# Byron 1 3Q/2014 Plant Inspection Findings

#### **Initiating Events**

Significance: Mar 31, 2014 Identified By: Self-Revealing

Item Type: NCV NonCited Violation

## FAILURE TO PROPERLY IMPLEMENT A COMPENSATORY FIRE WATCH AS REQUIRED BY THE FIRE PROTECTION PROGRAM

A finding with two examples of very low safety significance and associated NCV of Technical Specification 5.4.1.c was self-revealed when required compensatory fire watches were discovered to have been terminated while the fire systems were still impaired. Specifically, the licensee failed to maintain compensatory fire watches for Fire Zone 3.1-1, "Unit 1 Electrical Cable Tunnel" and for Fire Zones 10.1-2 "2B Diesel Fuel Oil Storage Room" and 10.2-2 "2A Diesel Fuel Oil Storage Room" required by procedure OP-MW-201-007 and as described in Technical Requirements Manual limiting conditions for operations.

The inspectors determined that this finding was more than minor in accordance with IMC 0612, Appendix B, "Issue Screening," dated September 7, 2012, because the finding was associated with the Initiating Events Cornerstone attribute of Protection Against External Factors (Fire) and adversely affected the cornerstone objective of limiting the likelihood of those events that upset plant stability and challenge critical safety functions during plant operations. Specifically, required fire watches established as compensatory measures should have been maintained for the duration of the work activity so that the sites ability to promptly detect and suppress a fire would be maintained. The inspectors evaluated this issue in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings." In Table 3 of Attachment 4, "SDP Appendix Router," the inspectors answered "Yes" to Question E.2, "Does the finding involve:...(2) Fixed fire protection systems....?" Therefore, the inspectors continued the risk evaluation using IMC 0609 Appendix F, "Fire Protection Significance Determination Process." Due to the equipment located in each of the affected fire zones, the two examples were evaluated independently. One example screened to Green using the questions under Task 1.4.2 for fixed fire protections systems. The senior reactor analyst performed a quantitative Phase 2 evaluation and determined the issue to be Green. The inspectors determined that a principle contributor to the finding was that the organization did not implement a process for planning, implementing, and executing concurrent work activities that ensured the required compensatory actions were maintained such that nuclear safety was the overriding priority (WP.1). As a result, the inspectors assigned a cross-cutting aspect of Work Management (H.5) to the finding.

Inspection Report#: 2014002 (pdf)

#### **Mitigating Systems**

Significance: Dec 31, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

**Emergency Service Water Blowdown Isolation Valves Were Not Tested** 

The inspectors identified a finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control," for failure to demonstrate the ability to isolate the emergency service

water blowdown as credited in analysis described in the Updated Final Safety Analysis Report. Specifically, the licensee was not periodically testing the active function of the blowdown isolation valves. This finding was entered into the licensee's Corrective Action Program, in part, to periodically test the closing function of the blowdown

The performance deficiency was determined to be more than minor because it was associated with the Mitigating Systems cornerstone attribute of equipment performance and affected the cornerstone objective of ensuring the availability, reliability, and capability of the ultimate heat sink to respond to initiating events to prevent undesirable consequences. The finding screened as of very low safety significance because it did not result in the loss of operability or functionality. Specifically, the licensee reviewed recent history of the affected piping system and determined it opportunistically cycled the valves without incidents. The inspectors did not identify a cross-cutting aspect associated with this finding because it was not confirmed to reflect current performance due to the age of the performance deficiency.

Inspection Report#: 2013005 (pdf)

Significance: Dec 31, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

#### Intake Structure Silt Level Acceptance Criteria Were Non-Conservative

The inspectors identified a finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for failure to develop appropriate intake structure silt level acceptance criteria. Specifically, the licensee used a non-conservative river water low level value as an input when developing silt level acceptance criteria. This finding was entered into the licensee's CAP to correct the acceptance criteria and revise the affected surveillance procedures.

The performance deficiency was determined to be more than minor because it was associated with the Mitigating Systems cornerstone attribute of equipment performance and affected the cornerstone objective of ensuring the availability, reliability, and capability of the ultimate heat sink to respond to initiating events to prevent undesirable consequences. The finding screened as of very low safety significance because it did not result in the loss of operability or functionality. Specifically, a historic review did not find an example where the as-found silt level resulted in an inoperable condition. The inspectors did not identify a cross-cutting aspect associated with this finding because it was not confirmed to reflect current performance due to the age of the performance deficiency.

Inspection Report# : 2013005 (pdf)

Significance: Dec 31, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

#### Failure to Implement Preventative Maintenance Procedure Repalacement Schedules for Essential Service **Water Makeup Pump Diesel Engine Hoses**

. Inspectors identified a finding of very low safety significance and associated Non-Cited Violation of TS 5.4.1, "Procedures," for failure to establish and implement a preventive maintenance schedule to replace hoses on SX Make Up pump diesel engine. Specifically, the licensee failed to implement preventive maintenance procedures that require periodic replacement of hoses on pre-established schedules in accordance with vendor recommendation and corporate Performance Centered Maintenance (PCM) template. The finding was entered into the licensee's Corrective Actions Program, in part, to evaluate the current maintenance strategy for maintaining flexible hoses on the SX make-up pump diesel engines.

The performance deficiency was determined to be more than minor because if left uncorrected the failure of SX Make up pump engine hoses could result in the in the inoperability of the SX Make up pumps. The performance deficiency also screened as more than minor because it affected the Procedure Quality attribute of the Mitigating Systems

cornerstone and affected the cornerstone objective of ensuring the reliability of systems that respond to initiating events to prevent undesirable consequences. The finding screened as being of very low safety significance because it did not result in the loss of operability or functionality. Specifically, the licensee has reviewed the recent history of hose inspections and instances that required hose replacement and determined no failures have occurred that resulted in an inoperable condition. The inspectors did not identify a cross-cutting aspect associated with this finding because it was not confirmed to reflect current performance due to the age of the performance deficiency. Inspection Report# : 2013005 (pdf)

## **Barrier Integrity**

#### **Emergency Preparedness**

### **Occupational Radiation Safety**

#### **Public Radiation Safety**

## **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 <u>cover letters</u> to security inspection reports may be viewed.

#### Miscellaneous

Last modified: November 26, 2014