

## Hatch 1

### 3Q/2015 Plant Inspection Findings

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## Initiating Events

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## Mitigating Systems

**Significance:** G Sep 30, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

### **Failure to Perform Adequate Surveillance on Fire Barriers and Penetration Seals**

The NRC identified a non-cited violation (NCV) of Hatch Operating License Conditions (OLCs) 2.C.(3) and 2.C.(3)(a), for Units 1 and 2 respectively, for the licensee's failure to perform fire barrier penetration seal inspections in accordance with the requirements of Surveillance Requirement 2.1.1.c of Appendix B of the Fire Hazard Analysis (FHA). Specifically, the licensee failed to ensure that fire-rated penetrations and fire-rated barriers separating redundant safe-shutdown trains were adequate to keep a fire from spreading from one fire area to another. To restore compliance the licensee performed a 100 percent inspection of fire-rated penetrations to verify the material condition of the site's rated fire barrier penetrations.

The licensee's failure to perform fire barrier penetration seal inspections was a performance deficiency. The performance deficiency was determined to be more than minor because it was associated with the reactor safety Mitigating Systems cornerstone attribute of protection against external factors (i.e. fire), and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Based on the finding being of very low probability, the finding was determined to be of very-low safety significance (Green). The cause of the finding had a cross-cutting aspect in the area of Human Performance, field presence, because plant leadership did not reinforce standards and expectations, and did not ensure that deviations from standards and expectations were corrected promptly (H.2). Specifically, licensee oversight was not properly engaged to ensure that surveillances were performed adequately, and that deviations were addressed appropriately.

Inspection Report# : [2015003](#) (*pdf*)

**Significance:** G Sep 30, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

### **"1A" PSW Pump High Vibration Failure**

A self-revealing, NCV of 10 CFR 50, Appendix B, Criterion V, "Procedures, Instructions, and Drawings," was identified when the licensee failed to provide instructions to ensure alignment of the "1A" plant service water (PSW) pump column in the true vertical position. The failure to align the "1A" PSW pump column resulted high stresses which caused the failure of the "1A" PSW pump. To restore compliance, the licensee replaced the "1A" PSW pump

and revised the pump installation procedure to ensure the pump column is aligned in the true vertical position.

Failure to provide instructions to ensure appropriate vertical alignment of the “1A” PSW pump column was a performance deficiency. This performance deficiency was more than minor because it affected the Mitigating Systems cornerstone attribute of Equipment Performance and adversely affected the cornerstone objective in that the misalignment of the pump column resulted in inoperability of the “1A” PSW pump. A regional Senior Reactor Analyst (SRA) performed a detailed risk review of the finding. The SRA calculated the difference between the risk associated with loss of offsite power (LOOP) events with extended recovery times with the “1A” pump available, and without the pump. Because of the low frequency of the seismic event, the finding was determined to be Green. The inspectors determined that this finding did not have an associated cross cutting aspect because this finding was not reflective of current licensee performance. (4AO3.3)

Inspection Report# : [2015003](#) (*pdf*)

**Significance:**  Jun 30, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

**Failure to Maintain HELB Penetrations**

A Green NRC identified non-cited violation (NCV) of 10 CFR 50, Appendix B, Criterion III, “Design Control,” was identified for failure to maintain reactor building residual heat removal (RHR) diagonal room penetrations in the designed configuration. The violation was entered into the licensee’s corrective action program as CR 10055943. The licensee issued work orders to seal the affected penetrations in accordance with design documents.

The licensee’s failure to maintain the penetration seals in accordance with design drawings was a performance deficiency. The performance deficiency was more than minor because it was associated with the Design Control attribute of the Mitigating Systems Cornerstone and adversely affected the cornerstone objective in that the failure to maintain the design basis configuration compromised the capability of the RHR diagonal room wall to restrict a high pressure coolant injection (HPCI) high energy line break to the torus area. The finding was of very low safety significance (Green) because the loss of component function did not significantly affect the function of the train or system. The inspectors determined that the finding had a cross-cutting aspect of “work management” in the human performance area (H.5), because the licensee’s work process did not control work activities such that nuclear safety was the overriding priority. (Section 1R15)

Inspection Report# : [2015002](#) (*pdf*)

**Significance:**  Mar 31, 2015

Identified By: Self-Revealing

Item Type: NCV Non-Cited Violation

**Failure to Identify Embedded Conduit prior to Core Drill Operations**

A self-revealing non-cited violation (NCV) of 10 CFR 50, Appendix B, Criterion V, “Procedures, Instructions, and Drawings,” was identified for failure to identify existing embedded conduit in the vicinity of prescribed core drills location. The violation was entered into the licensee’s corrective action program (CAP) as condition report (CR) 902506.

Failure to provide adequate instructions in Design Change Package (DCP) SNC467474 to perform core drills in the Unit 2 control building to support conduit installations was a performance deficiency. This performance deficiency is more than minor because it affected the Equipment Performance attribute of the Mitigating Systems Cornerstone and adversely affected the cornerstone objective in that 2P41F316A was rendered incapable of performing its’ safety related function of closing in the event of an accident condition. The finding was screened as Green because the inoperability did not last longer than the technical specification (TS) allowed outage time. The inspectors determined the performance deficiency has a cross-cutting aspect of “work management” in the human performance area, because

the licensee's work process did not identify and manage the risk commensurate to the core drill work.

Inspection Report# : [2015001](#) (*pdf*)

**Significance:**  Dec 31, 2014

Identified By: NRC

Item Type: NCV Non-Cited Violation

**Failure to evaluate fire penetration 1T43-H528J**

The NRC identified a Green Non-Cited Violation (NCV) of Unit 1 License Condition 2.C.(3) Fire Protection when a fire penetration that deviated from three-hour rating requirements was not evaluated in accordance with Unit 1 Fire Hazards Analysis (FHA) Appendix I, "Evaluation of non-rated penetration seals in rated fire barriers." The licensee initiated roving fire watches and initiated corrective actions to restore compliance with Appendix I of the Unit 1 FHA. The violation was entered into the licensee's corrective action program as CR 865615.

Failure to implement the Unit 1 Fire Hazards Analysis (FHA) Appendix I, "Evaluation of non-rated penetration seals in rated fire barriers" was a performance deficiency. This performance deficiency was more than minor because it was associated with the Mitigating Systems cornerstone of the Protection Against External Factors (Fire) attribute and adversely affected the cornerstone objective in that the licensee failed to evaluate the as-found configuration of the penetration which resulted in a nonfunctional fire barrier. The inspectors determined the finding was Green because there was a fully functional automatic suppression system on either side of the fire barrier. The inspectors determined that this finding did not have an associated cross-cutting aspect because this finding is not reflective of current licensee performance.

Inspection Report# : [2014005](#) (*pdf*)

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## Barrier Integrity

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## Emergency Preparedness

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## Occupational Radiation Safety

**Significance:**  Mar 31, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

**Failure to perform adequate surveys of air samples for alpha activity**

An NRC-Identified non-cited violation (NCV) of 10 CFR 20.1501(a) was identified for failure to perform an adequate survey. Air samples obtained in the reactor cavity and on the refuel floor during a contamination event indicating greater than 0.3 beta-gamma Derived Air Concentration (DAC) fraction level were not analyzed for alpha activity as required by the licensee's procedures. Previous characterization of the area had determined the area to be an Alpha Level II area requiring additional assessment and evaluation of air samples. This violation was entered into the licensee's CAP as CR 10033022.

This finding is greater than minor because it was associated with the Occupational Radiation Safety Cornerstone attribute of Program and Process (Monitoring and RP Controls) and adversely affected the cornerstone objective in that failure to identify potentially significant contributors to internal dose could lead to unmonitored occupational exposures. The finding was determined to be of very low safety significance (Green) because it was not related to As Low As Reasonably Achievable (ALARA) Planning and the ability to assess dose was not compromised during these instances. The cause of this finding was directly related to the cross-cutting aspect of leaders ensuring equipment, procedures, and other resources are available and adequate in the Resources component of the Human Performance area. [H.1]

Inspection Report# : [2015001](#) (*pdf*)

**Significance:**  Mar 31, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

**Failure to perform complete analysis of air samples**

An NRC-Identified non-cited violation (NCV) of TS 5.4.1 was identified for the failure of the licensee to perform complete quantitative analysis of air samples using approved counting equipment as required by the licensee's procedures. NMP-HP-301, Step 5.6, provides guidance for quantitative evaluation of air samples. On February 16, and 25, 2015, air samples for work activities in the Reactor Pressure Vessel head (RPV) and the Reactor Water Cleanup (RWCU) System heat exchanger were not quantitatively analyzed or evaluated for alpha activity even though the areas had been identified as having elevated alpha contamination levels. The licensee entered the issue into their corrective action program (CAP) as CR 10034556.

The finding was more than minor because it was associated with the Occupational Radiation Safety Program attribute of exposure control and affected the cornerstone objective of ensuring adequate protection of worker health and safety from exposure to radiation from airborne radioactive material during routine civilian nuclear reactor operation. Failure to identify potentially significant contributors to internal dose could lead to unmonitored occupational exposures. The finding was determined to be of very low safety significance (Green) because it did not involve: (1) an as low as is reasonably achievable finding, (2) an overexposure, (3) a substantial potential for overexposure, or (4) an impaired ability to assess dose related to As Low As Reasonably Achievable (ALARA) Planning and the ability to assess dose was not compromised during this instance. The cause of this finding was directly related to the cross-cutting aspect of following processes, procedures, and work instructions in the Procedure Adherence component of the Human Performance area.

Inspection Report# : [2015001](#) (*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.

## Miscellaneous

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