

Turkey Point 4

2Q/2008 Plant Inspection Findings

Initiating Events

Significance:  Jun 30, 2008

Identified By: Self-Revealing

Item Type: FIN Finding

Maintenance causes smoke and fumes to enter the control room causing fire alarms.

A Self-Revealing finding of very low safety significance was identified after smoke and welding fumes from maintenance entered the control room through the ventilation system causing smoke alarms. When identified, the licensee stopped the maintenance and entered the issue into the corrective action program as CR 2008-17166.

The Initiating Events cornerstone was affected when smoke alarms occurred requiring the operators to initiate actions to protect themselves and the plant. The event screened as Green when mitigating systems remained unaffected and would have functioned, if needed. The cause of the finding is related to the cross-cutting area of Human Performance, Work Practices, (H.4.b) when personnel did not follow procedures in developing the work package for metalizing operations outside of the control room. (1R05)

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

Significance:  Dec 31, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to implement the fire protection program: unapproved transient combustibles in the cable spreading room

The inspectors identified a Non-Cited violation for failure to implement the fire protection program when unapproved transient combustibles (including an ignition source) were found in the cable spreading room without the required evaluation. When identified to the licensee either the materials were removed or an appropriate evaluation was done and a permit issued.

The finding was more than minor because it involved the degradation of a fire protection program component to control combustibles and initiation sources introduced into the cable spreading room. The issue was of very low safety significance because the overall fire loading increase in the affected area was small and would not affect the cable spreading room barrier three-hour fire rating. The cause was related to the cross-cutting area of Human Performance, Work Practices (IMC 0305, H.4.b) because the work groups, operators doing rounds, and fire protection personnel did not communicate expectations regarding procedural compliance and personnel did not follow procedures. (1R05)

Inspection Report# : [2007005](#) (*pdf*)

Significance:  Dec 31, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to periodically update the FSAR with changes made to the cable spreading room fire loading

The inspectors identified a Non-Cited violation for failure to update the final safety analysis report (FSAR) regarding fire loading of permanently installed equipment in the cable spreading room to assure that the information included in the FSAR is the latest information developed. When identified to the licensee, actions were initiated to identify and document changes to the cable spreading room fire loading.

The failure to update the FSAR with information that could affect fire loading of the cable spreading room was a failure to provide accurate information that could impact the NRC ability to perform its regulatory function and was

subject to traditional enforcement. (1R17)

Inspection Report# : [2007005](#) (*pdf*)

Mitigating Systems

Significance:  Jun 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to implement procedures that assure component lineups prior to power escalation.

The inspectors identified a non-cited violation of Technical Specification (TS) 6.8.1, Procedures for failure to implement Unit 4 plant startup requirements regarding alignment of components that support operability of the recirculation sump. When identified, the licensee corrected the alignments and entered the issues into the corrective actions program as CR 2008-15444 and 2008-15505.

The Mitigating Systems cornerstone was affected when standby equipment was not in the specified ready lineup. The finding screened to be of very low safety significance when no loss of safety function occurred. The cross-cutting area of Human performance – Work Practices (H.4.c) was affected when the licensee did not assure supervisory oversight of work activities (valve lineup and debris gate position) to assure that nuclear safety was supported. (1R20)

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

Significance:  Jun 30, 2008

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Failure to take timely corrective actions leads to emergency diesel generator failure.

A Self-revealing Non-cited violation of 10 CFR 50, Appendix B, Criterion XVI was identified when external corrosion of a Unit 3 emergency diesel radiator was not promptly repaired resulting in a diesel failure. The licensee repaired the radiator and entered the event into their corrective action program as CR 2008-11134.

The finding affected the equipment performance attribute of the Mitigating System cornerstone due to the impact on availability and reliability of the EDG system. The finding screened to be of very low safety significance, Green, when the loss of safety function for the single train did not exceed the allowed outage time. The finding involved the cross-cutting area of Problem Identification, and Resolution, (P.1.c), when the licensee did not thoroughly evaluate the radiator corrosion such that the issue could be resolved prior to failure. (4OA2)

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

Significance:  Mar 31, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to implement procedures regarding overtime hours for plant operations personnel

The inspectors identified a Non-cited violation of Technical Specification (TS) 6.8.5 for the failure of the licensee to properly implement procedure requirements regarding the control of overtime for operations personnel that may perform safety-related duties. To address this issue the licensee has revised the operations shift scheduling to reduce or eliminate the need for overtime beyond the limits specified in licensee procedures.

The finding is greater than minor in accordance with Inspection Manual Chapter (IMC) 0612, Power Reactor Inspection Reports, “Appendix B, Issue Screening.” If left uncorrected, the excessive work hours could adversely affect the station’s defense-in-depth and increase the likelihood of human errors during response to plant events and would become a more significant safety concern. The failure to implement requirements for controlling the use of overtime is contrary to TS and is a performance deficiency which could adversely the impact operability to monitor

safe operation of the plant and other onsite activities. This issue has a cross-cutting aspect in the area of Human Performance, Resources (Item H.2.(c) of IMC 0305, because sufficient qualified personnel were not available to maintain working hours within working hour guidelines.

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

Significance:  Dec 31, 2007

Identified By: NRC

Item Type: FIN Finding

Failure to correct moisture buildup in alternate shutdown panel results in degraded cooldown capability

The inspectors identified a finding when the licensee failed to evaluate excessive moisture and condensation in the Unit 3 alternate shutdown panel. During subsequent testing, all channels of steam generator pressure indication at the panel were inoperable causing a degraded ability to achieve cold shutdown in some fire scenarios. When identified to the licensee, the issue was entered into the corrective action program and moisture intrusion in the panel was stopped by sealing the water source.

The licensee's failure to identify and correct moisture intrusion problems with the remote shutdown equipment was a noncompliance with the licensee's corrective actions procedure. The finding was more than minor because it affected the availability and reliability of the alternate shutdown system designated for use in licensee procedure 0-ONOP-105, Control Room Evacuation. The finding was of very low safety significance because only the ability to achieve cold shutdown was affected by the moisture. The cause of the finding is related to the cross-cutting area of problem identification and resolution because the moisture intrusion in the alternate shutdown system had not been thoroughly evaluated such that the resolutions addressed the causes (IMC 305, P.1.c). (1R15)

Inspection Report# : [2007005](#) (pdf)

Significance:  Sep 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform Required ASME Code Section XI Leakage Testing

The inspectors identified a non-cited violation (NCV) of 10 CFR 50.55a(g)(4) for the failure to perform periodic leakage testing of buried piping portions of the Intake Cooling Water system as required by Section XI of the ASME Code for the third 10-year Inservice Inspection interval for Units 3 and 4. The licensee entered this issue into their corrective action program for resolution.

This finding is more than minor because it affects the Equipment Performance attribute of the Mitigating Systems cornerstone objective of ensuring availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. This finding is of very low safety significance because it was not a design issue resulting in a loss of operability, did not represent an actual loss of a system's safety function, did not result in exceeding a technical specification (TS) allowed outage time, and did not affect external event mitigation. The inspectors determined that this finding had no cross-cutting aspect. (Section 1R08)

Inspection Report# : [2007004](#) (pdf)

Significance:  Sep 30, 2007

Identified By: NRC

Item Type: FIN Finding

Recurring Problems with Alternate Shutdown Communication Equipment

The inspectors identified a finding when the licensee did not identify and correct an adverse trend of recurring problems with the alternate shutdown communications system. When identified, the licensee entered the issue into the corrective actions program and initiated a review of reliability issues with the communications equipment.

The finding is more than minor because it affects the availability and reliability of the communications system used by plant operators to mitigate certain fire scenarios. The issue was of very low safety significance because an alternate communications system (radios) was available, if needed. The cause was related to the cross-cutting area of problem identification and resolution because the adverse trend of problems with alternate shutdown communications had not

been identified nor corrected by the licensee commensurate with its safety significance. (IMC 305, P.1 (d)) (4OA2)
Inspection Report# : [2007004](#) (pdf)

Significance:  Sep 30, 2007

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Failure to Appropriately Procure Replacement Parts Leads to Reactor Shutdown

A self-revealing NCV of 10 CFR 50, Appendix B, Criterion IV, Procurement Document Control, was identified for improper inserts having been procured and installed in the Unit 3 and Unit 4 rod position circuitry. The inserts were not qualified for the reactor environment and sequentially failed, causing loss of multiple rod position circuits on Unit 3 requiring reactor shutdown. When identified, the affected electrical connectors were replaced with qualified splices. The licensee entered this issue into their corrective action program for resolution.

The failure is more than minor because the reliability of the mitigating rod position indication system is affected. The finding was of very low safety significance because redundant measures of assuring plant shutdown and control using boron were available. The inspector determined that this finding had no cross-cutting aspect. (4OA3)

Inspection Report# : [2007004](#) (pdf)

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Significance:  Sep 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Include an Accurate Emergency Response Telephone Number on Radioactive Waste Shipping Papers

The inspectors identified an NCV of 10 CFR Part 71.5(a)(1)(v) for the failure of the licensee to follow Department of Transportation (DOT) regulations found in 49 CFR Part 172.201(d) which require shipping papers associated with the transport of radioactive material to contain an emergency response telephone number. All radioactive waste shipments made from November 2006 until September 2007 had an incorrect emergency response phone number listed on the official shipping papers. The licensee entered the issue into the corrective action program under condition report (CR) Number 2007-28133 and intended to correct future shipping papers.

The finding is more than minor because it is associated with the Public Radiation Safety cornerstone attribute and adversely affects the cornerstone objective of ensuring adequate protection of public health and safety from exposure to radioactive materials released into the public domain. Based on the facts that emergency response recommendations required by 49 CFR Part 172.602 were included in the paperwork package for each shipment and that there were no accidents on public roadways that would have required the use of the emergency response phone number, the finding was determined to be of very low safety significance (Green). This finding has a crosscutting area of human performance with work practices aspect (IMC 305, H.4 (a)), because the incorrect emergency response phone number was the result of a transposition error which was not prevented by the use of self and peer checking human error prevention techniques. (Section 2PS2)

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.

Miscellaneous

Significance: N/A Jun 27, 2008

Identified By: NRC

Item Type: FIN Finding

Problem Identification and Resolution

The team concluded that in general, problems were properly identified, evaluated, prioritized, and corrected within the licensee's corrective action program (CAP). Evaluation of issues was generally comprehensive and technically adequate. Formal root cause evaluations for issues classified as significant adverse conditions were comprehensive and detailed. The team reviewed the licensee's corrective action program improvement plan and actions to address evaluation quality, timeliness, and overall CAP effectiveness. The team determined that progress has been made in improving all areas addressed by the improvement plan. Overall, corrective actions developed and implemented for issues were effective in correcting the problems. However, the team identified examples where corrective actions have not been entirely effective, or potential adverse trends had not been identified and entered into the CAP.

The team determined that thresholds for identifying issues were appropriately low. Nuclear Assessment Section audits and departmental self-assessments were effective in identifying issues and directing attention to areas that needed improvement. Licensee identified weaknesses and issues in self-assessments were appropriately entered into the CAP and addressed.

Based on discussions and interviews conducted with plant employees from various departments, the inspectors did not identify any reluctance to report safety concerns.

Inspection Report# : [2008008](#) (pdf)

Significance: N/A Mar 21, 2008

Identified By: NRC

Item Type: FIN Finding

PI&R Inspection

The licensee was generally effective at identifying problems and initiating condition reports (CR) as required by program procedures. The inspectors determined that the licensee utilized their corrective action program to evaluate, assign corrective actions, and identify adverse trends, including low level issues. The inspectors reviewed the licensee's corrective action program improvement plan and actions to address evaluation quality, timeliness, and overall corrective action program (CAP) effectiveness. In general, the inspectors found the evaluations to be adequate with notable reductions in the CR backlog and evaluation timeliness since the last problem identification and resolution (PI&R) inspection completed in December 2007. The inspectors identified some minor deficiencies associated with corrective actions to prevent recurrence (CAPR) put in place to address the substantive PI&R cross-cutting issue, first identified in 2006 but overall, corrective actions were effective.

On the basis of interviews conducted during the inspection, a review of the Employee Concerns Program, and the results of the licensee's safety conscious work environment (SCWE) surveys, the inspectors determined that employees felt free to raise concerns without fear of retaliation.

Inspection Report# : [2008007](#) (pdf)

Significance: N/A Dec 21, 2007

Identified By: NRC

Item Type: FIN Finding

PI&R Inspection

The licensee was generally effective at identifying problems and initiating condition reports (CR) as required by program procedures. The inspectors determined that the licensee utilized their corrective action program to evaluate, assign corrective actions, and identify adverse trends, including low level issues. In most instances, the licensee properly assigned, prioritized, and evaluated issues identified at the site. The inspectors reviewed the licensee's corrective action program improvement plan and actions to address evaluation quality, timeliness, and overall CAP effectiveness. In general, the inspectors found the evaluations to be adequate with the CR backlog and evaluation timeliness having been reduced since the last problem identification and resolution (PI&R) inspection completed in June 2007. Overall, corrective actions were effective, but the inspectors identified a number of weaknesses associated with corrective actions to prevent recurrence (CAPR) put in place to address the substantive PI&R cross-cutting issue, first identified in 2006. The inspectors identified several examples where corrective actions to prevent recurrence had not been fully implemented and contract engineers had not completed training requirements to perform certain condition report evaluations.

Licensee self-assessments and audits were self-critical and generally effective in identifying problems which were properly documented in their CAP. On the basis of interviews conducted during the inspection, and the results of the licensee's safety conscious work environment (SCWE) surveys the inspectors determined that those employees felt free to raise concerns without fear of retaliation.

Inspection Report# : [2007009](#) (*pdf*)

Last modified : August 29, 2008