

Summer

2Q/2010 Plant Inspection Findings

Initiating Events

Significance:  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:  Dec 31, 2009

Identified By: NRC

Item Type: FIN Finding

Failure to Follow Procedure and Correct Previously Identified Deficiencies with the Operator Workaround Program

A Green NRC-identified finding was identified for the failure to adequately implement a procedure and correct previously identified deficiencies with the licensee's operator workaround program. This resulted in operator

workarounds and challenges not fully or adequately being assessed, untimely resolution and status reporting of operator workarounds. The licensee initiated Condition Report (CR)-1000079 to address this issue.

This finding is more than minor because it was similar to examples 3.j. and 3.k. in Inspection Manual Chapter 0612, Appendix E, "Examples of Minor Issues," where significant programmatic deficiencies were identified that could lead to worse errors if left uncorrected. In addition, the finding has the potential to lead to a more significant safety concern in the management and correction of operator workarounds that can have an adverse effect on the functional capability of a mitigating system or that can impact human reliability in responding to initiating events. Using NRC Inspection Manual Chapter 0609, Attachment 4, "Phase 1 – Initial Screening and Characterization of Findings," this finding was determined to be of very low safety significance (Green) because the failure to follow procedure and correct previously identified operator workaround program deficiencies, by themselves, did not result in an actual loss of operability or functionality, loss of system safety function, actual loss of safety function of a single train for greater than its Technical Specification (TS) allowed outage time, actual loss of safety function of one or more non-TS trains of equipment designated as risk-significant per 10CFR50.65 for greater than 24 hours, and was not potentially risk significant due to a seismic, flooding, or severe weather initiating event. This finding has a crosscutting aspect in the area of problem identification and resolution associated with the corrective action program component because operations department personnel failed to take appropriate corrective actions to address previously identified deficiencies with following the operator workaround program procedure (P.1.d).
Inspection Report# : [2009005](#) (*pdf*)

Barrier Integrity

Significance:  Dec 31, 2009

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Failure to Follow Procedure Results in Inadvertent Loss of Spent Fuel Pool Inventory

A Green self-revealing non-cited violation (NCV) was identified for the failure to comply with TS 6.8.1. As a result of the failure to follow a procedure, approximately 8000 gallons of water was inadvertently transferred from the SFP to the refueling cavity. This issue was entered in the licensee's CAP as CR-09-04237.

This finding is more than minor because it is associated with the human performance and configuration control attributes of the Barrier Integrity cornerstone and affects the cornerstone objective to provide reasonable assurance that physical design barriers, such as maintaining functionality of the spent fuel pool system, protect the public from radionuclide releases caused by accidents or events. Using NRC Inspection Manual Chapter 0609, Attachment 4, "Phase 1 – Initial Screening and Characterization of Findings," this finding was determined to be of very low safety significance (Green) because it only represents a degradation of the radiological barrier function provided by the spent fuel pool, in that, since water level did not decrease less than 23 feet above the top of the irradiated fuel and pool temperature only increased by two degrees Fahrenheit, adequate radiological shielding and spent fuel pool cooling margins were maintained. This finding has a cross-cutting aspect in the area of human performance associated with the work practices component because operators failed to focus adequate attention to detail on following procedure steps in the proper sequence (H.4.b).

Inspection Report# : [2009005](#) (*pdf*)

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 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*)

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