Oconee 1
2Q/2010 Plant Inspection Findings

Initiating Events

Significance: G Jun 30, 2010
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Risk Management Associated With the Unit 2 Electrical Generator Rotor Lifts
Green. An NRC-identified Green non-cited violation (NCV) of 10 CFR 50.65(a)(4) was identified for the licensee's failure to adequately develop and effectively implement risk mitigation actions associated with lifting the Unit 2 main generator rotor. The licensee failed to establish and adhere to lift height restrictions to protect the Unit 1 and Unit 2 main feeder buses from damage in the event the rotor was dropped. The issue was entered into the licensee's corrective action program as PIPs O-10-2477 and O-10-2830. Corrective actions taken included enhancing the Critical Activity and Complex Lift Plans to provide additional guidance and mitigating actions as well as assigning increased oversight for future lifts.

The performance deficiency was more than minor because it affected the Human Performance attribute and adversely impacted the Initiating Events cornerstone objective in that the risk management strategies did not minimize the consequence of a rotor drop during the Unit 2 online lifts and were not effectively implemented during the Unit 2 outage lifts. The inspectors completed a Phase 1 screening using Inspection Manual Chapter 0609, Appendix K, Maintenance Risk Assessment and Risk Management Significance Determination Process, and determined that the finding was of very low safety significance (Green) because the Incremental Core Damage Probability increase was less than 1E-6. The finding directly involved the cross-cutting area of Human Performance under the "Work Activity Coordination" aspect of the "Work Control" component in that the licensee failed to appropriately control work activities by incorporating risk insight. [H.3(a)] (Section 1R13)

Inspection Report# : 2010003 *(pdf)*

Mitigating Systems

Significance: Y Jun 09, 2010
Identified By: NRC
Item Type: VIO Violation
SSF reactor coolant makeup subsystem inoperable for greater than allowed by technical speciafications
A self-revealing Yellow violation of Technical Specification 3.10.1 was identified when the Standby Shutdown Facility (SSF) Reactor Coolant Makeup (RCM) subsystem letdown line failed to pass the required flow. As a result, the SSF RCM subsystem was rendered inoperable for greater than the seven days allowed by technical specifications (TSs). This violation has been entered into the corrective action program as PIP O-09-7536.

The licensee's failure to ensure the SSF RCM subsystem remained operable as required by TSs was a performance deficiency. The performance deficiency was determined to be more than minor because it was associated with the Mitigating Systems Cornerstone attribute of Equipment Performance and adversely impacted the cornerstone objective in that the letdown line could not perform its design function during an SSF event. This finding was characterized as a Yellow finding of substantial importance to safety. This finding does not present an immediate safety concern because the filters have been removed from the SSF RCM subsystem letdown lines on all three units. No cross-cutting aspect was identified because the most significant contributor to this finding was not indicative of current licensee performance. (Section 4OA5.b.3)

Inspection Report# : 2010007 *(pdf)*
Inspection Report# : 2010008 *(pdf)*

Significance: G Apr 30, 2010
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Identify and Correct Fire Brigade Performance Weaknesses
A Green NRC-identified NCV of Condition 3.D of Facility Operating Licenses DPR-38 (Unit 1), DPR-47 (Unit 2) and DPR-55 (Unit 3) was identified for the licensee's failure to identify, critique, and develop corrective actions for fire brigade performance weaknesses during a fire drill as required by NSD 112, "Fire Brigade Organization, Training and Responsibilities." This violation has been entered into the corrective action program as PIP O-10-1247.

The licensee's failure to identify, critique, and develop corrective actions for fire brigade performance weaknesses during a fire drill as required by NSD 112 was a performance deficiency. The performance deficiency was more than minor because it was associated with the protection against external factors attribute of the Mitigating Systems Cornerstone and adversely affected the cornerstone objective in that fire brigade performance weaknesses may delay fire brigade response allowing a fire to propagate leading to a more significant event. This finding was determined to be of very low safety significance because the condition of the automatic fire detection and suppression systems was satisfactory and the performance weaknesses would not have affected the ability to achieve safe shutdown. This finding directly involved the cross-cutting area of Human Performance, component of Work Practices, and aspect of personnel follow procedures in that the requirements of NSD 112; Section 112.6, were not met (H.4(b)). (Section 1R05)

Inspection Report# : 2010002 *(pdf)*

Significance: G Dec 31, 2009
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Implementation of Risk Management Actions Associated With Modification Work Activities on the BWSTs for all Three Oconee Units
An NRC-identified Green NCV of 10 CFR 50.65(a)(4) was identified for the licensee's failure to effectively implement the risk mitigation actions contained in the approved complex activity plans associated with modifications on all three Borated Water Storage Tanks (BWST). This violation has been entered into the licensee's CAP as Problem Investigation Process report (PIP) O-10-0171.

The failure to properly implement the risk management actions of the complex activity plan was a performance deficiency. The finding was more than minor because the modification work on the BWSTs was performed in a manner that had the potential to adversely affect the Emergency Core Cooling Systems primary water source for all three units if left uncorrected by damaging level transmitters and associated cables supporting ECCS suction swap-over. The inspectors completed a Phase 1 screening using Inspection Manual Chapter 0609, "Maintenance Risk Assessment and Risk Significance Determination Process," Appendix K, and determined that the finding was of very low safety significance (Green) based on the Incremental Core Damage Probability resulting from the work activities being less than 1E-6. The finding directly involved the cross-cutting area of Human Performance under the "Work Activity Coordination" aspect of the "Work Control" component in that the licensee failed to appropriately coordinate work activities to ensure the increased risk was minimized in accordance with the approved Complex Activity Plan [H.3(b)]. (Section 1R13)

Inspection Report# : 2009005 *(pdf)*

Significance: G Dec 31, 2009
Identified By: NRC
Item Type: NCV NonCited Violation
Inappropriate Removal of Workers Associated With Modification Work Activities on the BWST's from Work Hour Controls

An NRC-identified Green NCV of 10 CFR 26.205 was identified when the licensee excluded individuals working on BWST modifications from work hour controls. This violation has been entered into the licensee's corrective action program as PIP O-09-6989.

The exemption of workers involved in work on a safety-related system from work hours controls was a performance deficiency. The performance deficiency was more than minor because if left uncorrected, the exclusion of workers from work hour controls could have led to a more significant safety concern due to personnel exceeding work hour limits while
performing modification work on the BWSTs that could have adversely affected the primary water supply to the emergency core cooling systems. In addition, more than 60 workers were improperly excluded from work hour controls over the 2.5-month period encompassed by the licensee's exclusion. This finding was determined be of very low safety significance (Green) based on no deficiencies occurring due to worker fatigue which affected risk significant structures, systems, or components. This finding has a cross-cutting aspect of the licensee formally defining the authority and roles for decisions affecting nuclear safety and communicating these roles to applicable personnel as described in the Decision-Making component of the Human Performance cross-cutting area [H.1(a)]. The licensee failed to ensure that the roles of personnel involved in processing requests exempting workers from work hour restrictions were adequately defined and communicated to ensure implementation of the work hour limits. (Section 4OA5.2)

Inspection Report# : 2009005 *(pdf)*

Barrier Integrity

Significance: G Dec 31, 2009
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Failure to Establish and Implement an Adequate Procedure for Performing Core Alignment Verification
A self-revealing Green NCV of Technical Specification (TS) 5.4.1 was identified for failure to maintain procedure PT/0/A/0775/015, "Core Alignment Verification," which resulted in damage to three Unit 1 fuel assemblies.

The inspectors determined that the failure to include all fuel vendor guidance as acceptance criteria was a performance deficiency. This performance deficiency was considered to be more than minor because it is associated with the Procedural Quality attribute and adversely affected the Reactor Safety/Barrier Integrity cornerstone objective in that one fuel assembly was damaged and removed from the reactor. This finding was determined to be of very low safety significance (Green) using Inspection Manual Chapter (MC) 0609, Appendix M. Appendix M was used because no other MC 0609 Attachments applied to refueling activities in containment. The key factors considered were 1) a risk calculation performed by a senior risk analyst of less than 1 E-6, 2) no failure of fuel pins resulting in release of radioactivity, 3) containment integrity was maintained, and 4) only one fuel assembly was affected. This finding has a cross-cutting aspect of implementing and incorporating operating experience into station procedures [P.2(b)], as described in the Operating Experience component of the Problem Identification and Resolution cross-cutting area. The licensee failed to incorporate revisions to the vendor guidance into the procedure used to perform core alignment verification. (Section 1R20)

Inspection Report# : 2009005 *(pdf)*

Emergency Preparedness

Occupational Radiation Safety

Significance: G Jun 30, 2010
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Failure to Conduct an Adequate Area Radiation Survey of a Room in the Radwaste Facility
Green. A self-revealing non-cited violation (NCV) of 10 CFR 20.1501(a) was identified for the licensee's failure to conduct an adequate area radiation survey to evaluate the magnitude and extent of radiation levels for an area located in the Radwaste Facility. This issue has been entered into the licensee's corrective action program as PIPs O-09-04475 and O-10-01503.

The failure to conduct an adequate area radiation survey to evaluate the magnitude and extent of radiation levels for an area located in the Radwaste Facility is a performance deficiency. This finding is more than minor because it is associated with the Occupational Radiation Safety cornerstone attribute of exposure control and monitoring and it affected the associated cornerstone objective because the failure to conduct an adequate area radiation survey to evaluate the magnitude and extent of radiation levels for an area located in the Radwaste Facility did not ensure the adequate protection of worker health and safety from exposure to radiation from radioactive material during routine civilian nuclear reactor operation. The finding was evaluated using the IMC 0609, Appendix C, and was determined to be of very low safety significance. The cause of this finding is related to the cross-cutting aspect of radiological safety in the work control component of Human Performance because the licensee did not conduct an adequate area radiation survey to evaluate the magnitude and extent of radiation levels for an area located in the Radwaste Facility. [H.3(b)] (Section 2RS1)
Inspection Report# : 2010003 *(pdf)*

Significance: G Dec 31, 2009
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Failure to Comply with Radiological Postings and the Requirements for Entering a Posted High Radiation Area
A self-revealing Green NCV of Technical Specification 5.4.1, Procedures, was identified for the failure to read and comply with all radiological postings and, prior to entering a high radiation area, attend a documented radiation protection briefing, know the radiological conditions in the area, and log onto a Radiation Work Permit that allows entry into a high radiation area, as required by procedure Nuclear Site Directive (NSD) 507, Radiation Protection (RP). The licensee has entered this violation into the corrective action program as PIP O-09-5609.
The failure to follow the requirements of NSD 507 with respect to radiological postings and entry into high radiation areas was a performance deficiency. This finding is greater than minor because it is associated with the Occupational Radiation Safety Cornerstone attribute of Program and Process (Exposure Control) and adversely affected the cornerstone objective of ensuring adequate protection of worker health and safety from exposure to radiation from radioactive material during routine civilian nuclear reactor operation. The finding was evaluated using the Occupational Radiation Safety Significance Determination Process and determined to be of very low safety significance (Green) because it was not related to As Low As Reasonably Achievable (ALARA) planning, did not involve an overexposure or substantial potential for overexposure, and the ability to assess dose was not compromised. The cause of this finding was directly related to the cross-cutting aspect of human performance and error prevention under the work practices component in the area of Human Performance, because the security personnel failed to use self-checking prior to passing through the Unit 1/Unit 2 fuel receiving bay door into the posted high radiation area [H.4(a)]. (Section 2OS1)

Inspection Report# : 2009005 *(pdf)*

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 : September 02, 2010