDARDS **SPECIFIED IN ANSI/ANS 3.5-1993** 

The inspectors identified that PSEG did not perform and document required simulator testing in accordance with ANSI/ANS 3.5-1993. Specifically, core performance testing similar to the plant and acceptable simulator validation testing on the simulator was not performed prior to using the RELAP model for training. The finding was not a violation of NRC requirements.

Traditional enforcement does not apply because the issue did not have any actual safety consequences or potential for impacting the NRC's regulatory function and was not the result of any willful violation of NRC requirements. The finding was more than minor because it was associated with the human performance attribute of the mitigating systems cornerstone and affected the cornerstone objective to ensure the availability and reliability of mitigating systems equipment. PSEG did not perform the testing required to verify that the simulator matched the plant's response and did not properly document the results of testing that identified difference between the simulator and the plant. The inspectors determined the finding to be of very low safety significance (Green) in accordance with IMC 0609, Appendix I, "Operator Requalification Human Performance Significance Determination Process." The discrepancy did not have an adverse impact on operator actions such that safety-related equipment was inoperable during normal operations or in response to a plant transient. Inspection Report# : 2004005(pdf)



Dec 31, 2004 Significance: Identified By: NRC

Item Type: NCV NonCited Violation

MAINTENANCE RULE NEUTRON MONITORING SYSTEM (a)(2) DEMONSTRATION INVALIDATED

The inspectors identified that PSEG failed to identify and properly account for three maintenance preventable functional failures (MPFF) of the neutron monitoring system and the 10 CFR 50.65(a)(2) demonstration became invalid. This finding was determined to be a violation of 10 CFR 50.65(a)(2), "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants."

Traditional enforcement does not apply because the issue did not have any actual safety consequence or potential for impacting the NRC's regulatory function and was not the result of any willful violation of NRC requirements. The finding was more then minor because it is similar to more than minor example 1.f in NRC Inspection Manual 0612, Appendix E, "Examples of Minor Issues," in that, the 10 CFR 50.65(a)(2) demonstration became invalid as a result of considering the three additional MPFFs. In accordance with IMC 0609, Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations," the inspectors conducted a Phase I SDP screening and determined the finding to be of very low safety significance (Green). The finding was of very low safety significance because the issue was not a design or qualification deficiency that resulted in a loss of function, did not result in an actual loss of safety function of a single train of equipment for greater than allowed by technical specifications, did not result in an actual loss of safety function of equipment considered risk significant in the maintenance rule program for greater than 24 hours, and was not screened as potentially risk significant from external events. Inspection Report# : 2004005(pdf)

Dec 31. 2004 Significance: Identified By: NRC Item Type: FIN Finding

FAILURE TO EFFECTIVELY IMPLEMENT PREVENTIVE MAINTENANCE FOR THE HPCI BAROMETRIC CONDENSER VACUUM PUMP

A finding was identified as a result of the October 10, 2004, event in that PSEG did not effectively implement preventive maintenance for the HPCI system barometric condenser vacuum pump. As a result, with the HPCI system operating in the pressure control mode, the vacuum pump tripped twice due to improper lubrication of the vacuum pump shaft. Due to the vacuum pump failure, operators removed the HPCI system from service and continued a vessel cooldown with alternate safety related equipment (safety relief valves).

The finding is greater than minor because it is associated with the Equipment Performance attribute of the Mitigating Systems cornerstone and affects the cornerstone's objective of ensuring the reliability of systems that respond to initiating events. The finding is of very low safety significance because per design basis, with the vacuum pump not available, the HPCI system remained operable and was able to perform its mitigation function if required.

Inspection Report# : 2004013(pdf)

Dec 31, 2004 Significance: Identified By: NRC Item Type: NCV NonCited Violation

Page 3 of 8

## FAILURE TO PROPERLY SET LIMIT AND TORQUE SWITCHES ON HPCI VALVE IN ACCORDANCE WITH PROCEDURES

A finding was identified as a result of the October 10, 2004, event, and was a non-cited violation of 10 CFR Part 50, Appendix B, Criterion V (Instructions, Procedures, and Drawings). Technicians did not comply with a procedure to properly set a limit switch on a high pressure coolant injection (HPCI) system injection valve, which is interlocked with the HPCI full flow test valve. As a result, the full flow test valve did not open as required on initial demand when control room operators attempted to place the HPCI system in the pressure control mode of operation. Operators were subsequently successful in opening the valve about five minutes later after additional actions were taken.

This finding is greater than minor because it is associated with the Equipment Performance attribute of the Mitigating Systems cornerstone and affects the cornerstone's objective to maintain mitigation equipment reliable. This finding is of very low safety significance because the finding did not represent the actual loss of the safety function for the HPCI system. Also, reactor pressure remained relatively stable when the issue occurred and alternate pressure control methods were available (safety relief valves) if required. Inspection Report# : 2004013(pdf)



**G** Dec 31, 2004 Significance:

Identified By: NRC Item Type: NCV NonCited Violation FAILURE TO INCORPORATE OPERATING EXPERIENCE FOR LOW FLOW OPERATIONS OF RCIC INTO OPERATING PROCEDURES AND OPERATOR TRAINING

A finding was identified as a result of the October 10, 2004, event, and was a non-cited violation of 10 CFR Part 50, Appendix B, Criterion V (Instructions, Procedures, and Drawings) in that procedures for operating the reactor core isolation cooling (RCIC) system at low flow conditions were inadequate. As a result, while operating the RCIC system during a plant transient, the system exhibited unexpected flow oscillations in the automatic mode when control room operators ran the system at low flow conditions.

This finding is greater than minor because it is associated with the Procedure Quality attribute of the Mitigating Systems cornerstone and affects the cornerstone's objective of ensuring the capability of systems that respond to initiating events to prevent undesirable consequences. This finding is of very low safety significance because the finding did not result in the actual loss of the safety function for the RCIC system. Also, reactor vessel level was maintained in the appropriate range in accordance with procedures and the HPCI system was available for reactor vessel level makeup if required.

Inspection Report#: 2004013(pdf)



Sep 30, 2004 Significance: Identified By: NRC Item Type: NCV NonCited Violation

### INADEQUATE CONTROL OF TRANSIENT COMBUSTIBLE MATERIAL

The inspectors identified that fire protection procedure requirements were not met when seven drums of lubrication oil removed from the C emergency diesel generator were stored in the adjacent common corridor without the required transient combustible permit (TCP). The finding was of very low safety significance and constituted a non-cited violation of Technical Specification 6.8.1.

Traditional enforcement does not apply because the issue did not have any actual safety consequences or potential for impacting the NRC's regulatory function and was not the result of any willful violation of NRC requirements. This finding was greater than minor because it was associated with the protection against external factors attribute of the mitigating systems cornerstone and affected the objective to maintain the reliability of mitigating systems. The increased combustible loading from improperly stored lubrication oil potentially reduced the availability of mitigating systems in and adjacent to the emergency diesel generator common corridor in the event of a postulated fire. Additionally, this finding is similar to example 4.k in NRC Inspection Manual 0612, Appendix E. The finding was evaluated in accordance with NRC Inspection Manual 0609, Appendix F and determined to be of very low safety significance. The lubrication oil stored without a TCP had a high flashpoint and resulted in a low degradation of the combustible controls program. In addition, there were no in-progress maintenance tasks that resulted in a credible ignition source in the area where this oil was stored.

Inspection Report# : 2004004(pdf)



Significance: Sep 30, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

SIMULATOR INCORRECTLY REPLICATED PLANT DESIGN

The inspectors identified that the Hope Creek simulator did not replicate the plant design during a station blackout (SBO) condition because the reactor core isolation cooling (RCIC) pump suction swapped from the condensate storage tank (CST) to the suppression pool. The finding was determined to be of very low safety significance and a non-cited violation of 10 CFR 55.46(c)(1), "Plant-Referenced Simulators."

Traditional enforcement does not apply because the issue did not have any actual safety consequences or potential for impacting the NRC's regulatory function and was not the result of any willful violation of NRC requirements. This finding was more than minor because it was associated with the human performance attribute and affected the mitigating systems cornerstone objective to ensure the availability and reliability of mitigating systems equipment. The finding was evaluated using the Operator Requalification Human Performance SDP (MC 0609 Appendix I). The finding was determined to be of very low safety significance based upon the SDP contained in MC 0609, Appendix I. The discrepancy did not have an adverse impact on operator actions such that safety-related equipment was inoperable during normal operations or

in response to a plant transient. Inspection Report# : 2004004(pdf)



Sep 30, 2004

Identified By: NRC Item Type: NCV NonCited Violation

INADEQUATE ABNORMAL PROCEDURES FOR RESPONDING TO ELECTRICAL EQUIPMENT PROBLEMS

The inspectors identified that abnormal operating procedures contained errors in describing the expected reactor core isolation cooling (RCIC) and high pressure isolation cooling (HPCI) pump suction alignment during electrical equipment problems. The finding was determined to be a non-cited violation of 10 CFR 50, Appendix B, Criterion III, "Design Control."

Traditional enforcement does not apply because the issue did not have any actual safety consequences or potential for impacting the NRC's regulatory function and was not the result of any willful violation of NRC requirements. This finding was more than minor because it was associated with the procedure quality attribute of the mitigating systems cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems to respond to initiating events. These procedure errors would require operators to evaluate HPCI and RCIC pump suction alignments during electrical equipment problems because the alignments would be different than described in abnormal operating procedures. The finding was determined to be of very low safety significance because the finding was not a design or qualification deficiency, did not result in an actual loss of safety function, and the finding was not screened as a potentially risk significant for external events.

Inspection Report# : 2004004(pdf)



**G** Sep 30, 2004 Significance: Identified By: NRC Item Type: NCV NonCited Violation

### INADEOUATE PROCEDURES RESULTED IN B SERVICE WATER PUMP PACKING FAILURE

A self-revealing finding was identified regarding inadequate procedure guidance when the B station service water system (SSWS) pump packing failed on July 14, 2004. The finding was determined to be a non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings."

Traditional enforcement does not apply because the issue did not have any actual safety consequences or potential for impacting the NRC's regulatory function and was not the result of any willful violation of NRC requirements. The finding was more than minor, because it was associated with the mitigating systems cornerstone attribute for equipment performance and affected the objective to ensure the availability of the B station service water system (SSWS) pump. This issue also impacted the initiating events cornerstone objective because the unavailability of one train of SSWS increased the likelihood of a loss of service water (LOSW) event. The finding was determined to be of very low safety significance based upon a SDP Phase 3 analysis. Inspection Report# : 2004004(pdf)

Sep 30, 2004

Significance: Identified By: NRC Item Type: NCV NonCited Violation

FAILURE TO PROPERLY ESTABLISH AND TRANSLATE MINIMUM BUS VOLTAGE LIMITS INTO PROCEDURES The inspectors identified that operating procedures allowed operation of the 4.16 kV vital electrical buses at voltage levels that would have caused the safety buses to separate from the offsite power source during the starting of emergency equipment loads following a loss of coolant accident. The finding was determined to be a non-cited violation of 10 CFR 50, Appendix B, Criterion III, "Design Control."

Traditional enforcement does not apply because the issue did not have any actual safety consequences or potential for impacting the NRC's regulatory function and was not the result of any willful violation of NRC requirements. This finding was more than minor because it affected the design control attribute of the mitigating systems cornerstone and the objective to ensure the availability, reliability, and capability of electrical systems to prevent undesirable consequences. The finding was determined to be of very low safety significance based on a SDP Phase 3 analysis.

Inspection Report# : 2004004(pdf)



Identified By: NRC Item Type: FIN Finding

### INVALID TECHNICAL BASES FOR REACTOR CORE ISOLATION COOLING NONCONFORMANCE INADEQUATE HIGH PRESSURE COOLANT INJECTION DESIGN ANALYSIS

The team identified that the basis for a reactor core isolation cooling (RCIC) system operability determination (CROD) and its associated follow-up assessment (CRFA) was not supported with technically correct information for evaluating a nonconformance to the original design performance specifications. Specifically, the RCIC turbine/pump speed control system response as described in the licensee's CROD / CRFA was incorrect and did not accurately reflect the actual system capability as described in the licensee's available vendor documentation and

calibration procedures.

This finding was more than minor because the error in the assumption that the turbine control system would compensate for pump degradation resulted in a nonconservative assessment of equipment capabilities. The issue affected the equipment performance attribute of the mitigating systems cornerstone objective of ensuring the capability of the RCIC system with respect to performing its licensing bases function identified in the Updated Final Safety Analysis Report (UFSAR). The finding was determined to be of very low safety significance because it did not represent an actual loss of safety function of the RCIC system.

Inspection Report# : <u>2004009</u>(*pdf*)



Significance: Jul 30, 2004 Identified By: NRC

Item Type: NCV NonCited Violation

### INADEQUATE HIGH PRESSURE COOLANT INJECTION DESIGN ANALYSIS

The team identified a finding of very low safety significance (Green) associated with a technically invalid high pressure coolant injection (HPCI) system analysis. The design analysis utilized an inaccurate design input relative to the capability of the turbine to increase speed above the maximum rated design value. This resulted in an invalid basis for determining that HPCI could inject its design flowrate against the assumed licensing basis vessel backpressure. The issue was determined to be a non-cited violation (NCV) of 10 CFR 50, Appendix B, Criterion III.

The finding was more than minor because it was associated with the mitigating system cornerstone attributes of design control and equipment performance and affected the objective of ensuring the capability of the HPCI system in performing its licensing basis function. The finding screened to very low safety significance (Green) in SDP Phase 1, because it did not result in an actual loss of system safety function. The team identified that a contributing cause of the finding was related to the cross-cutting area of Problem Identification and Resolution. PSEG missed several prior opportunities to identify and resolve this design issue. Inspection Report# : 2004009(pdf)

G

Significance: Jun 30, 2004

Identified By: NRC Item Type: NCV NonCited Violation

INADEQUATE CORRECTIVE ACTION FOR STATION SERVICE WATER SSYSTEM TRAVELING WATER SCREEN SUPPORTS

The inspectors determined that corrective actions were not identified and tracked to address corrosion of station service water system (SSWS) traveling screen seismic class 1 support structures and spray pipe supports that was documented in PSEG condition monitoring reports. This finding was determined to be of very low safety significance and a violation of 10 CFR 50 Appendix B, Criterion XVI, "Corrective Action."

Traditional enforcement does not apply because the issue did not have any actual safety consequences or potential for impacting the NRC's regulatory function and was not the result of any willful violation of NRC requirements. This finding was more than minor because it would have become a more significant safety concern in that the seismic class 1 supports were projected to degrade to the point that the safety function would not have been maintained prior to the next inspection. The finding was determined to be very low safety significance because it was not a design deficiency, did not result in an actual loss of safety function, and did not screen as potentially risk significant due to external conditions such as a seismic event. The traveling screen supports had not degraded such that a loss of service water traveling screen safety function would occur during a seismic event. Corrective actions were initiated to replace required support components. Inspection Report# : 2004003(pdf)



Significance: Jun 30, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

INADEQUATE CORRECTIVE ACTIONS FOR A STATION SERVICE WATER SYSTEM STRAINER

A self-revealing finding was identified regarding inadequate corrective actions when the A SSWS strainer motor breaker tripped open due to a thermal overload on February 23, 2004 during increased grass loading from the river intake. The finding was determined to be a non-cited violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action."

Traditional enforcement does not apply because the issue did not have any actual safety consequences or potential for impacting the NRC's regulatory function and was not the result of any willful violation of NRC requirements. The finding was more than minor because it was associated with the mitigating systems cornerstone attribute for equipment performance and affected the objective to ensure the availability and reliability of the A SSWS pump and strainer train. This issue also impacted the initiating events cornerstone because unavailability of one train of SSWS increased the likelihood of a loss of service water (LOSW) event. The finding was determined to be of very low safety significance based upon a SDP Phase 3 analysis. Corrective actions were taken to repair the A SSWS strainer. Inspection Report# : 2004003(*pdf*)

Significance: Jun 30, 2004

## Identified By: NRC

Item Type: NCV NonCited Violation

INADEOUATE PROCEDURE ADHERENCE FOR REACTOR CORE ISOLATION COOLING TURBINE BEARING OIL LEVEL The inspectors identified that RCIC turbine bearing site glass oil level was not maintained in accordance with the applicable operating procedure requirements. Minimum and maximum level markings were not visible, and when re-established, oil level appeared to be high. The

finding was determined to be a non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings."

Traditional enforcement does not apply because the issue did not have any actual safety consequences or potential for impacting the NRC's regulatory function and was not the result of any willful violation of NRC requirements. The finding was more than minor because the high oil level condition could have impacted the ability of the RCIC system to perform its function. This affected the equipment performance attribute of the mitigating systems cornerstone objective to maintain the reliability of the RCIC pump. The finding was determined to be of very low safety significance because the performance deficiency was not a design or qualification deficiency, did not result in an actual loss of safety function based on prior successful surveillance tests, and the finding was not screened as potentially risk significant for external events. Corrective actions were taken to re-establish bearing site glass oil level markings and revise procedure requirements for consistency. Inspection Report# : 2004003(pdf)



Significance: Jun 30, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

INADEQUATE EMERGENCY DIESEL GENERATOR LOCKOUT RELAY TESTING

The inspectors identified that emergency diesel generator (EDG) lockout features were not tested in accordance with requirements. This finding was determined to be a non-cited violation of Technical Specification 4.8.1.1.2.h.14 (a, b, and c), which requires a verification that the EDG lockout features prevent EDG starting only when required. PSEG had not performed this surveillance at least once per 18 months for lockout relays 86R, 86B, and 86F associated with all four EDGs as required by the technical specifications.

Traditional enforcement does not apply because the issue did not have any actual safety consequences or potential for impacting the NRC's regulatory function and was not the result of any willful violation of NRC requirements. The finding was more than minor because the required surveillance had not been performed within the required periodicity. Also, the condition could have affected the equipment performance attribute and the availability, reliability, and capability objective of the mitigating systems cornerstone. This finding was determined to be of very low safety significance because subsequent testing verified the lockout features and the associated EDGs were operable and capable of performing their intended function.

Inspection Report# : 2004003(pdf)



Jun 24, 2004 Significance: Identified By: NRC Item Type: FIN Finding FAILURE TO CONDUCT HOPE CREEK SIMULATOR TESTING IN ACCORDANCE WITH ANSI/ANS 3.5-1993 The inspectors identified that simulator performance testing on the Hope Creek simulator did not meet the standards as specified in ANSI/ANS

3.5-1993 in that: (1) "best estimate" data for the simulator testing was not used; (2) a required annual simulator transient test was not performed, and; (3) simulator test documentation did not include an evaluation and validation of test results.

This finding is more than minor because it affects the human performance (human error) attribute of the mitigating systems cornerstone. Improperly conducted simulator testing brings simulator fidelity into question. The finding is of very low safety significance (Green) because the discrepancy did not have an adverse impact on operator actions such that safety related equipment was made inoperable during normal operations or in response to a plant transient.

Inspection Report# : 2004007(pdf)

Jun 24, 2004 Significance:

Identified By: Self Disclosing

Item Type: NCV NonCited Violation FAILURE OF THE HOPE CREEK SIMULATOR TO DEMONSTRATE EXPECTED PLANT RESPONSE TO TRANSIENT

## CONDITIONS

A self-revealing Green Non-Cited Violation (NCV) of 10CFR55.45(c)(1) was identified. It involved the failure of the Hope Creek simulator to correctly replicate the plant's response to a Primary Containment Isolation Signal (PCIS) isolation of the Primary Containment Instrument Gas (PCIG) system that results in MSIVs drifting closed.

This finding is more than minor because it affected the human performance (human error) attribute of the mitigating systems cornerstone. Not correctly replicating the plant's response on the simulator provides the potential for negative operator training. The finding is of very low safety significance (Green) because the discrepancy did not have an adverse impact on operator actions such that safety related equipment was made inoperable during normal operations or in response to a plant transient. Inspection Report# : 2004007(pdf)



Item Type: NCV NonCited Violation

### IMPROPER CONTROL OF TRANSIENT COMBUSTIBLES IN CORE SPRAY ROOM

The inspectors identified that transient combustible control requirements were not met during a maintenance activity in the A core spray pump room because engineering approval had not been provided for storing oil, and the oil drum was stored in a location different than specified in the transient combustible permit. This finding was determined to be a non-cited violation of Hope Creek Technical Specification 6.8.1, "Procedures and Programs."

The finding was more than minor because the quantity of combustible material stored was greater than assumed in the fire hazards analysis limits. The finding affected the human performance attribute of the mitigating systems cornerstone. The finding was determined to be of very low risk significance because it did not result in an impairment or degradation of fire protection features or defense in depth elements. Inspection Report# : 2004002(pdf)



Significance: Mar 30, 2004

Identified By: NRC Item Type: NCV NonCited Violation

# INADEQUATE OPERABILITY EVALUATIONS FOR THE B EMERGENCY DIESEL GENERATOR LOAD WANDERING PROBLEM

The inspectors identified two instances where the basis was not supported with correct information for concluding the B emergency diesel generator (EDG) remained operable with a load wandering condition. The finding was determined to be a non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings."

This finding was more than minor because the issues affected the equipment performance attribute of the mitigating systems cornerstone objective to maintain the B EDG reliable. The finding was determined to be of very low safety significance for mitigation systems because the finding is a qualification deficiency confirmed not to result in a loss of EDG safety function. Inspection Report# : 2004002(pdf)



Significance: Mar 30, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

### INADEQUATE IDENTIFICATION OF DEGRADED PIPE INSULATION IN DRYWELL

The inspectors determined that PSEG did not adequately identify drywell pipe insulation deficiencies during a December 2003 plant outage such that the inspectors observed additional deficiencies during a March 2004 plant outage that required correction. Additionally, the inspectors identified problems with an evaluation performed on the use of tape on drywell piping insulation. This finding was determined to be a non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action."

The finding was more than minor because it affected the design control attribute of the mitigating systems cornerstone objective to maintain mitigation equipment reliable. The finding was determined to be of very low safety significance because the finding is a design deficiency confirmed not to result in a loss of safety function. Inspection Report# : 2004002(pdf)

G

Significance: Mar 30, 2004 Identified By: NRC Item Type: NCV NonCited Violation

**INADEQUATE PROCEDURE ADHERENCE DURING TEMPORARY MODIFICATION ON 125 V DC BATTERY ROOM** The inspectors identified temporary modification instructions were not followed for controlling battery room temperatures. This impacted the reliability of 125 VDC safety-related batteries because room temperatures decreased to a temperature outside the specified band. The finding was determined to be a non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings."

This configuration control issue was more than minor because it affected the mitigating systems cornerstone objective of maintaining the reliability of the 1BD411 125 VDC battery capacity. The finding was of very low safety significance because it did not result in the safety-related batteries being declared inoperable. Inspection Report# : 2004002(pdf)

Significance: Mar 30, 2004 Identified By: NRC Item Type: NCV NonCited Violation FAILURE TO PROPERLY TRANSLATE DESIGN BASES REQUIREMENTS INTO PLANT PROCEDURES FOR UNDER VOLTAGE RELAY RESET SETPOINTS

The inspectors identified that the acceptance criteria for 4.16 kv vital bus under-voltage relay reset setpoints used in calibration procedures did not ensure successful fast bus transfer to the redundant offsite power source if the first offsite source was unavailable. The finding was determined to be a non-cited violation of 10 CFR 50, Appendix B, Criterion III, "Design Control."

This finding was more than minor because it affected the design control attribute of the mitigating systems cornerstone objective to ensure the availability, reliability, and capability of electrical systems to prevent undesirable conditions. The finding was of very low safety significance because the degraded voltage relays had been set with sufficient margins to avoid a loss of electrical distribution function. Inspection Report# : 2004002(pdf)

w

Significance: Jan 21, 2004 Identified By: NRC Item Type: VIO Violation MAINTENANCE EFFECTIVENESS ON "A" STATION SERVICE WATER SYSTEM TRAVELING SCREEN (By letter dated May 10, 2004, Final Significance Determination for a White Finding and Notice of Violation, EA-04-086 was issued. The start date of this finding has been shown incorrectly at various times during 2004 since it should have been identified as January 21, 2004. The Hope Creek mid-cycle assessment letter correctly identified this finding as being identified in the first quarter of 2004. )

A self-revealing finding occurred when the A SSWS traveling screen failed and PSEG determined that improper cutting of a key without procedure guidance had been a contributing cause. The inspectors identified an additional problem that contributed to the failure in that applicable maintenance procedures had not been used to set traveling chain tension and screen level. This performance issue was determined to have potential safety significance greater than very low safety significance, based on preliminary risk assessments that considered the associated pump unavailable while the traveling screen was inoperable.

Inspection Report# : 2003005(pdf) Inspection Report# : 2003006(pdf) Inspection Report# : 2004011(pdf)

## **Barrier Integrity**

## **Emergency Preparedness**

## **Occupational Radiation Safety**

## **Public Radiation Safety**

## **Physical Protection**

Physical Protection information not publicly available.

## Miscellaneous

Last modified : March 09, 2005