

Hatch 1

3Q/2013 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance:  Sep 30, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to take required actions for inoperable equipment in accordance with Hatch's fire hazards analysis, Appendix B

The NRC identified a non-cited violation of Unit 1 License Condition 2.C.(3), "Fire Protection," and Unit 2 License Condition 2.C.(3)(a), "Fire Protection," which occurred on September 3, 2013, when the licensee failed to establish fire watches and compensatory measures required by Hatch's Fire Hazards Analysis, Appendix B, after a fire header pipe rupture rendered sprinklers and hose stations inoperable. The licensee returned the fire header to operable status September 4, 2013, to restore compliance. This violation was entered into the licensee's corrective action program as condition report (CR) 700402.

Failure to establish fire watches and compensatory actions as required by Hatch's Fire Hazards Analysis, Appendix B, when sprinkler systems and hose stations became inoperable on September 3, 2013, was a performance deficiency. This performance deficiency was more-than-minor because the performance deficiency is associated with the mitigating systems cornerstone protection against external factors (fire) attribute and adversely affected the cornerstone objective to ensure availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the failure to establish fire watches and alternate compensatory measures resulted in the loss of fixed fire suppression capabilities within each fire area on the plant site for up to 6 hours. The inspectors screened this finding using IMC 0609, Appendix F, Attachment 1, dated February 28, 2005. Using Part 1, "Fire Protection SDP Phase 1 Worksheet," this finding screened as requiring a Phase 2 analysis, because the duration factor was determined to be 0.01 (< 3 Days), the summation of estimated fire frequency for the fire areas was calculated to be 3.78E-01, and the delta core damage frequency (CDF) calculation of 3.78E-03 was greater than a high degradation value of 1E-6 in Table A1.1. The inspectors submitted this finding to the Region II senior reactor analyst for further processing. A detailed SDP risk evaluation was performed by a regional senior reactor analyst. A bounding SDP risk evaluation was completed using a hand calculation and guidance from NRC IMC 0609 Appendix F. The significant analysis assumptions included a five hour exposure time, plant wide ignition frequency of approximately 3E-1/year, severity factor of 1E-1 (only large fires likely to require use of fixed suppression), probability of non-suppression (PNS) of 5E-1 (10 minute fire growth scenario for base case and PNS of 1.0 no suppression due to the PD for the non-conforming case), and a conditional core damage probability of 1E-1 (assumed that large unsuppressed fire would lead to alternate shutdown scenario). The low exposure period mitigated the risk of the performance deficiency. The result of the bounding SDP evaluation was a core damage frequency increase (?CDF) of < 1E-6/year, a GREEN finding of very low safety significance. 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 when applying actions for inoperable fire hose stations, yard fire hydrants, and sprinklers. [H.1(b)] (Section 4OA3.1)

Inspection Report# : [2013004](#) (*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 [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Last modified : December 03, 2013