

South Texas 1

1Q/2015 Plant Inspection Findings

Initiating Events

Significance: G Apr 04, 2014

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Establish Adequate Screening Criteria in the Boric Acid Corrosion Control Program

The inspectors identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, “Instructions, Procedures, and Drawings,” for an inadequate procedure associated with the boric acid corrosion control program (BACCP). Specifically, Procedure OPGP03-ZE-0133, “Boric Acid Corrosion Control Program,” Revision 7, failed to provide adequate screening criteria for boric acid leaks. As a result, the inspectors identified multiple instances where the licensee inadequately screened boric acid leaks by failing to take into account all the characteristics of the leak commensurate to the affected component. The licensee entered the finding into the corrective action program as Condition Report 14-5393.

The inspectors determined that the failure to establish adequate screening criteria for boric acid leaks in Procedure OPGP03-ZE-0133 was a performance deficiency. The finding is more than minor because it is associated with the procedure quality attribute of the Initiating Events cornerstone and adversely affected the cornerstone objective to limit the likelihood of events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Using Inspection Manual Chapter 0609, Appendix A, “The Significance Determination Process (SDP) for Findings At-Power,” Exhibit 1, the finding was determined to be of very low safety significance (Green) because the assessment of degradation did not result in exceeding the RCS leak rate for a small LOCA and did not affect other systems used to mitigate a LOCA resulting in a total loss of their function. The inspectors determined the finding has a cross-cutting aspect in the area of human performance associated with conservative bias because the licensee failed to use decision-making practices that emphasize prudent choices over those that are simply allowable [H.14].

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

Mitigating Systems

Significance: G Dec 31, 2014

Identified By: Self-Revealing

Item Type: NCV Non-Cited Violation

Failure to Identify a Condition Adverse to Quality on Emergency Diesel Generator

The inspectors documented a self-revealing non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, “Corrective Action,” for the licensee’s failure to promptly identify and correct a condition adverse to quality following an unexpected alarm on the train A emergency diesel generator. Specifically, after receiving the, “E-5 Starting Air System Malfunction” alarm, the licensee did not identify the correct cause of the alarm or take the necessary action to ensure the operability and reliability of the emergency diesel generator. As a result, the train A emergency diesel generator was degraded for 20 days, and was later rendered inoperable and non-functional for approximately 26 hours when operators removed the only air start subsystem that remained unaffected from service.

This issue was entered into the corrective action program as Condition Report 14-18639, and the cause was corrected.

Failure to identify the cause for the starting air system alarm and recognize that this degraded the starting function was a performance deficiency. This performance deficiency is more than minor because it 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, the failure to correctly identify and correct the cause of the “E-5 Starting Air System Malfunction” alarm resulted in the train A emergency diesel generator being degraded and later inoperable. Using NRC Inspection Manual 0609, Appendix A, “The Significance Determination Process for Findings At-Power,” the finding was determined to be of very low safety significance (Green) because it did not: 1) affect the design or qualification of a mitigating structure, system, or component; 2) represent a loss of system and/or function; 3) represent an actual loss of function of a single train for greater than its technical specification allowed outage time; and 4) represent an actual loss of function of one or more non-technical specification trains of equipment designated as having high safety-significance. This finding has a cross-cutting aspect in the area of problem identification and resolution associated with Evaluation because the licensee failed to thoroughly evaluate the issue to ensure that resolutions address the causes and extent of conditions commensurate with the safety significance. Specifically, the licensee’s failure to fully evaluate the cause of the starting air system alarm, and as a result, failed to recognize and correct the out-of-position valve before it rendered the system inoperable [P.2].

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

Significance:  Sep 25, 2014

Identified By: NRC

Item Type: NCV Non-Cited Violation

Inadequate Loop Flow Test

The team identified a non-cited violation of Technical Specification 6.8.1.d for the failure to implement and maintain written procedures for fire protection program implementation. Specifically, the licensee failed to have procedures for and to flow test the portions of the underground piping that supplied water to the diesel generator buildings since the initial startup test. The licensee initiated actions to perform the flow testing within two months and entered the deficiency into their corrective action program as Condition Report 14-17098.

The failure to conduct flow testing of the entire underground fire protection piping loop was a performance deficiency. This performance deficiency was more than minor because it was associated with the protection against external factors attribute (fire) and adversely affected the mitigating systems cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the failure to performance test the underground fire protection piping loops supplying the emergency diesel generator buildings for both units did not demonstrate the continued capability to deliver adequate flow and pressure to the fire suppression systems supplying those buildings.

The team evaluated the finding using Inspection Manual Chapter 0609, Appendix F, “Fire Protection Significance Determination Process,” because it affected fire protection defense-in-depth strategies involving fire water supply. Using Appendix F, the team determined that the finding screened to very low safety significance. Specifically, the finding did not prevent the reactor from achieving safe shutdown since only one safe shutdown train would be affected at a time. Since these underground fire protection piping loops had not been flow tested since initial installation and nothing caused the licensee to reevaluate the test, the team determined that this failure did not reflect current performance.

Inspection Report# : [2014008](#) (*pdf*)

Significance:  Apr 04, 2014

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Perform a Fill and Vent Results in an Inoperable Essential Chilled Water Train

The inspectors identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, “Instructions, Procedures, and Drawings,” for an inadequate procedure because train C essential chilled water system was rendered inoperable by failing to remove air from the system following maintenance. Specifically, the licensee failed to require a system fill and vent in Procedure 0PMP05-CH-003, “York Chiller Inspection & Maintenance 300 Tons,” Revision 6, following maintenance on the essential chilled water system. The condition was placed into the corrective action program as Condition Report 13-12492. The licensee has modified the essential chilled water maintenance procedure to require a full system fill and vent following maintenance.

The failure to require filling and venting of the essential chilled water system following maintenance that may introduce air into the system is a performance deficiency. The performance deficiency is more than minor because it is associated with the equipment performance attribute of the Mitigating Systems Cornerstone, and adversely affected the objective to ensure availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, air left in the system rendered the train inoperable. Using Inspection Manual Chapter 0609, Appendix A, Exhibit 2, “Mitigating Systems Screening Questions,” the inspectors determined the finding was of very low safety significance (Green) because the finding did not affect the design or qualification of the structure, system, and component; did not represent a loss of system or function; did not represent an actual loss of function of a single train for greater than its technical specification allowed outage time; and did not represent an actual loss of function of one or more non-technical specification trains of equipment designated as high safety significant in accordance with the licensee’s Maintenance Rule program for greater than 24 hours. The inspectors determined that the cause of the finding had a cross-cutting aspect in the resources area of human performance because the licensee did not ensure that this procedure was adequate to support nuclear safety by ensuring that the essential chilled water system was operable when it was returned to service [H.1].

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

Barrier Integrity

Significance:  Sep 28, 2014

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Identify a Condition Adverse to Quality for the Control Room Envelope

The inspectors identified a Green non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, “Corrective Action,” involving the licensee’s failure to promptly identify and correct a condition adverse to quality. Specifically, following the identification of general corrosion on the Units 1 and 2 control room envelope heating, ventilation, and air conditioning ducts, the licensee failed to identify that moisture condensing and collecting was a condition adverse to quality and failed to correct the condition. As a result, corrosion caused through-wall leaks in 2008 and 2014. The licensee entered this into the corrective action program as Condition Report 14-17723, and planned to evaluate and address the issue.

The failure to promptly identify and correct a condition adverse to quality is a performance deficiency. The performance deficiency was more than minor because it is associated with the barrier performance attribute of the Barrier Integrity Cornerstone and affected the cornerstone objective. Using NRC Inspection Manual Chapter 0609, Appendix A, “Significance Determination Process (SDP) for Findings at Power,” dated June 19, 2012, the finding was determined to be of very low safety significance (Green) because the finding only represented a degradation of the radiological barrier function provided for the control room. The finding has a cross-cutting aspect in the area of problem identification and resolution associated with evaluation, because the licensee failed to

thoroughly evaluate the issue to ensure that the resolution addressed the cause of extent of condition commensurate with the safety significance [P2].

Inspection Report# : [2014004](#) (*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:  Dec 18, 2014

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Perform Proper Material Package Searches to Ensure Identification Prior to Entry into Protected Area

The team identified a non-cited violation of 10 CFR 73.55(h)(3)(i) for the failure to properly search personnel items (lunch boxes, briefcases, packages) before granting access to protected areas. Specifically, security personnel did not follow Security Instruction 2101, "Access Control," by allowing owners of packages to manipulate their packages when officers needed to search those packages for contraband prior to gaining entry into the protected area. The licensee entered the issue into the corrective action program as Condition Report 14-22811, developed, and reviewed a pre-job brief specifically for search train requirements with every oncoming officer, and covered management expectations and procedure details at all shift turnovers.

The failure to follow Security Instruction 2101 "Access Control," requirements by allowing the owners (non-security officers) to manipulate those packages that needed to be hand inspected when x-ray inspection reveals complex images or suspicious or unidentifiable images was a performance deficiency. The performance deficiency is more than

minor because it was associated with the Access Control attribute and adversely affected the Safeguards/Security cornerstone objective to provide assurance that the licensee's security system uses a defense in-depth approach and can protect against the design basis threat of radiological sabotage from external and internal threats, and therefore a finding. The finding adversely affected the cornerstone objective because it could have resulted in undetected weapons or contraband being taken into the protected and vital areas.

Using the Physical Protection Significance Determination Process, the inspector determined that the cumulative total for the finding was two points. This was calculated by factoring the impact area (Vital Area) against Tier I element 71130.02-02.02(c) Search Activities, under the Access Control attribute. Because the calculated point total did not exceed the range for a Green determination (zero to six points), the inspector determined the finding to be of very low security significance. The inspectors determined that this finding has a cross-cutting aspect in the human performance area associated with complacency in that security force personnel did not implement appropriate error reduction tools due to the repetitive nature of the search train activities and the expectation of successful outcomes H.12.

Inspection Report# : [2014010](#) (*pdf*)

Last modified : June 16, 2015