

Turkey Point 4

Initiating Events

Significance:  Mar 31, 2001

Identified By: NRC

Item Type: FIN Finding

Corrective actions for previous Unit 4 loss of offsite power incident not thorough.

Green. Some of the licensee's corrective actions in response to a previous Unit 4 loss of offsite power incident were not thorough. The incident involved a flooded manhole and an electrical cable fault. NRC inspector questioning led to the identification of numerous manhole sump pump and drain deficiencies. The licensee's periodic inspections of the manholes were not adequate to identify water intrusion. Subsequently, it was identified that 55 of 126 manholes contained accumulations of water. The finding was of very low safety significance because the conditions did not have any adverse impact other than slightly increasing the probability of initiating a reactor trip or other event.

Inspection Report# : [2000006\(pdf\)](#)

Mitigating Systems

Significance:  Sep 28, 2002

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

Failure to take Corrective Action Required by the Maintenance Rule for RHR Sump Pump Failures

Green. The licensee did not correctly assess and take corrective action when the Residual Heat Removal (RHR) sump pumps performance goals were not met. This is a violation of the Maintenance Rule, 10 CFR 50.65. The system had not been placed into status a(1) when multiple failures caused the established performance goals to not be met. This finding was of very low safety significance because it involved administrative implementation of the Maintenance Rule, and the probability of a flooding event that could impact both trains of the RHR system was extremely low. (Section 1R12).

Inspection Report# : [2002003\(pdf\)](#)

Significance:  Aug 23, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Ineffective Corrective Actions To Prevent Recurring Charging Pump and 4KV Breaker Failures

A noncited violation of 10 CFR 50, Appendix B, Criterion XVI was identified for ineffective corrective actions to prevent recurring charging pump and vital electrical breaker functional failures. These failures constituted repetitive significant conditions adverse to quality. This finding was considered more than minor due to the safety significance of the affected systems and because actual loss of component safety functions occurred. The charging pump controller failures, and the failure of the 3A component cooling water pump breaker were determined to be of very low safety significance by the significance determination process because the failures did not reduce the number of available pumps to below that required for each of the involved systems to perform their safety function. (Section 4OA2.c).

Inspection Report# : [2002005\(pdf\)](#)

Significance: N/A Jun 29, 2002

Identified By: Licensee

Item Type: NCV NonCited Violation

Failure to comply with procedure for taking Operator Rounds

Technical Specification 6.8.1 requires that written procedures shall be established, implemented, and maintained covering the log entry activities in Appendix A of Regulatory Guide (RG) 1.33, Revision 2, February 1978. Procedure 0-OSP-201.4, ANPO Daily Log, requires that a tour of the Auxiliary Feedwater Cage be completed and a specified number of pumps, valves, and governor readings be observed and data recorded. Contrary to the above, on September 27, 2001, a Senior Nuclear Plant Operator, failed to comply with the above requirements when, during his rounds in the Auxiliary Feedwater Cage he spent an inadequate amount of time within the cage to accomplish the required tour. This issue was placed in the licensee's corrective action program as Condition Report 01-1883.

Inspection Report# : [2002002\(pdf\)](#)

G

Significance: Sep 29, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

Control Room Emergency Ventilation System Inoperable

TS 3.7.5 requires that the Control Room Emergency Ventilation System shall be operable. The system was found inoperable during surveillance testing due to failure of a backup emergency supply fan to start as a result of a mispositioned damper effecting the low flow actuation setting. This issue was described in CR 01-1197. (Green)

Inspection Report# : [2001005\(pdf\)](#)

G

Significance: Jun 30, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

Inadequate Verification of Skills and Training for Personnel Working on Safety Related Motor Operated Valves

10 CFR 50 Appendix B Criteria II, Quality Assurance Program, requires that a program be established to verify the skills and training of personnel performing activities affecting quality. During the Unit 4 refueling outage conducted in October 2000, verification of training was inadequate for personnel conducting work on several safety related motor operated valves. This issue was described in CR 00-2164. (Green)

Inspection Report# : [2001004\(pdf\)](#)

G

Significance: Mar 31, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Meet TS Time Requirement for QPTR Calculation

Green. The licensee's review of a recent reactor trip involving two dropped control rods focused on the cause of the trip and did not fully review all aspects of Technical Specification compliance. A Non-cited violation was identified for failure to complete the Quadrant Power Tilt Ratio determination within the time period required in Technical Specification 3.2.4. The safety significance of this finding was very low because, although the time requirements were not met, the power distribution during this period remained within the design values assumed in the Updated Final Safety Analysis Report (Section 1R14).

Inspection Report# : [2000006\(pdf\)](#)

G

Significance: Dec 30, 2000

Identified By: Licensee

Item Type: NCV NonCited Violation

Failure to Follow Procedural Requirements During Fuel Movement

TS 6.8.1.a requires that written procedures shall be established, implemented, and maintained covering the activities referenced in Appendix A of Regulatory Guide 1.33. Refueling and Core Alterations are included in that Appendix. Two examples were identified where a fuel assembly was placed in the wrong spent fuel pool location. On October 2,

2000 and again on October 3, 2000, during de-fueling of the core, personnel incorrectly verified the Spent Fuel Pool location of a fuel assembly and placed the fuel assembly in the wrong location. Both examples were contrary to procedural requirements in 4-OP-040.2, Refueling Core Shuffle. One of the assemblies did not meet the TS 3.9-1 burnup requirements for storage in the location in which it was initially placed. These issues are described in the licensee's corrective action program in CR's 00-1759 and 00-1771.

Inspection Report# : [2000005\(pdf\)](#)

G

Significance: Sep 30, 2000

Identified By: Licensee

Item Type: FIN Finding

The 4B High Head Safety Injection Pump Was Inoperable

Green. The 4B high head safety injection pump became inoperable because of nitrogen gas leakage from the safety injection accumulators into the pump. Corrective actions for previous similar incidents did not prevent this problem. The finding was determined to be of very low safety significance. Although the licensee's corrective actions for previous similar instances of gas intrusion did not prevent this occurrence, the duration and the extent of the condition was limited by the licensee's corrective actions. Technical Specifications allow a single pump to be out of service for 30 days and the 4B pump was inoperable for only a very small fraction of that time. Only one high head safety injection pump from each unit (of the four total pumps) is required for accident mitigation. (Section 1R15)

Inspection Report# : [2000004\(pdf\)](#)

G

Significance: Sep 30, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

RHR Room Sump Level Switches Not Included in the Maintenance Rule

Green. A Non-Cited violation of 10 CFR 50.65 (b)(2) was identified because residual heat removal pump room and heat exchanger room sump level alarm switches were not included in the scope of the maintenance rule monitoring program. The switches were not periodically checked and some were not functional when they were subsequently tested. The failure to include the switches in the maintenance rule program was determined to be of very low safety significance. Although the alarm switches could affect the response to an internal flooding incident, the potential impact on accident mitigating systems was limited. The sump pumps located in the rooms that had inoperable level alarm switches were verified to be operable. No credible postulated flooding incidents were identified which could impact both residual heat removal trains simultaneously. (Section 1R06)

Inspection Report# : [2000004\(pdf\)](#)

G

Significance: Sep 30, 2000

Identified By: Licensee

Item Type: NCV NonCited Violation

Incorrect Design for Valve Position Indication Of Containment Isolation Valves

Green. A Non-Cited violation of 10 CFR 50, Appendix B, Criterion III was identified because the licensee did not correctly implement valve position indication circuitry design requirements on six containment isolation valves. The finding was of very low safety significance because the safety function of the valves was not affected. The condition involved only the valve position indications. The licensee's design control program has changed significantly since the time that this noncompliance occurred. This issue was identified through good questioning by an operator. (Section 4OA3)

Inspection Report# : [2000004\(pdf\)](#)

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

Significance: N/A Mar 30, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Communication of NRC Inspector's Presence and Arrival by Security Supervisor

No Color. A non-cited violation of 10 CFR 50.70 (b) (4) was identified for failure to ensure that the arrival and presence of a NRC inspector was not announced or otherwise communicated. A NRC inspector while in the main truck gate control cubicle overheard, when the telephone was answered using the speaker phone, communication by a security supervisor to a security officer announcing the inspector's presence. This issue is more than a minor because it has the potential for impacting the NRC's ability to perform its regulatory function (Section 3PP2).

Inspection Report# : [2001007\(pdf\)](#)

Significance:  Dec 30, 2000

Identified By: NRC

Item Type: FIN Finding

Protective Strategy Deficiencies Identified During Drills

Green. During the conduct of table-top drills, the inspectors identified issues with deployment strategies and target set development and concluded that some equipment is not fully protected by the currently established protective strategy. The issue was of very low safety significance because it involved vulnerabilities in safeguards plans identified through table top drills and no actual security incident or threat occurred. (Section 3PP3.4)

Inspection Report# : [2000005\(pdf\)](#)

Miscellaneous

Significance: N/A Aug 23, 2002

Identified By: NRC

Item Type: FIN Finding

Identification and Resolution of Problems

Overall, the licensee's corrective action program (CAP) was effective at prioritizing, evaluating and resolving conditions adverse to quality. The licensee was particularly effective at identifying problems with a low threshold and entering them into the CAP. One finding was identified involving corrective actions that were not fully effective in preventing repetitive failures of charging pumps and important electrical breakers. Several negative observations were also identified during the inspection. Some Condition Report records did not contain documentation to fully support disposition of the issues in that apparent causes or corrective actions were not adequately described. The significance

level of some condition reports was not in accordance with licensee program guidance. Also, the Plant Nuclear Safety Review Committee was not consistently reviewing Technical Specification violations documented in NRC inspection reports. Operating experience information, including NRC generic communications, was routinely reviewed for applicability in a timely manner and effectively utilized. Root cause analyses were usually comprehensive and in-depth, and apparent cause determinations were sufficiently rigorous. Overall, audits and self-assessments were sufficiently critical and thorough; licensee identified findings, weaknesses, areas of improvement, or recommendations were consistently tracked to resolution. For almost all problems, appropriate corrective actions were developed and implemented in a timely manner commensurate with the safety significance. A safety conscious work environment was evident at Turkey Point where employees felt free to raise safety concerns.

Inspection Report# : [2002005\(pdf\)](#)

Significance: N/A Mar 30, 2001

Identified By: NRC

Item Type: FIN Finding

Corrective Action Program

The licensee was effective at identifying problems at a low threshold and entering them into the corrective action program. Problems entered into the program were adequately evaluated and appropriate corrective actions were identified. Formal root cause evaluations and corrective actions for significant issues were thorough and detailed. Corrective actions were generally implemented in a timely manner, commensurate with their safety significance. The inspectors identified a few minor problems. Several condition reports did not identify or evaluate all pertinent deficiencies involved with issues, and two minor problems related to corrective actions were identified. Licensee audits and assessments were effective. Operating event information was effectively utilized. Recent problems related to human errors were receiving high levels of licensee management attention. Overall, a safety conscious work environment was present. Discussions with workers and other information indicated that employees were not reluctant to report nuclear safety issues.

Inspection Report# : [2001003\(pdf\)](#)

Last modified : December 02, 2002