Hope Creek 1
1Q/2003 Plant Inspection Findings

Initiating Events

Significance: G Mar 29, 2003
Identified By: NRC
Item Type: NCV NonCited Violation
PSEG OPERATORS AND ENGINEERS FAILED TO PROMPTLY IDENTIFY AND INTIATE ACTIONS TO INVESTIGATE A MINOR POWER, PRESSURE, AND LEVEL EXCURSION
During a plant shutdown on March 17, PSEG operators and engineers did not promptly identify and initiate actions to evaluate a reactor pressure control deficiency, which had caused a small power, pressure, and level excursion. This deficiency subsequently resulted in a larger operational transient. The inspectors identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, Corrective Actions, for this performance deficiency. This self-revealing finding was considered to be more than minor, because it resulted in a perturbation in plant stability by causing a power transient. The inspectors determined that the finding was of very low safety significance, because although it caused a transient, it did not increase the likelihood of a primary or secondary system loss of coolant accident (LOCA) initiator, did not contribute to a combination of a reactor trip and loss of mitigation equipment function, and did not increase the likelihood of a fire or internal/external flood.
Inspection Report# : 2003003*(pdf)*

Significance: G Sep 30, 2002
Identified By: NRC
Item Type: NCV NonCited Violation
PSEG NUCLEAR DID NOT IDENTIFY AND ADMINISTRATIVELY CONTROL TRANSIENT COMBUSTIBLES MATERIALS IN THE HPCI PUMP AND TURBINE ROOM
The inspectors identified a non-cited violation for the failure to comply with the transient combustible control requirements in the high pressure coolant injection (HPCI) pump room. The safety significance of this finding was very low because of the availability of safe shutdown capabilities that were physically independent of the fire area, area-wide smoke detection, and effective fire brigade performance.
Inspection Report# : 2002006*(pdf)*

Significance: G Jun 29, 2002
Identified By: Self Disclosing
Item Type: NCV NonCited Violation
OPERATION OUTSIDE THE LICENSED CONDITIONS FOR MAXIMUM POWER LEVEL AND MINIMUM FEEDWATER TEMPERATURE FOLLOWING AN ELECTRICAL TRANSIENT
PSEG Nuclear identified that they had failed to take timely corrective actions for an August 1999 electrical transient in order to preclude its recurrence. A similarly induced electrical transient in May 2002 resulted in Hope Creek operation outside the licensed conditions for maximum power level and minimum feedwater temperature. This violation of Hope Creek operating license conditions 2.C.(1) and 2.C.(11) is being treated as a non-cited violation. The safety significance of this finding was very low because of the short duration, mitigation equipment availability, and no apparent adverse impact on fuel barrier integrity.

Inspection Report# : 2002005*(pdf)*

Mitigating Systems

Significance: G Mar 29, 2003
Identified By: NRC
Item Type: FIN Finding
PSEG FAILED TO PROMPTLY FOLLOW THROUGH ON CORRECTIVE ACTIONS TO ENSURE ADEQUATE STROKING OF ALL APPLICABLE ADHR VALVES
The inspectors identified that PSEG did not follow through on corrective actions regarding adequate stroking of all applicable alternate decay heat removal (ADHR) valves prior to refueling outage 10 (RF10) in October 2001. In addition, inspector follow-up was needed to preclude a similar occurrence in RF11, planned for April 2003. The finding was more than minor, because it potentially affected the Mitigating Systems Cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events (i.e., loss of normal decay heat removal). The finding was associated with the attribute of equipment performance (availability and reliability of ADHR). The issue was considered to be of very low safety significance based on PSEG's subsequent demonstration of no loss of safety function (ADHR).
Inspection Report# : 2003003*(pdf)*

Significance: G Mar 29, 2003
Identified By: NRC
Item Type: NCV NonCited Violation
PSEG ENGINEERING FAILED TO PROMPTLY IDENTIFY AND TAKE ACTIONS TO ADDRESS A CONDITION ADVERSE TO QUALITY CONCERNING DEGRADED HPCI SYSTEM LO PRESSURES
The high pressure coolant injection (HPCI) system lubricating oil (LO) pressures were degraded in multiple tests but were not corrected. The inspectors noted that the auxiliary and shaft-driven LO pump discharge pressures were both outside of the required range during numerous surveillance testing; however, engineering did not initiate any corrective actions to further evaluate or correct the condition. The inspectors identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, Corrective Actions, for PSEG engineering's failure to promptly identify and take actions to address a condition adverse to quality. The finding was more than minor because PSEG engineering failed to adequately evaluate a degraded condition with the potential to impact HPCI equipment performance and adversely affect HPCI availability and reliability. The issue was considered to be of very low safety significance, because HPCI remained operable.
Inspection Report# : 2003003*(pdf)*

Significance: G Dec 28, 2002
Identified By: NRC
Item Type: FIN Finding
LICENSED OPERATOR REQUALIFICATION PROGRAM
The inspectors identified a finding associated with crew performance on the simulator. Of the nine crews evaluated, three failed to pass their facility-administered requalification examinations. The Operator Requalification Human Performance SDP establishes the risk importance for crew failure rate. The failure rate for Hope Creek crews was 3 of 9, or 33 percent. A failure rate of 20 percent to 34 percent is considered to be a Green finding, and is turned over to the facility licensee for corrective action. The finding is of very low safety significance because the failures occurred

during annual testing of the operators on the simulator, because there were no actual consequences to the failures, and because all three crews were re-trained and re-evaluated before they were authorized to return to control room watches.
Inspection Report# : 2002007*(pdf)*

Significance: G Dec 28, 2002
Identified By: NRC
Item Type: NCV NonCited Violation
STANDBY LIQUID CONTROL PUMP FAILED INSERVICE TEST
The inspectors determined that PSEG failed to take adequate corrective actions to preclude repetition of a safety-related component failure. PSEG corrective actions for a B standby liquid control (SLC) pump inservice test (IST) failure in March 2002 did not adequately preclude a similar degraded condition from causing an A SLC pump IST failure on October 16, 2002. The inspectors identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, Corrective Actions, for this performance deficiency. This finding was considered to be more than minor because it affected the Mitigating Systems cornerstone objective of ensuring the availability, reliability, and capability of the SLC system to respond to initiating events (ATWS) to prevent undesirable conditions. The inspectors determined that the finding was of very low safety significance (Green) because the B SLC pump remained operable and there was no loss of the SLC system safety function.
Inspection Report# : 2002007*(pdf)*

Significance: G Dec 16, 2002
Identified By: NRC
Item Type: FIN Finding
INADEQUATE MODIFICATION AND SYSTEM DESIGN CONTROLS WITH RESPECT TO THE STATION ATWS EVALUATION
NRC Team identified a finding concerning inadequate modification and system design controls with respect to the station anticipated transient without scram (ATWS) evaluation. The team identified two modifications as well as other configuration differences that could change the results for the ATWS evaluation of record. There was no violation of NRC requirements because the licensee did evaluate design basis events such as loss of offsite power (LOP) and loss of coolant accident (LOCA) to verify design inputs and limits for the modifications. The finding is greater than minor because the condition if left uncorrected had the potential to affect the availability and reliability of HPCI. The finding is of very low safety significance because there was no loss of safety function and the reconciled and corrected ATWS evaluation demonstrated that suppression pool temperature remains below design limits and would provide adequate net positive suction head (NPSH) and LO cooling.
Inspection Report# : 2003002*(pdf)*

Significance: G Dec 16, 2002
Identified By: NRC
Item Type: AV Apparent Violation
INADEQUATE EMERGENCY DIESEL GENERATOR LOCKOUT RELAY TESTING FREQUENCY
NRC Team identified an apparent violation of Technical Specification (TS) 4.8.1.1.2.h.14 (a, b, and c) because of inadequate testing to verify that the emergency diesel generator (EDG) features associated with the 86R, 86B, and 86F lockout relays prevent EDG starting only when required. The licensee failed, in several cases, to test that the actual lockout features (i.e., lockout relay inputs) tripped the specific lockout relays as specified in the TS. This issue was more than minor because a TS required test was not performed within the required periodicity (Question 1.C in Appendix E of NRC Manual Chapter 0612). There was no actual loss of the safety system function, and subsequent testing indicated that the lockout features would have been able to accomplish their design safety functions. Enforcement action for this apparent violation will be handled by separate correspondence at a later date.

Inspection Report# : 2003002*(pdf)*

Significance: G Dec 16, 2002
Identified By: NRC
Item Type: NCV NonCited Violation
INADEQUATE INSERVICE TEST ACCEPTABLE CRITERIA FOR HIGH PRESSURE COOLANT INJECTION DEVELOPED PUMP FLOW
NRC Team identified a non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion III (Design Control) was identified for inadequate acceptance limits for HPCI quarterly operability surveillance testing requirements for developed pump flow. The licensee calculations that established the required test pressure and flows for the quarterly operability test were found to be non-conservative and no calculation was done to ensure that the system could meet design requirements. This issue was more than minor because applying the non-conservative or unreviewed acceptance limits for the pump operability test did not assure the availability and reliability of the HPCI system. This issue is considered a very low safety significance finding, because while established acceptance limits may not have been correct, there was no loss of safety function.
Inspection Report# : 2003002*(pdf)*

Significance: G Dec 16, 2002
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO IDENTIFY AND CORRECT ISSUES WITH THE HIGH PRESSURE COOLANT INJECTION LUBRICATING OIL TEMPERATURE MONITORING INSTRUMENTATION
NRC Team identified an NCV of 10 CFR Part 50, Appendix B, Criterion XVI (Corrective Actions), for not assuring that conditions adverse to quality concerning the high pressure coolant injection (HPCI) system lubricating oil (LO) temperature monitoring were promptly identified and corrected. The temperature alarm actuated during observed inservice testing after which the team identified several deficiencies with plant drawings and procedures and at least six notifications related to uncalibrated instruments, high temperature alarms, and defective temperature switches entered into the corrective action program during the past two years. The finding was more than minor because the licensee failed to provide reliable indication in the control room potentially affecting the ability to monitor and assess equipment performance, which could affect the availability and reliability of HPCI. The issue was considered to be of very low safety significance because there was no loss of safety function and the actual oil temperature was below the technical manual temperature limit.
Inspection Report# : 2003002*(pdf)*

Significance: G Dec 16, 2002
Identified By: NRC
Item Type: NCV NonCited Violation
INCOMPLETE HIGH PRESSURE COOLANT INJECTION TECHNICAL SPECIFICATION VALVE LINE-UP
NRC Team identified a TS violation dispositioned as an NCV for failure to demonstrate the HPCI system operability by, at least once per 31 days, verifying that each valve, manual or automatic, in the system flow path that is not locked, sealed or otherwise secured in position is in its correct position. The team identified that manual valve BJ-048 was not accounted for in the HPCI system valve lineup. The finding is more than minor because a TS required valve position verification was not performed (Question 1.c in Appendix E Manual Chapter 0612), which had the potential to impact HPCI availability and reliability in reference to the configuration control attribute for operating equipment. Mis-positioning of this valve could result in damage due to inadequate LO cooling. The risk of this finding is determined to be of very low safety significance because there was no loss of safety function, and the valve was found to be in the

proper positions during a subsequent valve line-up.
Inspection Report# : 2003002*(pdf)*

Significance: G Dec 16, 2002
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO EVALUATE THE POTENTIAL EFFECTS OF STEAM LEAKS ON STATION BLACKOUT COPING ASSUMPTIONS
An NCV of 10CFR50.63 (a) (2) Station Blackout (SBO) was identified due to the lack of an operability determination or engineering evaluation for the multiple steam leaks in the HPCI pump room. The degraded plant material condition of elevated HPCI room temperatures and humidity were not evaluated for the direct impact on the station's ability to cope following an SBO. The finding was more than minor because, for an SBO event, both the expected HPCI pump room temperatures and HPCI DC bus room temperatures would be above the evaluated temperature limits potentially affecting the availability and reliability of HPCI. The finding is of very low safety significance because there was no loss of safety function. Draft calculations and subsequent engineering review of the conservatism in the original calculation method provided evidence that the resulting elevated room temperatures were not likely to cause a short term failure of HPCI or a risk significant failure on the DC bus components during the four-hour coping period.
Inspection Report# : 2003002*(pdf)*

Significance: G Sep 30, 2002
Identified By: NRC
Item Type: NCV NonCited Violation
PSEG NUCLEAR DID NOT PROMPTLY IDENTIFY AND INITIATE ACTIONS TO CORRECT A CONFIGURATION CONTROL DEFICIENCY ASSOCIATED WITH SERVICE WATER INTAKE WATERTIGHT FLOOD DOORS
The inspectors identified a non-cited violation for PSEG Nuclear's failure to promptly identify and initiate actions to correct a configuration control deficiency associated with SW intake watertight flood doors. The safety significance of this finding was very low (Green) because: (1) the likelihood of a flooding event in the service water (SW) screen room that would challenge the equipment in the B/D SW bay was low; (2) one complete SW loop remained available to provide safety-related cooling water to the safety auxiliaries cooling system (SACS), if needed; and (3) the duration that the condition existed was very short, less than four hours.
Inspection Report# : 2002006*(pdf)*

Significance: G May 11, 2002
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO PROMPTLY IDENTIFY AND CORRECT A DEGRADED CONDITION ON THE D EMERGENCY DIESEL GENERATOR
The inspectors identified a non-cited violation for inadequate corrective actions for PSEG Nuclear's inability to promptly identify a degraded condition on the D emergency diesel generator (EDG). The safety significance of this finding was very low, based on the continued operability of the D EDG.
Inspection Report# : 2002004*(pdf)*

Significance: G May 11, 2002
Identified By: NRC

Item Type: NCV NonCited Violation
FAILURE TO ADEQUATELY ASSESS AND MANAGE THE INCREASE IN RISK ASSOCIATED WITH PLANNED MAINTENANCE ON THE A EDG AND C SW PUMP
The inspectors identified a non-cited violation for PSEG Nuclear's ineffective assessment and management of the increase in risk associated with planned maintenance on the A emergency diesel generator and C service water pump. The safety significance of this finding was very low, because the components were not removed from service at the same time.
Inspection Report# : 2002004*(pdf)*

Significance: G May 11, 2002
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO PERFORM ADEQUATE INSPECTIONS IN ACCORDANCE WITH PROCEDURES
The inspectors identified a non-cited violation for PSEG Nuclear's failure to adequately perform post installation inspections on the high pressure coolant injection (HPCI) 250 volt DC battery. The safety significance of this finding was very low, because PSEG Nuclear was able to demonstrate that the HPCI battery remained operable in this circumstance.
Inspection Report# : 2002004*(pdf)*

Barrier Integrity

Significance: G Mar 29, 2003
Identified By: NRC
Item Type: NCV NonCited Violation
PSEG FAILED TO PROPERLY PLAN A WORK ACTIVITY ASSOCIATED WITH SCHEDULED MAINTENANCE ON THE A CRVS
PSEG did not properly plan scheduled maintenance on the A control room ventilation system (CRVS), which resulted in the inoperability of both the A and B control room emergency filtration (CREF) subsystems. Work planning did not identify that a ductwork hatch affected both trains prior to its removal. The inspectors identified a non-cited violation of TS 3.7.2, Control Room Emergency Filtration System, for this performance deficiency. This self-revealing finding was considered to be more than minor because it affected the Barrier Integrity cornerstone and was associated with the configuration control attribute as it impacted the control room envelope. The inspectors determined that the finding was of very low safety significance because: (1) the likelihood of an initiating event that would challenge the control room barrier function was low; (2) the B CRVS and CREF subsystem was recoverable; (3) full faced, self-contained breathing apparatus and protective clothing were available for use by control room operators; and (4) the duration that the condition existed was very short, approximately 10 minutes.
Inspection Report# : 2003003*(pdf)*

Significance: G Sep 30, 2002
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO CONDUCT MAINTENANCE IN ACCORDANCE WITH NC.NA-AP.ZZ-0069, RESULTING IN THE LOSS OF BOTH TRAINS OF CONTROL ROOM VENTILATION
A July 16 event revealed inadequate work control, in that technicians failed to conduct maintenance in accordance with

NC.NA-AP.ZZ-0069, "Work Control Coordination," resulting in the loss of both trains of control room ventilation. The safety significance of this finding was very low (Green) because: (1) the likelihood of an initiating event that would challenge the control room barrier function was low; (2) the physical integrity of the control room barrier was maintained, which would minimize in-leakage into the control room; (3) the control room ventilation system was recoverable; (4) full faced, self-contained breathing apparatus and protective clothing were available for use by control room operators; and (5) the duration that the condition existed was very short, approximately 40 minutes.
Inspection Report# : 2002006*(pdf)*

Significance: G Sep 30, 2002
Identified By: NRC
Item Type: NCV NonCited Violation
PSEG NUCLEAR DID NOT TAKE APPROPRIATE CORRECTIVE ACTIONS TO PRECLUDE RECURRENCE OF A DEFICIENCY ASSOCIATED WITH SECONDARY CONTAINMENT INTEGRITY
The inspectors identified a non-cited violation for PSEG Nuclear's failure to take appropriate corrective actions to preclude recurrence of a filtration, recirculation and ventilation system (FRVS) configuration control deficiency, i.e., an incorrect operating setpoint for the B FRVS ventilation fan. The safety significance of this finding was very low, as the finding only represented a degradation of the radiological barrier function for FRVS, the A FRVS train remained available to control reactor building pressure, and secondary containment integrity was maintained (no open pathway existed).
Inspection Report# : 2002006*(pdf)*

Significance: G Jun 29, 2002
Identified By: NRC
Item Type: NCV NonCited Violation
PERSONNEL PERFORMANCE DURING NONROUTINE PLANT EVOLUTIONS
The inspectors identified a non-cited violation for inadequate corrective actions for the reactor operators' failure to promptly identify and initiate actions to correct a deficiency associated with an elevated turbine first stage pressure indicative of a potential overpower condition. The safety significance of this finding was very low, based on the small magnitude of the overpower condition, limited duration, and no apparent adverse impact on fuel barrier integrity.
Inspection Report# : 2002005*(pdf)*

Emergency Preparedness

Occupational Radiation Safety

Significance: G Jun 29, 2002
Identified By: NRC
Item Type: NCV NonCited Violation
PSEG NUCLEAR FAILED TO CALIBRATE TWO AREA RADIAITON MONITORS
The inspector identified that two area radiation monitors had not been calibrated every 18 months as required by procedure NC.WM-AP.ZZ-0003, Regular Maintenance Process. This violation of Technical Specification 6.8.1.a is

being treated as a non-cited violation. The safety significance of this finding was very low, because other radiological instrumentation, industry survey meters and electronic dosimeters, were available.
Inspection Report# : 2002005*(pdf)*

Public Radiation Safety

Physical Protection

Miscellaneous

Last modified : May 30, 2003