

## Hatch 1

### 3Q/2014 Plant Inspection Findings

---

### Initiating Events

**Significance:** G Sep 30, 2014

Identified By: Self-Revealing

Item Type: FIN Finding

#### **Unit Downpower Caused by Relief Valve Failure**

A self-revealing finding was identified when the opening of the 8th stage feedwater heater relief valves due to improper set point adjustment necessitated a Unit 1 downpower.

Failure to verify the 8th stage feedwater heater shell side relief valve set point was greater than normal system operating pressure as required by 52IT-MME-006-0 was a performance deficiency. This performance deficiency was more than minor because it was associated with the Equipment Performance attribute of the Initiating Events cornerstone and adversely affected the cornerstone objective in that a manual reactor power reduction was required from 93 percent to 25 percent. The inspectors screened this finding as Green because the finding did not cause a reactor trip and the loss of mitigation equipment, a high energy line-break, internal flood, or a fire. The finding had a cross cutting aspect of “training” in the human performance area because the engineer performing the work order review and approval was newly qualified and did not know how to determine system operating pressures. [H.9] Inspection Report# : [2014004](#) (*pdf*)

**Significance:** G Dec 31, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

#### **Failure to promptly identify source of leakage under Unit 1 reactor vessel**

NRC inspectors identified a non-cited violation (NCV) of 10 CFR 50, Appendix B, Criterion XVI, “Corrective Action,” for the licensee’s failure to promptly identify the source of leakage under Unit 1 reactor vessel on February 26, 2013. On October 25, 2013, the licensee identified the source of under vessel leakage to be from two bolts on a control rod drive mechanism to restore compliance. This violation was entered into the licensee’s corrective action program as condition report (CR) 723942.

The failure to promptly identify leakage from control rod drive mechanism 06-35 on February 26, 2013, as required by 10 CFR 50 Appendix B, Criterion XVI, “Corrective Actions,” was a performance deficiency. This performance deficiency affected the initiating events cornerstone and was determined to be more-than-minor because, if left uncorrected, failure to identify the location of leakage sources within the drywell has the potential to lead to a worse leak and a more significant safety concern. The inspectors screened this finding utilizing IMC 0609 Attachment 4, “Initial Characterization of Findings,” dated June 19, 2012. The finding screened as Green using the initiating events loss of coolant accident initiator screening questions because the finding degradation assessment did not result in exceeding the reactor coolant system leak rate for a small loss of coolant accident and did not affect the functions of other systems used to mitigate a loss of coolant accident. The inspectors determined this performance deficiency had a cross cutting aspect in the human performance area decision-making attribute because the licensee did not use conservative assumptions in decision making by demonstrating that a condition adverse to quality was identified or did not exist in order to proceed with plant startup. [H.1(b)] (Section 1R20.2)

Inspection Report# : [2013005](#) (pdf)

## Mitigating Systems

**Significance:**  Sep 30, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

**Failure to Implement Fire Surveillance Procedure Resulted in Isolation of All Fire Water to the Station**

The NRC identified a NCV of Technical Specification 5.4, "Procedures," for the licensee's failure to properly implement a valve lineup in a surveillance procedure for the fire protection system. The licensee inadvertently isolated all fire suppression water during the performance of a valve lineup. Although this condition was identified by the licensee, the inspectors identified weaknesses in the licensee's apparent cause determination. Therefore, this finding is being treated as an NRC-Identified finding. The violation was entered into the licensee's corrective action program as condition report 841493.

The licensee's failure to implement the correct valve lineup in accordance with procedure 42SV-FPX-015-0, "System Flush Fire Protection Water", was a performance deficiency. This performance deficiency was more than minor because the performance deficiency was associated with the Protection Against External Factors (Fire) attribute of the Mitigating Systems cornerstone and adversely affected the cornerstone objective in that the failure to implement the correct valve lineup of 42SV-FPX-015-0 resulted in total fire suppression water isolation. The inspectors screened this finding as requiring a Phase 3 analysis, because 1) the duration factor was determined to be 0.01 (< 3 Days), 2) the summation of estimated fire frequency for the fire areas was calculated to 1.24E-01, and 3) the delta CDF calculation was greater than 1E-6 in Table 1.5.4. A Senior Reactor Analyst performed a Phase 3 analysis for the finding using licensee input from their fire PRA. Because of the short exposure time of approximately one hour, the change in risk was below 1E-6. Therefore, this finding is Green. The finding had a cross-cutting aspect of "resources" in the human performance area, because the licensee did not ensure that procedure 42SV-FPX-015-0 was adequate to support nuclear safety. [H.1]

Inspection Report# : [2014004](#) (pdf)**Significance:**  Sep 30, 2014

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

**Failure to Promptly Identify Malfunction of HPCI Exhaust Drain Pot Level Instrumentation**

A self-revealing NCV of Title 10 of the Code of Federal Regulations (10 CFR) Part 50, Appendix B, Criterion XVI, "Corrective Actions," was identified on May 1, 2014 when a control room annunciator and subsequent investigation of the high pressure coolant injection (HPCI) system led to the discovery that on March 4, 2014, the licensee failed to identify that a blown fuse was preventing the HPCI turbine exhaust drain pot from performing its automatic level control function. The licensee restored HPCI operability by replacing the fuse and draining the accumulated condensation from the HPCI turbine. The violation was entered into the licensee's corrective action program as condition report 807394.

The failure to promptly identify and correct the failure of the exhaust drain pot level instrumentation, as required by 10 CFR 50, Appendix B, Criterion XVI, "Corrective Actions," was a performance deficiency. This performance deficiency was determined to be more than minor because it was associated with the Equipment Performance - Reliability attribute of the Mitigating Systems cornerstone and it adversely affected the cornerstone objective in that the failure to promptly identify and replace the blown fuse resulted in the HPCI system inoperability from April 24 to

May 1, 2014. The inspectors assessed this finding and determined it was Green because HPCI functionality was not lost. The inspectors determined the finding had a cross cutting aspect of “avoid complacency” in the human performance area because the licensee did not recognize the possibility of latent issues and inherent risk when evaluating CR 782581. [H.12]

Inspection Report# : [2014004](#) (*pdf*)

**Significance:**  Mar 31, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

**Failure to Scope Safety System MOVs in the GL 96-05 Periodic Verification Program**

Green. The inspectors identified a Green NCV of 10 CFR 50.55a, “Codes and Standards,” for the licensee’s failure to establish a periodic verification program for the core spray, high pressure core injection, and reactor core injection cooling systems pump outboard discharge motor-operated valves (MOVs) to ensure their long-term capability to perform their design bases safety functions. The licensee provided operators with interim instructions to declare the affected systems inoperable until permanent corrective actions are implemented. This violation has been entered into the licensee’s corrective action program as CR 799261.

Failure to establish a periodic verification program for the core spray, high pressure core injection, and reactor core injection cooling systems pump outboard discharge MOVs to ensure their long-term capability to perform their design basis safety functions was a performance deficiency. The performance deficiency was more than minor because it adversely affected the equipment performance attribute of the mitigating systems cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, failure to ensure the long-term capability of the valves to perform their design basis safety functions overestimated the availability and reliability of the core spray, high pressure core injection, and reactor core injection cooling systems during testing or other activities that would place the valves in their non-safety position. The inspectors screened this finding using IMC 0609, Appendix A, “The Significant Determination Process (SDP) For Findings At-Power”, dated June 19, 2012. The finding screened as Green per Section A of Exhibit 2, “Mitigating Systems Screening Questions,” because each of the four screening questions were answered “no.” The inspectors determined the finding had a cross-cutting aspect of “evaluation” in the problem identification and resolution area because in 2013 the licensee had corrective actions in the corrective action program to evaluate the adequacy of the MOV periodic verification program scope and failed to identify that reliance on the valves to reposition when in the closed position required the valves to be in the program. [P.2] (Section 4OA2.2)

Inspection Report# : [2014002](#) (*pdf*)

**Significance:**  Dec 31, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

**Scaffolding installed in safety related areas failed to meet procedural requirements**

The NRC inspectors identified an NCV of 10 CFR 50, Appendix B, Criterion V, “Instructions, Procedures, and Drawings,” for the licensee’s failure to implement existing procedural guidance for the control of clearances between installed scaffolding and safety-related plant equipment. The licensee corrected each scaffold identified to restore compliance. This violation has been entered into the licensee’s corrective action program as CR 721564.

Failure to maintain the required clearance of two inches between scaffolding and safety related equipment in accordance with 50AC-MNT-003-0, “Scaffold Control,” was a performance deficiency. The performance deficiency was more-than minor because it adversely affected the protection against external factors attribute of the mitigating systems cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events. Specifically, this issue is similar to IMC 0612 Appendix E, Section 4 Example (a) of a more-than-minor issue

because the licensee routinely failed to perform engineering evaluations on scaffolding erected with clearances less than procedural requirements. The inspectors screened this finding utilizing IMC 0609 Attachment 4, "Initial Characterization of Findings," dated June 19, 2012, and IMC 0609 Appendix A, "The Significance Determination Process (SDP) for Findings at Power" dated June 19, 2012. The finding screened as Green using Exhibit 2, Section A. "Mitigating Structures, Systems, Components and Functionality" screening question 1, because the finding was a qualification (seismic) deficiency of a mitigating structure, system, or component which maintained its operability or functionality. The inspectors determined this performance deficiency had a cross cutting aspect in the work practices component of the human performance area because the licensee did not ensure supervisory and management oversight of work activities, including contractors, such that nuclear safety is supported. [H.4(c)] (Section 1R12)

Inspection Report# : [2013005](#) (*pdf*)

**Significance:**  Dec 31, 2013

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

**Failure to implement an administrative procedure for equipment control when using personal danger tags**

A self-revealing NCV of Hatch Unit 1 and Unit 2 Technical Specification 5.4., "Procedures," was identified on October 5, 2013, when the licensee failed to implement an administrative procedure for equipment control which caused the "A" main control room air conditioning unit to trip. The licensee properly realigned the system and restarted the "A" main control room air conditioning unit to restore compliance. This violation has been entered into the licensee's corrective action program as CR 713629.

Failure to ensure the use of the personal danger tags (PDTs) will have no adverse effects on the continued operation of the plant as required by procedure NMP-AD-003-005, "PDT Tags/Maintenance Locks Use With Operating Permit Tags or PDT Documentation Sheets," was a performance deficiency. This performance deficiency was more-than-minor because it adversely affected the equipment performance attribute of the mitigating systems cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, a PDT clearance sheet was performed on in-service equipment and resulted in the tripping of the "A" main control room air conditioner. The inspectors evaluated the finding in accordance with IMC 0609, Attachment 4, "Initial Characterization of Findings," dated June 19, 2012. Using Table 2, "Cornerstones Affected by Degradation Condition or Programmatic Weakness," the finding affected the mitigating systems cornerstone and required further evaluation using IMC 0609 Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," dated June 19, 2012. Based on Appendix A, Exhibit 2 – Mitigating Systems Screening Questions, the finding screened as Green because all the questions were answered no. The inspectors determined this finding has a cross-cutting aspect in the work control aspect of the human performance area, because the licensee did not coordinate work activities by incorporating actions to address the need to keep personnel apprised of work status, the operational impact of work activities, or plant conditions that may affect work activities. [H.3(b)] (Section 40A2.3)

Inspection Report# : [2013005](#) (*pdf*)

---

## Barrier Integrity

**Significance:**  Jun 30, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

### **Failure to Prove Operability Following the Failure of the Secondary Containment Surveillance Test**

Green. The inspectors identified a Green non-cited violation of 10 CFR 50, Appendix B, Criterion V, “Procedures, Instructions, and Drawings,” for the licensee’s failure to prove operability following a failure of a surveillance test as required by Hatch procedure 90AC-OAM-001-0, “Test and Surveillance Control,” Ver. 1.0, on May 12, 2014. To restore compliance, the licensee isolated the refueling floor dampers and re-performed Surveillance Requirement 3.6.4.1.3 with satisfactory results later that day on May 12, 2014. This violation was entered into the licensee’s corrective action program as condition report (CR) 819563.

Failure to prove operability following failure of a surveillance test as required by Hatch procedure 90AC-OAM-001-0, “Test and Surveillance Control,” Ver. 1.0, on May 12, 2014, was a performance deficiency. The performance deficiency affected the barrier integrity cornerstone and was more-than-minor because, if left uncorrected, it would have the potential to lead to a more significant safety concern. Specifically, declaring equipment operable following a failed surveillance test would have the potential for the facility to operate outside of technical specification requirements. The inspectors screened this finding using IMC 0609, Appendix A, “The Significant Determination Process (SDP) For Findings At-Power”, dated June 19, 2012. The finding screened as Green per Section C of Exhibit 3, “Barrier Integrity Screening Questions,” because the finding only represented a degradation of the radiological barrier function provided by the standby gas treatment system. The inspectors determined the finding had a cross-cutting aspect of “training” in the human performance area, because the licensee did not ensure knowledge transfer of Surveillance Requirement 3.0.1 requirements to maintain a knowledgeable, technically competent workforce and instill nuclear safety values. [H.9]

Inspection Report# : [2014003](#) (*pdf*)

---

## **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 [cover letters](#) to security inspection reports may be viewed.

---

## Miscellaneous

**Significance:** N/A Dec 13, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

### **Failure to Update the UFSAR Following a Change in Neutron Fluence Calculation Methodology**

SL IV. The inspectors identified an NRC-identified Severity Level IV non-cited violation (NCV) of 10 CFR 50.71(e) for the licensee's failure to update the UFSAR following the change in methodology used to calculate reactor vessel neutron fluence. Specifically, the licensee did not completely update the UFSAR to reflect the change in fluence calculation methodology from the General Electric methodology to the Radiation Analysis Modeling Application (RAMA) methodology described in BWRVIP-114-A, "BWR Vessel and Internals Project, RAMA Fluence Methodology Theory Manual." The licensee entered this issue into their corrective action program as condition report (CR) 744853.

The inspectors determined that the failure to update the UFSAR as required by 10 CFR 50.71(e) was a performance deficiency. The performance deficiency was greater than minor because the failure to provide complete licensing and design basis information in the UFSAR could result in either the licensee making an inappropriate licensing interpretation or the NRC making an inappropriate regulatory decision based on incomplete information in the UFSAR. This performance deficiency was dispositioned using the traditional enforcement process because failing to update a UFSAR had the potential to adversely impact the NRC's ability to perform its regulatory function. The performance deficiency was characterized as a Severity Level IV violation in accordance with the NRC Enforcement Policy (dated July 9, 2013), Section 6.1.d.3. Since this issue was dispositioned using traditional enforcement, there was no cross-cutting aspect associated with this violation (Section 4OA5.3).

Inspection Report# : [2013007](#) (*pdf*)

Last modified : November 26, 2014