Summer
4Q/2010 Plant Inspection Findings

Initiating Events

Significance: G Jun 30, 2010
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Inadequate Station Tagout Procedure for Controlling Safety and Non-safety Related Grounding Equipment Results in Loss of All Balance of Plant Power and Switchgear Fires
A Green self-revealing non-cited violation (NCV) of TS 6.8.1.a was identified for the failure to establish adequate procedural tagging controls of safety and non-safety related electrical ground protection equipment which contributed to the main power transformer being energized while electrical ground protection equipment was still installed in three 7.2 kV Balance of Plant (BOP) switchgear breaker cubicles. This condition resulted in a complete loss of BOP power due to the faults to ground, significant arc flashing, and subsequent fires in each of the three switchgear cubicles requiring onsite and offsite fire brigade response and the declaration of an UE. The finding was entered into the licensee's corrective action program as condition report CR-09-05093.

The inspectors determined that the licensee's failure to develop an adequate station tagout procedure for controlling the configuration of safety and non-safety related ground protection equipment was a performance deficiency that was within the licensee's ability to foresee and correct. While this event involved the mis-configuration of ground protection in non-safety-related BOP switchgear, the same station tagout procedural requirements apply to the control of safety-related equipment. This finding is more than minor because the failure to properly control the configuration of safety and non-safety related ground protection electrical equipment, if left uncorrected, would have the potential to lead to a more significant safety concern. In addition, the finding is associated with the protection against external factors attribute of the initiating events cornerstone and affected the cornerstone objective to limit the likelihood of events that upset plant stability and challenge critical safety functions during shutdown, in that, the failure to properly control the configuration of the ground protection equipment resulted in fires in three switchgear cubicles requiring onsite and offsite fire brigade response actions and the declaration of an UE. Since this problem occurred while the station was in cold shutdown (Mode 5) with the pressurizer solid and all three reactor coolant pumps initially bumped, NRC Inspection Manual Chapter (IMC) 0609, "Significance Determination Process," Appendix G, "Shutdown Operations Significance Determination Process," was used to assess the significance of this finding. Using Phase 1 of Appendix G, the finding was determined to be of very low significance (Green) because it did not result in an actual loss of offsite power event nor degrade the licensee's ability to cope with such an event since both emergency diesel generators, the dedicated offsite AC power, and alternate AC power sources remained available. This finding involved the cross-cutting area of human performance, the component of resources, and the aspect of complete, accurate and up-to-date procedures, H.2(c), because the licensee failed to establish adequate station tagout procedures for controlling the installation and removal of safety and non-safety related ground protection equipment.
Inspection Report# : 2010003 *(pdf)*

Mitigating Systems

Significance: G Dec 31, 2010
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to correct condition adverse to quality involving inadequate EDG engine driven pump preventive maintenance
•Green. The inspectors identified a non-cited violation (NCV) of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," for the licensee's failure to identify and correct a condition adverse to quality following the February 10,

2010, failure of the ‘A’ Emergency Diesel Generator (EDG) jacket water pump mechanical seal. Specifically, the licensee failed to identify and correct inadequacies in their EDG preventive maintenance program for monitoring engine driven pump seal leakage in accordance with vendor recommendations, leading to subsequent ‘A’ EDG jacket water seal leakage going unidentified from approximately June 1, 2010, until October 20, 2010. The licensee initiated condition report (CR)-10-03861 and implemented requirements and operator training to conduct proper seal leakage monitoring during subsequent EDG operations.

The inspectors determined that the licensee’s failure to take adequate corrective actions to identify and correct inadequacies in the EDG PM program for monitoring EDG engine driven pump seal leakage in accordance with vendor recommendations was a performance deficiency that was within the licensee’s ability to foresee and correct. This finding is more than minor because if left uncorrected, the issue would become a more significant safety concern, in that, the potential exists for unidentified engine driven pump seal leakage that could lead to EDG failure. This issue is associated with the equipment performance attribute of the Mitigating System cornerstone and adversely affects the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the failure to take adequate corrective actions to identify inadequacies in the EDG preventive maintenance program for monitoring EDG engine driven pump seal leakage in accordance with vendor recommendations could adversely affect the reliability of the EDGs. This finding was evaluated using Inspection Manual Chapter 0609, “Significance Determination Process,” Phase 1 Worksheet for mitigating systems. The finding was determined to be of very low safety significance (Green) because it did not actually result in the loss of the EDG system safety function or the loss of function of a single EDG. The cause of this finding was directly related to the problem evaluation cross-cutting aspect in the corrective action program component of the Problem Identification and Resolution area because the licensee did not thoroughly evaluate the February 10, 2010, jacket water pump mechanical seal failure event and identify nonconformance with the vendor recommended visual inspections of engine driven pump seals during EDG operations (P.1(c)). (Section 4OA2.3.1)

Inspection Report# : 2010005 *(pdf)*

Significance: G Oct 22, 2010
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to maintain safety related cables in a nonsubmerged environment
The inspectors identified a NCV of 10 CFR 50, Appendix B, Criterion XVI, “Corrective Action,” for the licensee’s failure to identify and correct a condition adverse to quality. The licensee failed to recognize that low voltage safety related cables leading to the service water pump house (SWPH) from electrical manhole #2 (EMH-2) had been subject to submergence, a condition for which they were not designed. The license initiated CR-10-03994 to address this issue.

The failure to recognize that safety related cables were being subjected to an environment for which they were not designed was a performance deficiency. The performance deficiency was more than minor in accordance with IMC 0612, Appendix B (Block 9, Figure 2), “Issue Screening,” because if left uncorrected, the performance deficiency had the potential to lead to a more significant safety concern. Specifically, subjecting the low voltage electrical cables leading from EMH-2 to SWPH to continuous submersion had the potential to, over time, degrade the cable insulation and result in failure. In accordance with IMC 0609, Attachment 4,
Table 4a, “Phase 1 – Initial Screening and Characterization of Findings”, the finding was determined to be of very low safety significance (Green) because the submerged cable condition was a design or qualification deficiency confirmed not to have resulted in a loss of operability or functionality.

The cause of the finding was directly related to the problem evaluation cross-cutting aspect in the corrective action program component of the Problem Identification and Resolution area because the licensee did not thoroughly evaluate previous related conditions (CR-06-03220, CR-08-04927) and information contained in GL 2007-001 and, as a result, did not consider the potential for and the degrading effects of continuously submerged low voltage cables. (P.1(c)).
Inspection Report# : 2010006 *(pdf)*

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

Although the NRC is actively overseeing the Security cornerstone, the Commission has decided that certain findings pertaining to security cornerstone will not be publicly available to ensure that potentially useful information is not provided to a possible adversary. Therefore, the cover letters to security inspection reports may be viewed.

Miscellaneous

Significance: SL-IV Sep 30, 2010
Identified By: NRC
Item Type: VIO Violation
Failure to Notify the Commission of a Change in Medical Status
The inspectors identified a cited violation of 10 CFR Part 55.25, “Incapacitation because of disability or illness,” for the failure of the facility licensee to notify the Commission of a change in the medical status of one licensed operator within 30 days of learning of the change as required. This issue was entered into the licensee’s corrective action program as Condition Report CR-10-03348.

The failure of the facility licensee to notify the Commission within 30 days of learning of a permanent change in the medical status of a licensed operator as required by 10 CFR 55.25 was a performance deficiency. This performance deficiency was evaluated in accordance with the Enforcement Policy and determined to be a
Severity Level IV violation in accordance with Supplement I. This violation is being cited in accordance with the Enforcement Policy Section 2.3.2.a.3 because it was a repetitive violation resulting from inadequate corrective action and was NRC identified. Because this Notice of Violation was evaluated in accordance with Traditional Enforcement, there was no cross-cutting aspect assigned.
Inspection Report# : 2010004 *(pdf)*

Significance: SL-IV Jan 31, 2010
Identified By: NRC
Item Type: VIO Violation
Inaccurate Fire Watch Records
The failure to provide complete and accurate information on the fire watch by not completing Attachment VI of Procedure FPP-020 was a performance deficiency. This issue was dispositioned using traditional enforcement due to the willful aspects of the performance deficiency. Furthermore, the failure to provide complete and accurate information has the potential to impact the NRC’s ability to perform its regulatory function. In accordance with the guidance in Chapter 2 of the Enforcement Manual, although the investigation revealed that no fire watch surveillances were actually missed, this issue is considered more than minor due to the willful aspects of the performance

deficiency. In accordance with the guidance in Supplement VII of the Enforcement Policy, this issue is considered a Severity Level IV violation because it involved information that the NRC required be kept by a licensee that was incomplete or inaccurate and of more than minor safety significance.
Inspection Report# : 2010007 *(pdf)*

Last modified : March 03, 2011