

## Turkey Point 3 4Q/2003 Plant Inspection Findings

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### Initiating Events

**Significance:**  Jun 28, 2003

Identified By: Self Disclosing

Item Type: FIN Finding

#### **A Personnel Error Resulted in a Secondary Plant Transient**

A self-revealing finding was identified concerning a human performance issue which resulted in a secondary plant transient and numerous annunciators including both steam generator feed pump low suction pressure alarms. The plant transient occurred when the Moisture Separator Re-heaters (MSRs) were placed in service at a higher power level than normal without adequate procedural guidance or management involvement.

This finding is greater than minor because a human error adversely affected the Initiating Events cornerstone objective of limiting the likelihood of events that upset plant stability during power operations. However, because a plant trip did not occur, nor were the operation of any mitigating systems affected, the finding was determined to be of very low safety significance. (Section 1R14)

Inspection Report# : [2003003\(pdf\)](#)

**Significance:**  Jun 28, 2003

Identified By: Self Disclosing

Item Type: FIN Finding

#### **Inadequate Corrective Action Resulted in a Plant Trip**

A self-revealing finding was identified concerning inadequate corrective action to address starting problems with the two diesel driven instrument air compressors which resulted in a plant trip when the instrument air pressure degraded and the compressors failed to start and load. Numerous condition reports had been written over several years but adequate plant focus was not taken to correct the problem until after the plant trip occurred.

This finding is greater than minor since it affected the Initiating Events cornerstone objective of limiting the likelihood of events that upset plant stability and challenge critical safety functions during power operations. This finding was reviewed using the Significance Determination Process and was determined to be of very low safety significance because several systems such as auxiliary feedwater, standby steam generator feed pumps, and manual realignment of the feedwater control valves were available. (Section 4OA2)

Inspection Report# : [2003003\(pdf\)](#)

**Significance:**  Apr 05, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

#### **Inadequate Corrective Action For A Failed CVCS Pipe Support**

Green. Inadequate root cause determination and corrective action of a failed Chemical and Volume Control System

(CVCS) pipe support led to an additional failure.

A Non-Cited violation of 10CFR50.55a(g)(4) and 10CFR50, Appendix B, Criterion XVI was identified in that measures taken to evaluate the suitability of replacement and to correct the cause for failure of CVCS pipe support H-4 in 1998 were not adequate and the same pipe support was found failed again in 2003. This finding was greater than minor because inadequate evaluation and corrective action to modify the pipe support and correct the cause for the 1998 failure could have challenged the ability of this line to supply reactor coolant pump seal cooling. The finding was of very low safety significance because the licensee determined that the loss of this support did not cause loss of function of the CVCS system. Specifically, the stress analysis showed that the pipe would not have been over stressed seismically or thermally with the loss of this hanger. (Section 1R08.1)

Inspection Report# : [2003002\(pdf\)](#)

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## Mitigating Systems

**Significance:**  Dec 27, 2003

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

### **Failure to Identify and Use an Appropriate Acceptance Criteria for the Main Oil Pump Internals Clearances and Main Oil Pump Suction Check Valve Leakage**

A self revealing non-cited violation was identified for failure to comply with 10 CFR 50, Appendix B, Criterion III, "Design Control." The licensee failed to identify and specify in procedures the appropriate acceptance criteria for the main oil pump (MOP) internals clearances and the MOP suction check valve leakage, to ensure the operability of the 'B' Auxiliary Feedwater Pump (AFW). As a result, during surveillance testing, the 'B' AFW Pump experienced a lubrication failure which damaged the pump outboard thrust bearings.

This finding is greater than minor because it involved the design control attribute of the mitigating system cornerstone, which could affect the objective of ensuring that equipment is available and capable of responding to an event. The finding was of very low safety significance in accordance with the Significance Determination Process (SDP) Phase 1 worksheet, because it did not represent an actual loss of the safety function of the AFW system and it did not represent an actual loss of safety function of a single train of AFW for greater than the Technical Specification allowed outage time. (Section 1R15)

Inspection Report# : [2003005\(pdf\)](#)

**Significance:**  Sep 27, 2003

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

### **Failure to Maintain Design Documentation to Prevent Inadvertent Loss of Both Trains of AFW Automatic Actuation Logic and Relays**

A self-revealing finding was identified concerning a failure to comply with 10 CFR 50, Appendix B, Criterion V, "Instruction, Procedures, and Drawings." Licensee drawings and instructions used to research Clearance Zone 28-01 relay tagouts were not sufficient to assure that the design basis Engineering Safety Feature Actuation Signal (ESFAS) function of these components was protected. As a result, a plant configuration was established which rendered the automatic start of all AFW pumps on a Low-Low Steam Generator Level signal unavailable while U3 was in Operational Mode 3.

This finding is greater than minor since it affected the Mitigating System Cornerstone objective for Equipment Availability and had an actual safety impact of rendering the automatic start of all AFW pumps on a Low-Low Steam Generator Level signal unavailable while in Operational Mode 3. This finding was reviewed using the Significance Determination Process and was determined to be of very low safety significance because for the two applicable design basis accidents requiring this signal, alternative methods would have started the AFW pumps and the system would have been able to perform its safety function. (Section 40A3.1)

Inspection Report# : [2003004\(pdf\)](#)



**Significance:** Apr 21, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

#### **Failure to Update UFSAR with SBO Mitigation Information**

Green. The licensee failed to update the Final Safety Analysis Report (FSAR) regarding their method of coping with potential reactor coolant system losses during a station blackout by reestablishing reactor coolant pump seal injection.

A non-cited violation of 10 CFR 50.71(e) was identified. This violation is subject to traditional enforcement since it had the potential for impacting the regulatory process. Specifically, the NRC relies on the licensees to update FSARs to reflect the latest information developed for the facility. This ensures that the NRC has an accurate description of the facility when conducting inspections and evaluating license amendments. The finding is of very low safety significance because not updating the FSAR did not have any actual safety consequences. (Section 40A5)

Inspection Report# : [2003007\(pdf\)](#)



**Significance:** Apr 21, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

#### **Inadequacies in SBO Mitigation Procedures (Six Examples)**

Green. Several emergency operating procedures developed by the licensee for mitigating a station blackout contained procedural inadequacies. These inadequacies included lack of appropriate acceptance criteria as well as improper use of and inadequate caution statements. Six examples were identified by the inspectors.

Six examples of a non-cited violation of Technical Specification 6.8.b, Procedures and Programs and licensee Administrative Procedure 0-ADM-101, Procedure Writer's Guide, were identified. This violation was more than minor because if left uncorrected, it could become a more significant safety concern. The finding is of very low safety significance because only one initiating event (loss of offsite power) was involved, three of four available emergency diesel generators (EDGs) would have to fail to get to this condition; the low probability that, given three EDGs fail, the fourth would operate properly; the possibility that offsite power would be restored prior to core damage; and there was a possibility that operators would be able to recover from the performance deficiency without overloading the EDG, due to operator training on the limitations of the EDGs. (Section 40A5)

Inspection Report# : [2003007\(pdf\)](#)

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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

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## Miscellaneous

**Significance:**  Apr 05, 2003

Identified By: NRC

Item Type: FIN Finding

### **Inappropriate blanket overtime authorization**

Green. Inappropriate blanket overtime authorization for operators, health physics personnel, and maintenance personnel was granted for the entire Unit 3 refueling outage.

This finding is greater than minor because inappropriate deviations from overtime limits can be a significant contributor to worker fatigue and potential for human errors which, if left uncorrected, could become a more significant safety concern. This finding is of very low safety significance because once this issue was presented to licensee management at the start of the outage, action was taken to prevent inappropriate deviations from the guidelines and no violation of regulatory requirements occurred. (Section 1R20)

Inspection Report# : [2003002\(pdf\)](#)

**Significance:**  Apr 05, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

### **Failure To Report Main Steam Safety Relief Valve Test Results Outside TS Limits**

Green. Main Steam Safety Relief Valve lift pressures were outside the  $\pm 3\%$  Technical Specification (TS) requirements for the past several refueling outages and were not reported as required in Licensee Event Reports (LERs).

A non-cited violation of 10 CFR 50.73 (a)(2)(i)(B) was identified. This finding is greater than minor because failure to accurately report events could impact the NRC's ability to perform its regulatory function. This finding is of very low safety significance because the as-found main steam safety relief valve lift pressures of the affected valves were bounded by accident analyses. (Section 4OA2)

Inspection Report# : [2003002\(pdf\)](#)

Last modified : March 02, 2004