### Calvert Cliffs 2 1Q/2004 Plant Inspection Findings

## **Initiating Events**



Significance: Jun 28, 2003 Identified By: Self Disclosing Item Type: FIN Finding Troubleshooting Human Performance Error Results in a Reactor Trip The inspectors identified a finding because the work practices during a turbine governor valve control circuit troubleshooting activity were inadequate and resulted in a reactor trip.

This finding is greater than minor because it affected an attribute and the objective of the Initiating Events Cornerstone in that the work practices inadequacies resulted in a perturbation in plant stability by causing a reactor trip. The finding is of very low safety significant in accordance with Phase 1 of the reactor safety SDP because, although it caused a reactor trip, it did not increase the likelihood of a primary or secondary system loss of coolant accident initiator, did not contribute to a combination of a reactor trip and loss of mitigation equipment functions, and did not increase the likelihood of a fire or internal/external flood.

Inspection Report# : 2003003(pdf)

### **Mitigating Systems**



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

Design Basis for ECCS Mini Flow Valve Indication not Translated into DesignSpecifications (Section 1R21.b.3)

The team identified a non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion III, Design Control, for CEG's failure to correctly translate the design specifications into the design of the ECCS Mini Flow Valve Indication. Speficially, the control room valve indications on two normaly opened and de-energeized mini flow valves were not redundant and did not meet single failure criteria.

This finding is more than minor since it is associated with the design control attribute of the Mitigating Systems cornerstone objective of ensuring the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The finding was evaluated using Manual Chapter 0609, Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations". The issue was a design or qualification deficiency and was determined to be of very low safety significance (Green) because it did not result in an actual loss of safety function of a single train for internal or external event initiated core damage sequences. (Section 1R21.b.3)

Inspection Report# : 2004002(pdf)



Significance: Jan 30, 2004

Identified By: NRC Item Type: NCV NonCited Violation

HPSI Design Support/Seismic Structural Records not Retrievable (Section 1R21.b.1)

The team identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVII, Quality Assurance Records, related to the licensee's inability to retrieve records required to furnish evidence of the adequate performance of activities affecting the quality of the high pressure safety injection (hPSI) system. Specifically, quality records, identifiable with both the design change details for a Unit 2 HPSI pipe support snubber installation and the design calculations for the seismic adequacy for structural platforms in the refueling water tank (RWT) rooms in Units 1 & 2, were not retrievable.

The finding was evaluated using Manual Chapter 0612, Appendix E, example 1.b and determined to be more then mainor because the records were irretrievable lost. The finding was associated with the attribute of design control (initial design, plant modifications). This issue is considered a very low safety significance finding because, while the required records were not retrievable, an as-built design review was conducted by the licensee which demonstrated the structural adequacy of the existing field configurations (Section 1R21.b.1) Inspection Report# : 2004002(pdf)

### 1Q/2004 Inspection Findings - Calvert Cliffs 2



Identified By: NRC

Item Type: NCV NonCited Violation

#### High Pressure Safety Injection System Operation Outside of Design Basis (Section 1R21.b.2)

The team identified a non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion III, Design Control, for constellation Energy Group's (CEG) failure to correctly translate the emergency core cooling system (ECCS) design basis into the HPSI system operating instructions and procedures. Specifically, for shot durations during surveillance test activities, the HPSI loop isolation valve was placed in a condition that could impact core cooling if the redundant train of HPSI were to fail.

The finding was more than minor because it affected the Mitigating Systems cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events (i.e., loss of coolant accidents) to prevent undersirable consequences (core damage). The finding was associated with the attribute of configuration control (operating equipment lineup). The finding was of very low safety significance because it represented the loss of single train of HPSI for less than the TS 3.5.2.A allowed outage time (72 hours) during each occurrence. (Section 1R21.b.2)

Inspection Report# : 2004002(pdf)



Significance: Dec 31, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

#### Failure to adequately evaluate suction stabilizer failures and perform repairs in a timely manner

The inspectors identified a non-cited violation of 10 CFR 50, Appendix B, Criterion XVI, Corrective Actions, which requires that measures shall be established to assure that conditions adverse to quality are promptly identified and corrected. Specifically, the licensee failed to promptly correct a condition adverse to quality associated with suction stabilizer failures, which if left uncorrected could have resulted in the failure of a charging pump. These failures occurred on the Unit 1, 13 charging pump in October, 2002, and on the Unit 2, 23 charging pump in September, 2002. The associated repairs were not timely and did not occur until October, 2003, and December 2003, respectively.

This finding is greater than minor because it affects the Reactor Safety, Mitigating Systems attribute of equipment performance, and the availability, reliability, and capability objective of the mitigating systems cornerstone because if left uncorrected, this condition could have led to the failure of a charging pump. The issue was of very low safety significance because the finding was not a design or qualification deficiency, the finding did not represent an actual loss of safety function, and the finding did not screen as potentially risk significant due to a seismic, fire flooding, or severe weather initiating event. Additionally, the failure of a charging pump did not occur while its suction stabilizer was in a failed condition. The inspectors identified that a contributing cause of this finding was related to the cross-cutting area of Problem Identification and Resolution.

Inspection Report# : 2003006(pdf)



Significance: Nov 07, 2003 Identified By: NRC

Item Type: NCV NonCited Violation

Failure to identify and correct repeated failures of CCWHX saltwater flow verification.

The licensee failed to take appropriate corrective actions in a timely manner to address and corect repeat component cooling water heat exchanger (CCWHX) salterwater system test failures.

Inspection Report# : <u>2003009</u>(*pdf*)



Significance: Nov 07, 2003 Identified By: NRC Item Type: NCV NonCited Violation

#### Failure to prevent the recurrence of a significant condition adverse to quality involving mispositioning events

A significant condition adverse to quality involving several component mispositioning events associated with several safety-related systems occured between January 2002 and October 2003 and effective measures were not implemented to determine the cause of the problem and to preclude recurrence.

Inspection Report# : 2003009(pdf)

### **Barrier Integrity**

# **Occupational Radiation Safety**

## **Public Radiation Safety**

# **Physical Protection**

# Miscellaneous

Last modified : May 05, 2004