Perry 1
4Q/2007 Plant Inspection Findings

Initiating Events

Significance: G Jun 30, 2007
Identified By: NRC
Item Type: NCV NonCited Violation
IMPROPER STORAGE OF COMBUSTIBLE MATERIAL
The inspectors identified a finding of very low significance and an associated non-cited violation of the operating license section C(6) for the storage of transient combustible material in the Turbine Building 620' elevation. Specifically, on May 7 and May 16, 2007, the inspectors identified several acetylene and oxygen cylinders as well as other combustible material in the area that exceeded the fire hazards analysis for the fire zone. The primary cause of this finding was related to the cross-cutting area of Human Performance per Inspection Manual Chapter 0305 H.4(b) because the licensee failed to properly communicate expectations regarding procedural compliance that specified combustible loading of the fire zone. As part of their immediate corrective actions, licensee personnel removed the excess combustible material from the area and entered the issue into their corrective action program.

This finding was more than minor because it was associated with the protection against external factors attribute of the Initiating Events cornerstone and adversely affected the cornerstone objective of limiting the likelihood of events that upset plant stability. Specifically, the combustible storage amount exceeded the licensee's fire hazard analysis limits. The finding was determined to be of very low safety significance because the inspectors determined that the combustible materials of significance, that exceeded the fire hazards analysis limits, were in approved containers.

Inspection Report# : 2007003 *(pdf)*

Significance: G Jun 30, 2007
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
FAILURE TO IMPLEMENT APPROPRIATE PROCEDURE IN REASSEMBLY OF REACTOR CORE ISOLATION COOLING PIPING
A finding of very low safety significance and a non-cited violation of Technical Specification 5.4, "Procedures," was self-revealed when reactor water level indication was lost while the reactor was shut down on May 5, 2007. Specifically, licensee personnel failed to implement appropriate procedures in the re-assembly of reactor core isolation cooling head spray piping during a 1993 refueling outage. This resulted in leakage from a flange connection that affected the reference leg of the reactor shutdown and upset range level indication system, which caused a loss of reactor level indication. As part of their immediate corrective actions, licensee personnel repaired the flange, restored reactor water level indication, and entered the issue into the corrective action program.

The finding was more than minor because it was associated with the equipment performance attribute of the reactor safety Initiating Events cornerstone and affected the cornerstone objective of limiting the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Specifically, the finding resulted in a loss of reactor water level indication. The finding was determined to be of very low safety significance because the inspectors determined that it did not result in a loss of control of reactor water level and it did not affect decay heat removal systems.
Inspection Report# : 2007003 *(pdf)*

Significance: G Jun 30, 2007
Identified By: NRC
Item Type: FIN Finding
MAIN TURBINE GENERATOR TRIPPED ON REVERSE POWER

A finding of very low safety significance was self-revealed when, during reactor power ascension after a refueling outage, the main turbine generator tripped on reverse power on May 13, 2007. The primary cause of this event was licensee personnel's failure to appropriately install an electro-hydraulic control (EHC) circuit card following maintenance. The primary cause of this finding was related to the cross-cutting area of Human Performance per Inspection Manual Chapter 0305 H.4(a) because the organization failed to properly communicate human error prevention techniques for proper insertion of the control cards. As part of their immediate corrective actions, licensee personnel repaired the installation of the affected card and also repaired the installation of several other EHC system cards that were subsequently identified by the licensee as incorrectly installed. The licensee entered the issue into their corrective action program.

This finding was considered more than minor because it was associated with the availability and reliability of equipment attribute of the Initiating Events cornerstone and adversely affected the cornerstone objective of limiting the likelihood of events that upset plant stability. Specifically, the finding resulted in a turbine trip. The finding was determined to be of very low safety significance because it did not affect the likelihood that mitigation equipment or functions would be available. No violation of NRC requirements occurred.
Inspection Report# : 2007003 *(pdf)*

Significance: G Jun 30, 2007
Identified By: NRC
Item Type: FIN Finding
REACTOR SCRAMMED ON LOW REACTOR WATER LEVEL
A finding of very low safety significance was self-revealed when, during post-modification testing of the feedwater system after a refueling outage, the reactor scrammed on low reactor water level on May 15, 2007. The primary cause of this event was the licensee's failure to appropriately control the implementation of a digital feedwater control system design modification. Specifically, the licensee installed the modification with a control system software logic that was contrary to plant design and this resulted in a loss of feedwater flow to the reactor. The primary cause of this finding was related to the cross-cutting area of Human Performance per Inspection Manual Chapter 0305 H.3(a) because the organization failed to properly plan work activities that incorporated insights to risk. As part of their immediate corrective action, the licensee revised the digital feedwater control system software and entered the issue into their corrective action program.

This finding was considered more than minor because it was associated with the availability and reliability of equipment attribute of the Initiating Events cornerstone and adversely affected the cornerstone objective of limiting the likelihood of events that upset plant stability. Specifically, the finding resulted in a reactor scram. The finding was determined to be of very low safety significance because it did not affect the likelihood that mitigation equipment or functions would be available. No violation of NRC requirements occurred.
Inspection Report# : 2007003 *(pdf)*

Mitigating Systems

Significance: G Sep 30, 2007
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO FOLLOW PROCEDURES DISABLED EMERGENCY DIESEL OVERSPEED TRIP
A finding of very low safety significance and a non-cited violation of Technical Specification 5.4, "Procedures," was self-revealed when the Division 2 emergency diesel generator failed to trip during surveillance testing on August 20, 2007. Specifically, operators failed to position an overspeed trip reset valve in accordance with diesel startup procedures on August 19, 2007, and this disabled the essential overspeed trip function of the diesel. The primary cause of this finding was related to the cross-cutting area of Human Performance per Inspection Manual Chapter 0305 H.4(b) because the licensee failed to communicate and use human error prevention techniques commensurate with the risk of the assigned task. As part of their immediate corrective actions, licensee personnel restored the diesel to the appropriate equipment alignment and conducted additional training for operators on procedure adherence.

The finding was more than minor because it was associated with the Human Performance attribute of the reactor safety Mitigating Systems cornerstone and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the finding adversely affected an essential trip feature designed to protect the diesel from an overspeed condition. The finding was determined to be of very low safety significance because it was determined not to represent a loss of safety function.
Inspection Report# : 2007004 *(pdf)*

Barrier Integrity

Significance: G Mar 31, 2007
Identified By: NRC
Item Type: NCV NonCited Violation
NON-NRC APPROVED CODE USED IN FLAW EVALUATION OF AN ASME CLASS 3 SYSTEM
The inspectors identified a finding a very low safety significance and an associated non-cited violation of 10 CFR 50.55(a)(b)(5), "Codes and Standards," for the failure to appropriately implement American Society of Mechanical Engineers (ASME) Section XI Code Cases in the operability evaluation of a through-wall leak on a Class 3 component. Specifically, the licensee identified a through-wall leak on an emergency service water (ESW) pipe weld on the outlet of the 'B' emergency closed cooling heat exchanger. The piping was ASME Code Class 3 and the licensee applied Code Case N-513-2, "Evaluation Criteria for Temporary Acceptance of Flaws in Moderate Energy Piping," for flaw acceptance in lieu of a Code repair. This Code Case was not approved in Regulatory Guide 1.147 and therefore could not be used without prior NRC approval. Subsequently, when Code Case N-513-1 was used, the licensee did not account for all flaws in the leaking pipe section. The primary cause of this finding was related to the cross-cutting area of Human Performance because licensee personnel were not trained adequately to recognize the inappropriate implementation of the Code (H.2(b)). As part of their immediate corrective actions, licensee personnel revised the flaw analysis to account for all flaws in the affected pipe section and the licensee concluded that the structural requirements of Section XI were met.

The finding was more than minor because the failure to appropriately implement Code requirements in the operability evaluation of through-wall leaks in safety system piping was associated with the Equipment Performance attribute of the Mitigating Systems cornerstone and affected 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). This finding was determined to be of very low safety significance because the revised flaw characterization and flaw analysis determined that the structural integrity of the pipe met Code acceptance limits.
Inspection Report# : 2007002 *(pdf)*

Significance: G Mar 31, 2007
Identified By: NRC
Item Type: NCV NonCited Violation
PROCEDURES INAPPROPRIATE TO CIRCUMSTANCES FOR DEGRADED CONTAINMENT LOWER AIRLOCK INNER DOOR SEAL SYSTEM
The inspectors identified a finding of very low safety significance and a non-cited violation of Technical Specification 5.4, "Procedures," during a review of the containment airlock system. Specifically, the inspectors identified that the licensee had failed to implement airlock test and maintenance procedures that were appropriate to the circumstances when the lower airlock seal system was found to be degraded and subject to frequent failure. The primary cause of this finding was related to the cross-cutting area of Problem Identification and Resolution because licensee personnel failed to implement internal operating experience through changes in station processes, procedures, or equipment to address the frequent failures of the lower airlock seal system (P.2(b)). As part of their immediate corrective actions, the licensee initiated a procedure review to determine appropriate torque values and test frequencies for the affected valves. As a long-term corrective action, the licensee planned to replace all affected valves.

The finding was more than minor because it was associated with the Containment Procedure Quality attribute of the Barrier Integrity cornerstone and affected the cornerstone objective of providing reasonable assurance that physical

design barriers protect the public from radionuclide releases caused by accidents or events. Because the lower airlock outer door containment barrier was determined to be available during the periods when the inner door barrier was affected, the finding was determined to be of very low safety significance.
Inspection Report# : 2007002 *(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

Last modified : February 04, 2008