South Texas 1
3Q/2012 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance: G Jun 29, 2012
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Follow ASME Code Requirements
The inspectors identified a non-cited violation of 10 CFR 50.55a(g)(4) for the failure to follow in-service inspection requirements of Section XI of the 2004 ASME Boiler and Pressure Vessel Code. Specifically, the inspectors determined that the licensee had not correctly applied Section XI, IWA-5250, to boric acid residues that were discovered under the base lip of the refueling water storage tank on September 20, 2011. The inspectors questioned the licensee's operability determination of fully operable and engineering disposition of "acceptable for use," because the degradation mechanism was not readily apparent and the licensee had not characterized the flaw. The licensee documented the issues in Condition Reports 12-20019 and 12-20026 and changed the operability determination to operable but degraded.

This finding is more than minor because it affected the Mitigating Systems Cornerstone attribute of Design Control and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences, and if left uncorrected it would have the potential to become a more significant safety concern because the structural integrity of the safety injection system's primary source of cooling water could be compromised. The inspectors performed the significance determination using NRC Inspection Manual Chapter 0609, Attachment 0609.04, "Phase 1 – Initial Screening and Characterization of Findings," dated January 10, 2008, because it affected the Mitigating Systems Cornerstone while the plant was at power. The finding was determined to be of very low safety significance because it was not a design or qualification deficiency; it did not result in the loss of a system safety function; it did not represent a loss of a single train for greater than technical specification allowed outage time; it did not represent a loss of one or more nontechnical specification risk-significant equipment for greater than 24 hours; and it did not screen as potentially risk significant due to seismic, flooding, or severe weather. In addition, this finding had a human performance cross-cutting aspect associated with decision making because the licensee did not make safety-significant decisions using a systematic process, especially when faced with uncertain or unexpected plant conditions, to ensure safety is maintained [H.1(a)].
Inspection Report# : 2012003 *(pdf)*

Significance: G Dec 31, 2011
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Design Change on Class 1E 4160 Vac ESF Transformers
The inspectors identified a non-cited violation of 10 CFR Part 50, Appendix B, Criteria III, "Design Control," for the failure to ensure that design standards were correctly translated into drawings, procedures, and instructions. Specifically, the design specifications of the Class 1E 4160 Vac buses were not maintained with the installation of a

new transformer. The root cause investigation determined that the design change package that installed the new transformers on Units 1 and 2 in October 2009 and April 2010, respectively, was not modeled correctly. The licensee captured this event as Condition Report 11-10205 and implemented immediate compensatory measures of increased monitoring on the Class 1E 4160 Vac buses by implementing temporary logs to ensure that the Class 1E loads were within their technical specifications surveillance procedure acceptance criteria until the new design change package could be implemented on each unit.

The finding was more than minor because it was associated with the Mitigating Systems Cornerstone attribute of Design Control and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inadequate design change package resulted in the licensee declaring the Unit 2 Class 1E 4160 Vac E2B bus inoperable because it was outside of the technical specification surveillance procedure acceptance criteria for longer than allowed by technical specifications. The inspectors performed the significance determination using NRC Inspection Manual Chapter 0609, Attachment 0609.04, "Phase 1 – Initial Screening and Characterization of Findings," dated January 10, 2008, because it affected the Mitigating Systems Cornerstone while the plant was at power. The finding was determined to be of very low safety significance because it was a design deficiency that did not result in a loss of functionality per Part 9900 Technical Guidance, "Operability Determinations & Functionality Assessments for Resolution of Degraded or Nonconforming Conditions Adverse to Quality or Safety," dated April 16, 2008. In addition, this finding had human performance cross-cutting aspects associated with work practices in that the licensee did not ensure supervisory and management oversight of work activities, including contractors, such that nuclear safety was supported [H.4(c)].
Inspection Report# : 2011005 *(pdf)*

Barrier Integrity

Significance: G Jun 29, 2012
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Promptly Identify Conditions Adverse to Quality
The inspectors identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, for the failure to promptly identify conditions adverse to quality. Specifically, on May 21, 2012, the inspectors observed water was dripping from the isolation valve cubicle roof at several drops per minute and informed Unit 1 and 2 operations personnel to investigate further. The licensee confirmed that train C and D steam generator power operated relief valves in each unit were leaking steam directly to the atmosphere. The licensee entered the conditions into the corrective action program and plans to repair the valves at the next available opportunity.

The finding is more than minor because it is associated with the Barrier Integrity Cornerstone attribute of barrier performance and affected the cornerstone objective to protect the public from radionuclide releases caused by accidents or events because steam generator tube leakage events would release radionuclides directly to the atmosphere. The inspectors performed the significance determination using NRC Inspection Manual Chapter 0609, Appendix H, dated May 6, 2004. The finding was determined to be of very low safety significance because it did not affect core damage frequency and the components involved were not identified as being important to large early release frequency. In addition, this finding has a human performance cross-cutting aspect associated with decision making because the licensee did not use conservative assumptions and adopt a requirement to demonstrate that the proposed action is safe in order to proceed [H.1(b)].
Inspection Report# : 2012003 *(pdf)*

Emergency Preparedness

Occupational Radiation Safety

Significance: G Dec 31, 2011
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Failure to Follow Radiation Protection Procedural Requirements (Section 2RS01)
The inspectors reviewed a self-revealing non-cited violation of Technical Specification 6.8.1.a, for the failure to follow procedural and radiation work permit requirements. On April 22, 2011, work was performed in the Unit 1 reactor cavity and the health physics technician providing job coverage failed to verify dose and dose rate setpoints, and incorrectly assumed that removal of equipment measuring greater than 100 mrem per hour from the reactor cavity could proceed. Consequently, a contract radiation worker failed to comply with special instructions to not remove such equipment from the reactor cavity without the concurrence of a radiation protection supervisor or designee. As a result, the worker received two dose rate alarms. The licensee's corrective actions were to counsel the worker and technician to ensure a complete understanding of worker's radiation work permit instructions. In addition, licensee procedures were revised to require telemetry when removing items from the water. This issue was entered into the corrective action program as Condition Report 11-7217.

The finding was more than minor because it was associated with the Occupational Radiation Safety Cornerstone attribute of Program and Process and affected the cornerstone objective of ensuring adequate protection of worker health and safety from exposure to radiation during routine operations. The finding resulted in the worker being exposed to higher radiation levels and potentially unintended dose. When processed through the Occupational Radiation Safety Significance Determination Process, the inspectors determined the finding to be of very low safety significance because it was not: (1) an ALARA finding, (2) an overexposure, (3) a substantial potential for overexposure, or (4) an inability to assess dose. The finding had a cross-cutting aspect in the area of human performance, work practices component because the health physics technician, providing coverage, failed to define and effectively communicate expectations regarding procedural compliance [H.4(b)].
Inspection Report# : 2011005 *(pdf)*

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 : November 30, 2012