

## Summer 1Q/2006 Plant Inspection Findings

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### Initiating Events

**G****Significance:** Mar 31, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

**Failure to Use Adequate Maintenance Procedures to Inspect and Repair Main Steam Isolation Valves**

A self-revealing, non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, Instructions, Procedures, and Drawings, was identified for failure to establish, implement, and maintain adequate maintenance procedures to ensure that the Main Steam Isolation Valves (MSIVs) were capable of performing their safety-related function. Specifically, maintenance procedure MMP-300.023, Main Steam Isolation Valve Air Actuator Maintenance, was inadequate in that it did not include hot-condition checks of the alignment of the bottom spring plate and stanchion gap tolerances.

This finding is greater than minor because it impacts the equipment performance attribute of the Reactor Safety Mitigating Systems Cornerstone in that the failure of the MSIV to close affects the reliability and availability of that valve. This finding was determined to be of very low safety significance because the valve did go closed within a relatively short time, and because the effects of the failure of a single MSIV to close are bounded by accident analysis assumptions.

Inspection Report# : [2006007\(pdf\)](#)**G****Significance:** Jun 30, 2005

Identified By: Self-Revealing

Item Type: FIN Finding

**Failure of 1" Extraction Steam Line Due to Inadequate On-Line Leak Repair Procedure**

A self-revealing finding was identified for the use of an inadequate on-line leak repair procedure, which resulted in the line break of a 1" diameter Main Steam Turbine Casing Drain / 3rd Stage Extraction Steam Equalization Line. The on-line leak repair procedure, MMP-105.005, did not contain any instruction to verify that the subject piping maintained adequate wall thickness prior to installation of the leak sealant enclosure cavity. The licensee has performed a root cause investigation of the line failure and has entered the results into their corrective action program.

This finding is greater than minor because the procedure, if left uncorrected, could be applied to more safety significant piping systems where a similar failure could initiate a plant transient or cause complications such as loss of normal heat sink. The finding is considered to be of very low safety significance because it did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment would not be available. The cause of this finding was an evaluation issue of the cross-cutting aspect of Problem Identification and Resolution.

Inspection Report# : [2005003\(pdf\)](#)**G****Significance:** Jun 30, 2005

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

**Failure to Adequately Review and Understand the Impact of Relay Maintenance Resulting in Loss of Class 1E "B" Train Power and Automatic Start of "B" EDG and ESF Loading Sequencer**

A self-revealing non-cited violation of Technical Specification 6.8.1.a was identified for the failure to adequately review and understand the impact of protective relay maintenance/testing on the plant prior to allowing the work to commence.

This finding is greater than minor because it affected the human performance attribute of the Initiating Events cornerstone and affected the cornerstone objective, in that, the failure to adequately review and understand the impact of the work activity resulted in a perturbation in plant stability by causing a loss of power to the Class 1E "B" train vital safeguards bus (1DB), loss of power to all balance of plant buses, and automatic start of the "B" train emergency diesel generator and actuation of the Engineered Safety Features (ESF) loading sequencer. The finding is of very low safety significance because all necessary plant safety equipment responded as designed to the loss of power event, shutdown cooling flow was restored within 20 seconds without any appreciable reactor coolant system (RCS) heatup, and all "A" train redundant ESF equipment remained functional during the period. The direct cause of this finding was an organizational issue of the cross-cutting aspect of Human Performance.

Inspection Report# : [2005003\(pdf\)](#)

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## Mitigating Systems

**Significance:**  Aug 26, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

### **Failure to Prevent Spurious Operation of Charging Pump Suction From Volume Control Tank Valves LCV-115C and LCV-115E**

A non-cited violation of V.C. Summer Facility Operating License No. NFP-12, Condition 2.C.(18) and 10 CFR 50, Appendix R, Section III.G.2, was identified for failure to protect the control circuits for level control valves (LCV) LCV-115C and LCV-115E, (charging pump suction valves from the Volume Control Tank), to prevent spurious operation during a severe fire.

The finding adversely impacted the reliability and capability of equipment required to achieve and maintain a safe shutdown condition following a severe fire. The finding is greater than minor because it is associated with the protection against external factors attribute and degraded the reactor safety mitigating systems cornerstone objective. The finding degraded the defense-in-depth for fire protection. The safety significance of this finding was not more than very low because of the installed spare charging pump, redundancy in reactor coolant pump seal cooling, limited ignition sources, and current protection transformers.

Inspection Report# : [2005009\(pdf\)](#)

**Significance:**  Aug 26, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

### **Fire Emergency Procedure Implementation Not Timely To Maintain Pressurizer Level In Indicating Range**

A non-cited violation of V.C. Summer Facility Operating License No. NFP-12, Condition 2.C.(18) and 10 CFR 50, Appendix R, Sections III.G and III.L. was identified for failure to establish timely performance of key steps in the fire emergency procedures to ensure that pressurizer level would be maintained in the indicating range during plant fires that involved evacuation of the control room and use of alternative shutdown methods.

The finding adversely impacted the reliability and capability of equipment required to achieve and maintain a safe shutdown condition following a severe fire. The finding is greater than minor because it is associated with the protection against external factors attribute and degraded the reactor safety mitigating systems cornerstone objective. The finding degraded the defense-in-depth for fire protection. The safety significance of this finding was not more than very low because of the operator action timelines and thermo-dynamic analysis.

Inspection Report# : [2005009\(pdf\)](#)

**Significance:**  Aug 26, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

### **Post-Fire Operator Actions For Reactor Coolant Pump Seal Cooling Were Not Adequate**

A non-cited violation of V.C. Summer Technical Specification 6.8.1 regarding written procedures was identified for failure to ensure that vendor recommendations related to operation of reactor coolant pump seals would be followed during a severe fire.

The finding adversely impacted the reliability and capability of equipment required to achieve and maintain a safe shutdown condition following a severe fire. The finding is greater than minor because it is associated with the protection against external factors attribute and degraded the reactor safety mitigating systems cornerstone objective. The finding degraded the defense-in-depth for fire protection. The safety significance of this finding was not more than very low because of the redundancy in reactor coolant pump seal cooling, limited amounts of ignition sources, and current protection transformers.

Inspection Report# : [2005009\(pdf\)](#)

**Significance:**  Jun 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

### **Failure to Follow Startup Procedure for Aligning RHR System During Plant Heatup**

The NRC identified a non-cited violation of Technical Specification 6.8.1.a for the failure to place the "B" train Residual Heat Removal (RHR) pump control switch in pull-to-lock (PTL) prior to heating up the reactor coolant system (RCS) greater than 250 F during plant restart from the refueling outage.

This finding is more than minor because if left uncorrected, it could have resulted in a more significant safety concern, in that, had RCS heatup continued without the "B" RHR pump in PTL, it could have resulted in the pump being incapable of performing its design safety function during shutdown accident conditions. The finding is of very low safety significance because after being alerted by the NRC, the condition was corrected prior to the RCS exceeding temperatures that could have allowed flashing to occur in the "B" RHR pump suction piping had the pump automatically started and aligned to the refueling water storage tank. The direct cause of this finding was an attention issue of the cross-cutting aspect of Human Performance.

Inspection Report# : [2005003\(pdf\)](#)

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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

**Significance:** TBD Mar 03, 2006

Identified By: NRC

Item Type: AV Apparent Violation

**Failure to Properly Prepare a Radioactive Material Package for Shipment**

The inspectors identified an apparent self-revealing finding of low to moderate safety significance. The licensee failed to prepare a shipment of radioactive material to a waste processing facility in a manner such that, under conditions normally incident to transportation, the radiation level at any point on the external surface of the package would not exceed 200 millirem per hour (mR/hr), as specified by the Department of Transportation (DOT) Regulation 49 CFR 173.441(a). When the shipment arrived at the processing facility on May 27, 2005, the radiation dose rates, measured on portions of the external surface of the package, were as high as 600 mR/hr, which is in excess of the limits specified by the regulatory requirement.

The failure to properly prepare the shipment in a manner to assure conformance with the requirements of 49 CFR 173.441(a) was determined to have low to moderate safety significance, using the Public Radiation Safety Significance Determination Process. The finding involved the transportation of radioactive material in which the external radiation that was accessible to members of the public exceeded DOT limits but was less than five times the regulatory limit

Inspection Report# : [2006009\(pdf\)](#)

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## Physical Protection

[Physical Protection](#) information not publicly available.

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## Miscellaneous

Last modified : May 25, 2006