

# Hope Creek 1

## 4Q/2008 Plant Inspection Findings

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### Initiating Events

**Significance:**  Sep 30, 2008

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

#### **INADVERTENT FEEDWATER INJECTION THROUGH THE HIGH PRESSURE COOLANT INJECTION SYSTEM DUE TO AN INADEQUATE TEST PROCEDURE**

A self-revealing, non-cited violation of Technical Specification 6.8.1, "Procedures and Programs," was identified because, during performance of post-modification testing for the high pressure coolant injection (HPCI) feedwater injection valve, PSEG inadvertently injected feedwater into the reactor vessel through the HPCI and core spray systems. Specifically, PSEG did not ensure that the post-modification test procedure established a system configuration appropriate for the plant's operating condition. This resulted in an unanticipated reactor pressure and power transient. PSEG's corrective actions included revising the test procedure and re-performing the test.

The finding is more than minor because it is associated with the procedure quality attribute of the Initiating Events cornerstone, and it affected the cornerstone objective of limiting the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Specifically, an inadequate procedure resulted in an injection of feedwater through the HPCI core spray injection valve, which caused a pressure and power transient. The finding screened as Green (very low safety significance) because 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. The finding has a cross-cutting aspect in the area of human performance because PSEG did not define and effectively communicate expectations regarding procedural compliance, and PSEG personnel did not follow procedures. Specifically, PSEG did not adequately implement the new procedure review process defined by PSEG procedure AD-AA-102-1001, "Station Qualified Reviewer's Guide," and, as a result, did not identify the adverse impact of the sequence of valve operations specified by the test procedure. (H.4(b))

Inspection Report# : [2008004](#) (*pdf*)

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### Mitigating Systems

**Significance:**  Jun 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

#### **INADEQUATE CORRECTIVE ACTIONS FOR TRAVELING WATER SCREEN SUPPORT STRUCTURE**

The inspectors identified a non-cited violation of 10 CFR 50 Appendix B, Criterion XVI, for inadequate corrective actions to address previously identified corrosion of service water traveling screen seismic class 1 support structures. The actions were insufficient to address the corrosion on the D traveling water screen support structure, such that a seismic support I-beam was determined to be inoperable in May 2008. PSEG's corrective actions included replacing corroded I-beams and inspecting other support structure components.

The finding is more than minor because it is associated with the equipment performance attribute of the Mitigating Systems cornerstone, and it affected the cornerstone objective of ensuring the availability and reliability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the corrective actions did not assure operability of a seismic support for the D service water traveling water screen. The inspectors determined that the finding was of very low safety significance (Green). This finding has a cross-cutting aspect in the area of problem

identification and resolution because PSEG did not take appropriate corrective actions to address safety issues in a timely manner commensurate with their safety significance and complexity (P.1.(d)). Specifically, PSEG did not take adequate corrective actions to ensure that the operability of the degraded D TWS structural support steel was maintained.

Inspection Report# : [2008003](#) (*pdf*)

**Significance:**  Mar 31, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

### **IMPROPER MANAGEMENT OF WORKING HOURS DURING REFUELING OUTAGE**

The inspectors identified a non-cited violation of Technical Specification (TS) 6.2.2.d, "Unit Staff," because four individuals worked beyond the TS limit of 72 hours in a 7-day period without proper authorization. Additionally, PSEG did not approve the work hour deviations of 20 individuals prior to them working the hours. PSEG entered this issue into their corrective action program in notification 20357323.

The finding was determined to be more than minor because, if left uncorrected, exceeding TS work hour limits would increase the likelihood of a fatigue-related human performance error during normal plant operations or plant events. The inspectors used Inspection Manual Chapter 0609 Appendix M, "Significance Determination Process Using Qualitative Criteria," because other significance determination process guidance was not suited to provide reasonable estimates of the significance of this inspection finding. With the assistance of Region 1 management and a Senior Risk Analyst, the inspectors determined that the finding was of very low safety significance (Green) because there were no human performance issues that were linked directly to worker fatigue. The finding had a cross-cutting aspect in the area of human performance because PSEG did not follow procedure LS-AA-119 to authorize deviations from working hour limits described in Technical Specification 6.2.2.d. H.4(b)

Inspection Report# : [2008002](#) (*pdf*)

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## **Barrier Integrity**

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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**

Although the NRC is actively overseeing the Security cornerstone, the Commission has decided that certain findings pertaining to security cornerstone will not be publicly available to ensure that potentially useful information is not provided to a possible adversary. Therefore, the [cover letters](#) to security inspection reports may be viewed.

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## Miscellaneous

**Significance:** SL-IV Dec 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

### **UNTIMELY LICENSEE EVENT REPORT FOR A LOSS OF SAFETY FUNCTION OF THE CONTROL ROOM EMERGENCY FILTRATION SYSTEM**

The inspectors identified a non-cited, Severity Level IV violation of 10 CFR 50.73(a)(1) for a failure to submit a licensee event report (LER) within 60 days after the discovery of an event requiring a report. On April 22, 2008, PSEG determined that both trains of the control room emergency filtration (CREF) system were inoperable, which is reportable as a loss of safety function of a system that is designed to mitigate the consequences of an accident. Additionally, operators entered Technical Specification 3.0.3 and commenced a plant shutdown, which is reportable as a condition prohibited by Technical Specifications. PSEG did not submit an LER for this event until October 17, 2008. PSEG's corrective actions included revising the applicable procedure for assessing whether an LER is required.

Traditional enforcement applies because a failure to report an event in a timely manner has the potential to impact the NRC's ability to perform its regulatory function. This violation was determined to be a Severity Level IV violation consistent with Section IV.A.3 and Supplement I.D of the NRC Enforcement Policy. The finding has a cross-cutting aspect in the area of problem identification and resolution, because PSEG did not properly evaluate a condition adverse to quality for reportability. Specifically, PSEG did not correctly evaluate the reportability of both trains of CREF being inoperable. As a result, PSEG failed to submit an LER in a timely manner. (P.1(c))

Inspection Report# : [2008005](#) (*pdf*)

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