

## Turkey Point 3 2Q/2013 Plant Inspection Findings

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### Initiating Events

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### Mitigating Systems

**Significance:** G Jun 30, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

#### **Failure to Promptly Identify and Correct a Pressure Boundary Through Wall Leak on the 3A CCW Pump Casing Vent Pipe**

The NRC identified a Green non-cited violation of 10 CFR 50, Appendix B, Criterion XVI, “Corrective Action,” for the licensee’s failure to identify and correct a through wall pressure boundary leak on the 3A component cooling water (CCW) pump casing vent piping that affected system operability. The inspectors determined that the licensee’s failure to identify and correct a through wall leak on an ASME Code Class pressure boundary was a performance deficiency. The condition was entered in the licensee corrective action program (CAP) as action request 01883690 and the pipe was replaced.

The performance deficiency was determined to be more than minor in accordance with IMC 0612, Power Reactor Inspection Reports, Appendix B, Issue Screening, dated September 7, 2012, because it was associated with the mitigating systems cornerstone attribute of equipment performance and adversely affected the cornerstone objective to ensure the reliability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the inspectors determined that the licensee’s failure to identify a system pressure boundary leak precluded evaluations and repairs necessary to assure the reliability of the component cooling water system. The inspectors evaluated the finding using IMC 0609, Significance Determination Process, Attachment 0609.04, Initial Characterization of Findings, Tables 2 and 3, dated June 19, 2012, and Appendix A, The Significance Determination Process (SDP) for Findings At-Power, Exhibit 2 for the Mitigating Systems Cornerstone, dated June 19, 2012. The inspectors answered “yes” to the Exhibit 2 question A.1 because the system maintained its functionality. As a result, the inspectors determined the finding to be of very low safety significance (Green). This finding was associated with a cross-cutting aspect in the corrective action program component of the problem identification and resolution area. Specifically, the licensee failed to consider the potential for system pressure boundary leakage when evaluating the operability of the component cooling water system [P.1(c)].

Inspection Report# : [2013003](#) (*pdf*)

**Significance:** G Mar 31, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

#### **Failure to Implement Timely Corrective Actions to Test Molded Case Circuit Breakers**

The NRC identified a Green non-cited violation of 10 CFR 50, Appendix B, Criterion XVI, Corrective Action, for the licensee’s failure to establish a test program to demonstrate that safety-related 120 VAC and 125 VDC molded case circuit breakers (MCCBs) would be able to reliably perform their intended safety functions, specifically protective tripping. The team identified that since 2005 and 2006, when the lack of periodic testing of the molded case circuit

breakers was identified; no interim measures were taken to correct the nonconforming condition. Additionally, the team identified that the licensee failed to scope the protective tripping function of the MCCBs in the maintenance rule program. Upon identification by the team, the licensee entered these issues into their correction action program as ARs 1675539, 1676808, 1788355, and 1852219. As immediate corrective actions, the licensee tested 35 breakers which performed satisfactorily. The results of this testing and an action to develop a long-term test program for the entire 120 VAC and 125 VAC MCCBs were documented in AR 1852219. A license amendment will also be pursued to allow for more TS outage time in order to remove and replace the more difficult MCCBs. The licensee's failure to implement prompt and effective corrective actions to ensure that safety-related molded case circuit breakers were adequately tested was a performance deficiency. The performance deficiency was more than minor because it adversely affected the mitigating systems cornerstone attribute of equipment performance and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. In accordance with NRC Inspection Manual Chapter 0609.04, Initial Screening and Characterization of Findings, the inspectors conducted a Phase 1 Significance Determination Process screening using Exhibit 2 of Appendix A to Manual Chapter 0609 and determined the finding to be of very low safety significance (Green) because it was a qualification deficiency confirmed not to result in the loss of operability or functionality. Because the licensee did not ensure that the necessary resources were available and adequate to maintain long term plant safety through the minimization of preventative maintenance deferrals, this finding is assigned a cross-cutting aspect in the resources component of the human performance area [H.2(a)].

Inspection Report# : [2013002](#) (pdf)

**Significance:** G Sep 30, 2012

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

**Operation at power with Unit 3 feedwater flow transmitter connected incorrectly**

A self-revealing, non-cited violation (NCV) of Turkey Point Technical Specification (TS) 3.3.1 Reactor Trip System Instrumentation was identified when process tubing to a Unit 3 feedwater flow transmitter was found incorrectly installed. As a result, one channel of reactor protection was not operable when required. When control room indications of erratic feedwater flow were noted, the applicable technical specification action was entered, bistables were tripped, and the process tubing misalignment was corrected. The problem was documented in the corrective action program as action request (AR) 1800833.

Failure to adequately perform maintenance and to verify proper alignment of flow transmitter FT-3-476 process tubing after replacement was a performance deficiency. The performance deficiency was determined to be more than minor because it affected the configuration control attribute of the Mitigating Systems Cornerstone which ensures the reliability of systems that respond to initiating events, such as the reactor protection system. The finding was screened using IMC 0609, Appendix A, The Significance Determination Process for Findings At-Power, Exhibit 2. Because the finding affected only a single reactor protection system (RPS) trip initiator and other redundant trips or diverse methods of reactor shutdown were not affected, the finding was determined to be of very low safety significance (Green). The finding was assigned a cross-cutting aspect in the Work Practices component of the Human Performance area (H.4.a) because the licensee did not establish human error prevention techniques, such as self and peer checking and proper documentation of activities to prevent incorrect installation of the flow transmitter. (Section 1R19)

Inspection Report# : [2012004](#) (pdf)

**Significance:** G Aug 02, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

**Failure to Translate Design Basis Requirements into Plant Procedures and Calculations for CCW Heat Balance Equation**

An NRC identified non-cited violation (NCV) of 10 CFR 50, Appendix B, Criterion III, Design Control, was identified for the licensee's failure to translate the worst case total post accident ICW flow rate for CCW heat exchangers, as documented in calculation PTN-4FSM-04-003 Revision 2, into surveillance, 3/4-OSP-030.4, CCW Heat Exchanger (HX) Performance Test. In addition, the licensee failed to incorporate seasonal salinity variances into calculation PTN-BFJM-96-004, "HX3 and HX4 Computer Code Verification." The effects of these two discrepancies was a reduction in maximum allowed canal temperature margin by approximately 1.5% or 1.5 degrees Fahrenheit. The licensee entered this issue into their corrective action program (CAP) as Condition Report (CR) 1789995. The failure to maintain the CCW heat balance calculation to ensure the plant could meet their design basis to perform heat removal for normal cool down of the facility, and to mitigate the effects of accident conditions within acceptable limits is a performance deficiency. The inspectors determined that the performance deficiency was more than minor because the calculation errors impacted the Mitigating Systems cornerstone objective to ensure the capability of the CCW system to respond to initiating events to prevent undesirable consequences and affected the cornerstone attribute of Design Control. The inspectors determined that this finding did not have a cross-cutting aspect, because the finding was determined not to be indicative of current licensee performance.

Inspection Report# : [2012011](#) (*pdf*)

**Significance:**  Aug 02, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

#### **Inadequate Corrective Actions Following Identification of a Non-conservative Technical Specification**

An NRC identified non-cited violation of 10 CFR 50, Appendix B, Criterion XVI, Corrective Action, was identified when the licensee's failure to take timely corrective action to address a nonconforming condition of Technical Specification (TS) 3/4.5.2 SR 4.5.2a. The non-conservative TS was identified and placed in the corrective action program in 2006 as CR 2006-22868. TS 3.5.2 SR 4.5.2a was determined to be non-conservative and the corrective action to submit a TS amendment to address the non-conservative TS was not implemented. The licensee is scheduled to submit the license amendment in the fourth quarter of 2012, as referenced in AR 1790829. The inspectors determined that the licensee's failure to timely correct a condition adverse to quality associated with the non-conservative TS was a performance deficiency. The performance deficiency was more than minor because if left uncorrected the failure to implement timely corrective actions has the potential to lead to a more significant safety event in that the unit could be placed in an unanalyzed condition for up to 24 hours. The inspectors determined that the finding was of very low safety significance because there has been no loss of safety system function. The inspectors determined that this finding directly involved the crosscutting area of Problem Identification and Resolution, component of the CAP and an aspect in taking appropriate corrective actions to address safety issues in a timely manner, commensurate with their safety significance and complexity. [P.1(d)]

Inspection Report# : [2012011](#) (*pdf*)

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## **Barrier Integrity**

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## **Emergency Preparedness**

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## **Occupational Radiation Safety**

**Significance:**  Mar 31, 2013

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

**Noncompliance with Radiological Barrier**

A Green self-revealing non-cited violation (NCV) of Technical Specification (TS) 6.12.1 was identified when a worker did not comply with a radiological barrier and entered a high radiation area (HRA) without proper authorization. Specifically, the worker entered the HRA without receiving a HRA briefing, and subsequently received a dose rate alarm. Upon identification, the licensee immediately restricted the worker's access to the Radiological Controlled Area (RCA). This condition has been placed into the licensee's Corrective Action Program (CAP), under Action Request (AR) 01852456. The finding was determined to be more than minor because it was related to the Occupational Radiation Safety cornerstone attribute of Program and Process, and adversely affected the cornerstone attribute to ensure the adequate protection of worker health and safety, because the worker was not made knowledgeable of the radiological conditions. Additionally, the finding was similar to IMC 0612, Appendix E, Example 6.h, which describes an improper entry into an HRA. The finding was evaluated in accordance with IMC 0609, Appendix C, where it was determined to be Green because it did not involve ALARA planning or work controls, was not an overexposure, did not contain a substantial potential for an overexposure, and the ability to assess dose was not compromised. The inspectors determined that this issue had a cross-cutting aspect in the Work Practices component of the Human Performance area because the licensee did not communicate radiological conditions to the worker through a pre-job brief [H.4(a)].

Inspection Report# : [2013002](#) (*pdf*)

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## Public Radiation Safety

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### Security

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page. Therefore, the [cover letters](#) to security inspection reports may be viewed.

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### Miscellaneous

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