Kewaunee
3Q/2010 Plant Inspection Findings

Initiating Events

Significance: G Mar 31, 2010
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Fuel Loading Occurs With Boron Concentration Below Required Minimum
A finding of very low safety significance and associated Non-Cited Violation of Technical Specification 3.8.a.5 was self-revealed when the licensee loaded fuel into the reactor with reactor coolant system boron sample results less than the minimum boron concentration as specified in the core operating limits report. Once the licensee believed the boron concentration samples were accurate and that boron concentration was below the required minimum, operators stopped moving fuel until the boron concentration was restored to acceptable limits. The licensee entered the issue into the corrective action program as Condition Report 351923. The licensee conducted an apparent cause evaluation and proposed long-term corrective actions, including procedure enhancements, operator training on the event, and conservative decision making training.

This finding was determined to be more than minor because it was associated with the Initiating Events Cornerstone attribute of human performance and adversely affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown operations. Specifically, the licensee did not believe the initial boron sample results and continued to move fuel with actual boron concentrations below the minimum value specified in the core operating limits report. The inspectors determined that the finding could be evaluated in accordance with Inspection Manual Chapter 0609, Appendix G, “Shutdown Operations Significance Determination Process.” The inspectors used Checklist 4 contained in Attachment 1 and determined that the finding did not require a phase 2 or phase 3 analysis and screened as very low safety significance (Green). This finding has a cross-cutting aspect in the area of human performance, decision-making, because the licensee failed to use conservative assumptions when making decisions and did not demonstrate that nuclear safety was an overriding priority (H.1(b)).
Inspection Report# : 2010002 *(pdf)*

Significance: G Mar 31, 2010
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Incorrect Settings On Differential Relay Results In Loss Of Tertiary Auxiliary Transformer
A finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, “Design Control,” was self-revealed for the failure to establish adequate measures to identify and control design interfaces and coordinate among participating design organizations. Specifically, the licensee failed to adequately control all required tertiary auxiliary transformer relay inputs/settings that interfaced with the existing plant design. This adversely impacted associated equipment and caused an unanticipated system response. The licensee promptly cleared tags on the reserve auxiliary transformer to restore a normal offsite power source to one of the two 4160-volt safeguards buses. The licensee performed a root cause evaluation and implemented corrective actions, some of which included: modifying the design change process to ensure that all programmable digital device setpoints and inputs were

identified; documenting the basis for each setpoint or input in the design change documentation; and providing programmable digital device training for design engineering and maintenance personnel. The licensee entered the issue into its corrective action program as CR 352878.

The finding was determined to be more than minor because the finding was associated with the Initiating Events Cornerstone attribute of design control and adversely 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 failure to adequately control all required tertiary auxiliary transformer relay inputs/settings adversely impacted the associated equipment, which caused an unanticipated system response and challenged core shutdown cooling. The inspectors determined that the finding could be evaluated in accordance with Inspection Manual Chapter 0609, Appendix G, “Shutdown Operations Significance Determination Process.” The inspectors used Checklist 4, contained in Attachment 1, and determined that the finding required a Phase 2 analysis because it degraded the ability to recover the decay heat removal system. The Region III senior reactor analyst performed a phase 2 and subsequently a phase 3 analysis and determined the finding was of very low safety significance (Green). This finding has a cross-cutting aspect in the area of human performance, resources, because the licensee did not maintain complete, accurate, and up-to-date design documentation (H.2(c)).
Inspection Report# : 2010002 *(pdf)*

Significance: G Dec 31, 2009
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Inadequate Work Instructions Lead to Component Cooling Water Relief Valve Lift And Surge Tank Level Drop
A finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self-revealed for the failure to have adequate work instructions in place during the isolation of component cooling water (CCW) flow in the reactor coolant pump vaults. Specifically, the inadequate valve isolation sequence and the speed at which the outlet valves were closed caused CCW system relief valves to lift and rapidly drain the component cooling water surge tank while the CCW system was supporting the residual heat removal system for decay heat removal. In response to the issue, the licensee implemented compensatory corrective actions to modify the tagout and hang tags on the appropriate CCW isolation valves.

The inspectors determined that the finding was more than minor because it was associated with the Initiating Events Cornerstone attribute of configuration control 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. The inspectors determined that the finding could be evaluated in accordance with Inspection Manual Chapter 0609, Appendix G, "Shutdown Operations Significance Determination Process." The inspectors used Checklist 3 contained in Attachment 1 and determined that the finding required a Phase 2 analysis since the finding increased the likelihood that a loss of decay heat removal would occur. The Region III senior reactor analyst performed the assessment using Appendix G, Attachment 2, "Phase 2 Significance Determination Process Template for PWR [Pressurized Water Reactor] During Shutdown," and determined that this issue is best characterized as a finding of very low safety significance (Green). This finding has a cross-cutting aspect in the area of human performance, resources component, because the licensee did not maintain long-term plant safety by maintenance of design margins. Specifically, the work instruction did not adequately account for the low design margin that existed between the system operating pressure and the relief valve setpoints when both CCW pumps were running (H.2(a)).

Inspection Report# : 2009005 *(pdf)*

Significance: G Dec 31, 2009
Identified By: Self-Revealing

Item Type: NCV NonCited Violation
Procedure Inadequacy Results In The Tertiary Auxiliary Transformer Breaker Reopening After Alignment To The Bus
A finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self-revealed for the licensee's failure to have adequate procedures to ensure that steps were sequenced such that unplanned transients were not initiated. Specifically, the procedure for performing emergency diesel generator train "A" automatic testing allowed steps to be sequenced in a manner such that a jumper used to simulate a station blackout signal was left installed during the restoration of offsite power. Because of the installed jumpers, a transient was initiated on the associated bus and attached equipment during the restoration from testing. In response to the issue, the licensee implemented compensatory corrective actions and corrected the procedure deficiency prior to conducting the same test on the opposite train.

The inspectors determined that the finding was more than minor because it was associated with the Initiating Events Cornerstone attribute of procedure quality and affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. The inspectors evaluated the significance of the issue using Inspection Manual Chapter 0609, Appendix G, Checklist 3, and determined that the power availability guidelines were met. Because the finding did not increase the likelihood of a loss of offsite power or degrade the licensee's ability to cope with a loss of offsite power, the finding screened as having very low safety significance (Green). The finding has a cross-cutting aspect in the area of human performance, work practices component, because the procedure was not adequately verified when steps were changed from being sequence-dependent to allow for completion in any order. Specifically, personnel proceeded to change procedure without implementing peer-checking during the validation process to ensure that the change was applicable to all plant conditions (H.4(a)).

Inspection Report# : 2009005 *(pdf)*

Mitigating Systems

Significance: G Sep 30, 2010
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Emergency Operating Procedure
A finding of very low safety significance and associated non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion V, “Instructions, Procedures, and Drawings,” was identified by the inspectors for the licensee’s failure to have an adequate emergency operating procedure for an activity affecting quality. Specifically, emergency operating procedure E 2, “Faulted Steam Generator Isolation,” did not prescribe actions to manually close the steam supplies to the turbine-driven auxiliary feedwater pump in the event the control room switches failed to operate. The licensee initiated condition report (CR) CR391458 and took immediate corrective actions to correct the deficient procedure and informed the licensed operators.

The finding was determined to be more than minor because it was associated with the Mitigating Systems Cornerstone attribute of procedure quality and adversely affected the cornerstone objective of ensuring the reliability and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the licensee failed to ensure that Emergency Operating Procedure E 2 contained all the required actions to ensure successful isolation of a faulted steam generator. The inspectors determined the finding could be evaluated using the significance determination process (SDP) in accordance with Inspection Manual Chapter (IMC) 0609, “Significance Determination Process,” Attachment 0609.04, “Phase 1 – Initial Screening and Characterization of Findings,” Tables 3b and 4a, for the Mitigating Systems Cornerstone. The inspectors answered "no" to the Mitigating Systems questions and screened the finding as having very low significance (Green). The inspectors determined that this finding did not reflect present performance since the procedure error was introduced greater than three years ago; therefore, there was no cross cutting aspect associated with this finding.
Inspection Report# : 2010004 *(pdf)*

Significance: G Sep 30, 2010
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Barrier Control Procedures Result In Exposed Service Water Pumps
A finding of very low safety significance and associated non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the failure to have adequate procedures to address the removal of the screenhouse traveling water screen covers, an activity affecting quality. Consequently, the covers were removed and safety related equipment was exposed to the environment without adequate planning of mitigation actions in the event of inclement weather. The licensee initiated condition reports (CR) CR394670, CR395541, and CR395717 to document the issue. At the end of the inspection period, the licensee was performing a causal evaluation and developing corrective actions to address the issue.

The finding was determined to be more than minor because it was associated with the Mitigating Systems Cornerstone attribute of protection against external factors and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The inspectors determined the finding could be evaluated using the significance determination process (SDP) in accordance with Inspection Manual Chapter (IMC) 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 Initial Screening and Characterization of Findings," Tables 3b, 4a, and 4b for the Mitigating Systems Cornerstone. The inspectors determined that the screenhouse covers were designed to prevent tornado missiles from damaging the safety related equipment housed inside the screenhouse and that two trains of the service water system would be degraded; therefore, the inspectors answered "yes" to the Table 4b seismic, flooding, and severe weather screening criteria questions 1 and 2. The inspectors contacted the RIII senior reactor analyst who determined, using NUREG/CR 4461, "Tornado Climatology of the Contiguous United States," and the number of days the covers were removed that the performance deficiency risk was of very low safety significance (Green). The finding has a cross cutting aspect in the area of human performance, Decision Making, because the licensee failed to make safety significant or risk significant decisions using a systematic process to ensure safety is maintained. Specifically, the licensee applied an incorrect evaluation to a situation that resulted in the multiple trains of service water pumps being unprotected from tornado missiles (H.1(a)).
Inspection Report# : 2010004 *(pdf)*

Significance: SL-IV Sep 30, 2010
Identified By: NRC
Item Type: NCV NonCited Violation
Replacement of Automatic Action With An Operator Manual Action Without Prior NRC Approval
A Severity Level IV non-cited violation (NCV) of 10 CFR 50.59(d)(1), "Changes, Tests, and Experiments," was identified by the inspectors for the failure to document an evaluation that provided a basis for the determination that the changes implemented in DCR 3163 and Emergency Operating Procedure ES 1.3, "Transfer to Sump Recirculation," in 2001 did not require a license amendment. Specifically, the licensee failed to provide an evaluation that adequately documented why replacing the automatic opening of the service water (SW) valves SW 1300A and SW 1300B upon a safety injection signal (to support the service water safety function of loss of coolant accident (LOCA) recirculation operation) with a manual action to open the valves in Emergency Operating Procedure ES 1.3, did not present more than a minimal increase in the likelihood of occurrence of a malfunction of a structure, system, or component (SSC) important to safety previously evaluated in the updated safety analysis report. The licensee initiated CR389330 and, at the end of the inspection period, planned to submit a license amendment request to the NRC for this design change.

The violation was determined to be more than minor because the inspectors could not reasonably determine that the changes would not have ultimately required prior NRC approval. Violations of 10 CFR 50.59 are dispositioned using the traditional enforcement process instead of the significance determination process (SDP) because they are considered to be violations that potentially impede or impact the regulatory process. However, if possible, the underlying technical issue is evaluated under the SDP to determine the severity of the violation. In this case, the inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 Initial Screening and Characterization of Findings," Tables 3b and 4a, for the Mitigating Systems Cornerstone. The inspectors answered "yes" to question 1 of the Mitigating Systems Cornerstone column of the Phase 1 worksheet because the inspectors concluded that this was a design basis deficiency confirmed not to result in the loss of operability. Based upon this Phase 1 screening, the inspectors

concluded that the issue was of very low safety significance (Green). In accordance with Section 6.1.d.2 of the NRC Enforcement Policy this violation is categorized as Severity Level IV because the resulting changes were evaluated by the SDP as having very low safety significance. The inspectors determined that this finding did not reflect present performance since the error was introduced in a design change that was greater than three years old; therefore, there was no cross cutting aspect associated with this finding.
Inspection Report# : 2010004 *(pdf)*

Significance: G Jun 30, 2010
Identified By: NRC
Item Type: FIN Finding
Inappropriate Use of a Probabilistic Methodology in an Operability Determination
A finding of very low safety significance was identified by the inspectors for an inadequate operability determination performed for the emergency diesel generators. Specifically, the licensee used TORMIS, a computer code and probabilistic-based methodology, for assessing tornado missile protection and confirming operability of their emergency diesel generator fuel oil day tank vents and storage tank vents. Probabilistic risk assessments were not allowed for confirming operability under both NRC guidance and the licensee's procedures. The licensee entered this issue into their corrective action program as condition report 347741, performed a causal evaluation and took compensatory measures until modifications were complete in September 2009.
The finding was determined to be more than minor because the finding was associated with the Mitigating Systems Cornerstone attribute of protection against external events 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). Specifically, the closure of the emergency diesel generator fuel oil day tank or storage tank vent path as a result of tornado-generated missile striking the vent lines would adversely affect the availability, reliability, and capability of the emergency diesel generators. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 Initial Screening and Characterization of Findings," Table 4a for the Mitigating Systems Cornerstone. The inspectors answered "no" to the Mitigating Systems questions and screened the finding as having very low significance (Green). The inspectors did not identify a cross cutting aspect associated with this finding.

Inspection Report# : 2010003 *(pdf)*

Significance: G Mar 31, 2010
Identified By: NRC
Item Type: NCV NonCited Violation
Incorrect Curve Was Incorporated Into Calibration Surveillance Procedures
A finding of very low safety-significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for inadequate surveillance calibration procedures. Specifically, calibration surveillance procedure SP-06-034B-1, "Steam Generator Flow Mismatch and Steam Pressure Instrument Channel 1," failed to have the correct negative ramp curve. The curve was required to ensure that the low steam line pressure safety injection lag circuitry unit did not exceed the Technical Specification setpoint value. This condition also existed in calibration procedures for channels 2, 3, and 4. The licensee subsequently entered the issue into its corrective action program as CR 367826 and CR 367932. The licensee conducted an apparent cause evaluation and corrective actions were in progress at the conclusion of the inspection period.

The finding was determined to be more than minor because it was associated with the Mitigating System Cornerstone attribute of procedure quality and adversely affected the cornerstone objective of ensuring the reliability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the licensee failed to ensure that the low steam line pressure safety injection lag circuitry units did not exceed the Technical Specification value of less than or equal to 2 seconds. The finding was of very low safety-significance (Green) based on a phase 1 screening in accordance with Inspection Manual Chapter 0609, Appendix A, ASignificance Determination of Reactor Inspection Findings for

At-Power Situations." The finding has a cross-cutting aspect in the areas of human performance, work practices, because the licensee failed to ensure that the calculation upon which the surveillance procedure was based, was approved prior to issuance of the procedure (H.4(b)).
Inspection Report# : 2010002 *(pdf)*

Significance: G Feb 12, 2010
Identified By: NRC
Item Type: NCV NonCited Violation
Calculation Methodology Did Not Represent Actual Plant Equipment Configuration
A finding of very low safety-significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion III, “Design Control,” was identified by the inspectors for the licensee’s failure to assure that the calculation methodology represented the actual plant equipment configuration and that adequate design reviews were performed for verifying or checking the adequacy of design. Specifically, the licensee failed to assure that the methodology used in calculation C11716, “MCC [Motor Control Center] Control Circuit Voltage Drop,” Revision 1, correctly represented the sequence of operation for the various devices contained within the plant equipment’s control circuitry, such that the minimum required MCC voltage was available for proper circuit operation. Upon discovery of this condition, the licensee performed a preliminary evaluation and entered the finding into their corrective action program (CR366627 and CR366865).

This finding was more than minor in accordance with IMC 0612, Appendix B because the finding was associated with the design control attribute of the mitigating systems cornerstone and affected the cornerstone’s 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 inadequate MCC voltages could render the safety-related loads required to mitigate the consequences of a design basis accident inoperable and not available. In addition, as a result of the calculation errors, the inspectors were concerned that unsubstantiated MCC voltage values could be used in future calculations and modifications to plant equipment. To resolve the inspectors’ concerns, the licensee completed an interim evaluation, which evaluated the calculation’s other circuit models and associated cases. Although, by the end of the inspection, the licensee was able to demonstrate operability; at the time of discovery there was reasonable doubt on the operability of the control circuits modeled in the calculation. The finding was of very low safety-significance based on a Phase 1 screening in accordance with IMC 0609, “Significance Determination Process,” Attachment 0609.04, “Phase 1 - Initial Screening and Characterization of Findings,” Table 4a.

This finding has a cross-cutting aspect in the area of human performance, work practices because the licensee did not ensure supervisory and management oversight of work activities, including contractors, such that nuclear safety was supported. Specifically, the licensee failed to assure that the calculation methodology represented the actual plant equipment configuration and that adequate design reviews were performed for verifying or checking the adequacy of design. (H.4(c)) (Section 1R17.2b)
Inspection Report# : 2010007 *(pdf)*

Significance: G Dec 31, 2009
Identified By: NRC
Item Type: NCV NonCited Violation
Failure To Perform Dye Penetrant Examinations Of The Full Code Required Exam Surfaces
The inspectors identified a finding of very low safety significance and an associated Non-Cited Violation of 10 CFR 50.55a(g)(4) for the failure to perform dye penetrant examinations of the full required exam surface on safety injection (SI) gas collection chamber welds (SI-W603, SI-W604, and SI-H109) in accordance with the American Society of Mechanical Engineers Section XI Code. Specifically, the examiner proceeded with the examination without anticipating the effects of the increased dwell and drying times of the developer due to cooler ambient temperature than those he had been working under previously. The developer, which would normally dry to a white residue shortly after application to a warm surface and aid in determining the extent of application, remained somewhat translucent when applied to the cooler surface, masking the extent of coverage. This resulted in the examiner's failure to coat the full required Code areas of the welds he was examining and his failure to recognize the lack of coverage. The licensee subsequently re-performed the dye penetrant examinations and entered this issue into their corrective action program.

The inspectors determined that the finding was more than minor because it was associated with the Mitigating System Cornerstone attribute of equipment performance and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Absent NRC intervention, the licensee would not have performed the full Code required examination of welds SI-W603, SI W604, and SI-H109 for an indefinite period of service, which would have placed the reactor coolant pressure boundary at increased risk for unanalyzed cracking, leakage, or component failure. This finding was of very low safety significance because a qualified examination was subsequently performed with no relevant indications detected. In particular, it did not result in the loss of function of the mitigating system. The inspectors determined that the finding had a cross-cutting aspect in the area of human performance, work practices component, because the licensee proceeded in the face of uncertainty or unexpected circumstances (H.4(a)).
Inspection Report# : 2009005 *(pdf)*

Significance: G Dec 31, 2009
Identified By: NRC
Item Type: NCV NonCited Violation
Latching Pawl On Safety-Related Bus Tie Breakers Fails To Engage Due To Grease Hardening
The inspectors identified a finding of very low safety significance and an associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for the failure to promptly identify and correct deficiencies that had caused 4160-Volt alternating current breaker failures, which, if corrected, may have prevented subsequent similar failures. Specifically, the licensee did not evaluate other safety-related breakers after hardened grease was identified in the safety-related bus 5 to bus 6 crosstie breakers. In response to this finding, the licensee entered the issue into its corrective action program as Condition Report (CR) 360677.

The inspectors determined that the finding was more than minor because it was associated with the Mitigating Systems Cornerstone attribute of procedure quality and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The inspectors determined the finding could be evaluated using the Significance Determination Process in accordance with Inspection Manual Chapter 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1, Initial Screening and Characterization of Findings," Table 4a, for the Mitigating Systems Cornerstone, dated January 10, 2008. The significance of the finding was determined to be of very low safety significance because the inspectors answered "no" to all of the questions in the Mitigating Systems Cornerstone column. The inspectors determined that the issue had a cross-cutting aspect in human performance, work practices component, because licensee staff did not comply with the timeliness aspects of completing an apparent cause evaluation in accordance with procedure guidance (H.4(b)).

Inspection Report# : 2009005 *(pdf)*

Barrier Integrity

Significance: G Sep 03, 2010
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Correct the Classification of a Containment Isolation Valve.
A finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, “Corrective Action,” was identified by the inspectors for the failure to correct a condition adverse to quality. Specifically, the licensee failed to provide their licensed operators with correct procedures and instructions for determining which valves were containment isolation valves. The condition was previously identified on August 12, 2009, when the inspectors found MS 100A, the steam supply to the turbine driven auxiliary feedwater pump, open without the capability to be remotely closed from the control room and without a technical specification entry for the containment isolation function. The licensee entered the issue, during the current inspection, into their corrective action program and took short-term corrective actions of placing a standing order in the control room directing operators to enter the appropriate containment isolation technical specifications for the valves in question.

The finding was determined to be more than minor, because, if left uncorrected, has the potential to lead to a more significant safety concern. The inspectors concluded this finding was associated with the Barrier Integrity Cornerstone. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," Table 4a, for the Barrier Integrity Cornerstone. The inspectors answered "no" to the Barrier Integrity Cornerstone questions and screened the finding as having very low safety significance (Green). This finding has a cross-cutting aspect in the area of human performance within the resources component because the licensee did not maintain complete, accurate and up-to-date design documentation (H.2(c)). (Section 4OA2.1.b(2))
Inspection Report# : 2010006 *(pdf)*

Significance: SL-IV Sep 03, 2010
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Update the Updated Safety Analysis Report to Include Containment Penetration Leakage Testing Information.
The inspectors identified a Severity Level IV, non-cited violation of 10 CFR 50.71(e), "Maintenance of Records, Making of Reports," having very low safety significance. The inspectors found that the licensee failed to update the Updated Safety Analysis Report (USAR) to describe for each containment penetration, the penetration category, the type of leakage test required, and the applicable leakage test method. The licensee entered this into their corrective action program. The inspectors found the violation to be more than minor in accordance with the NRC Enforcement Policy, Section 6.1.d, Example 3, in that the failure to update the Final Safety Analysis Report (FSAR) would not have a material impact on safety or licensed activities. This issue was determined to be a Severity Level IV violation since it was similar to a Severity Level IV violation example in the NRC Enforcement Policy. Additionally, in accordance with the Enforcement Policy, this violation is categorized as Severity Level IV because the resulting changes were evaluated by the SDP as having very low safety significance (Green).

Violations of 10 CFR 50.71 are dispositioned using the traditional enforcement process instead of the significance determination process (SDP) because they are considered to be violations that potentially impede or impact the regulatory process. The underlying finding is evaluated under the SDP to determine the significance of the violation. In this case, the finding was determined to be more than minor because, if left uncorrected, it had the potential to lead to a more significant safety concern. (Section 4OA2.1.b(2))

The SDP portion of this issue is tracked as item 2010-006-03.
Inspection Report# : 2010006 *(pdf)*

Significance:  Sep 03, 2010
Identified By: NRC
Item Type: FIN Finding
Failure to Update the Updated Safety Analysis Report to Include Containment Penetration Leakage Testing Information.
The inspectors identified a finding associated with a traditional enforcement Severity Level IV, non-cited violation of 10 CFR 50.71(e), "Maintenance of Records, Making of Reports," having very low safety significance. The resulting changes were evaluated by the SDP as having very low safety significance (Green).

The underlying finding was evaluated under the SDP to determine the significance of the violation. In this case, the finding was determined to be more than minor because, if left uncorrected, it had the potential to lead to a more significant safety concern. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," Table 4a, for the Barrier Integrity Cornerstone. The inspectors answered "no" to the Barrier Integrity Cornerstone questions and screened the finding as having very low safety significance (Green). The inspectors did not identify a cross-cutting aspect associated with the finding because the finding was not representative of current performance. (Section 4OA2.1.b(2))

The Traditional Enforcement portion of this issue is tracked as item 2010-006-02.
Inspection Report# : 2010006 *(pdf)*

Emergency Preparedness

Significance: SL-IV Sep 07, 2010
Identified By: NRC
Item Type: NCV NonCited Violation
Changes to EAL Technical Bases Document Decreases the Effectiveness of the Plan without Prior NRC Approval.
The inspector identified a Severity Level IV NCV of 10 CFR 50.54(q) associated with 10 CFR 50.47(b)(2) because the licensee failed to obtain prior NRC approval for a change made to its emergency plan that decreased the effectiveness of the plan. Specifically, the licensee changed wording in their EAL technical basis document for EAL SU5 and CU1, RCS Leakage. The new wording eliminates leakage from the charging and letdown systems from consideration as RCS Leakage and therefore, leakage from these systems that meet the EAL thresholds would not constitute an Unusual Event declaration, using the licensee's revised wording. This change was made without prior NRC approval.

The Green finding associated with this Item 05000305/2010502-02.

Inspection Report# : 2010502 *(pdf)*

Significance: G Sep 07, 2010
Identified By: NRC
Item Type: FIN Finding
Changes Made to EAL Technical Bases that Decreased the Effectiveness
The inspector identified a Green finding associated with 10 CFR 50.47(b)(2) because the licensee failed to obtain prior NRC approval for a change made to its emergency plan that decreased the effectiveness of the plan. Specifically, the licensee changed wording in their EAL technical basis document for EAL SU5 and CU1, RCS Leakage. The new wording eliminates leakage from the charging and letdown systems from consideration as RCS Leakage and therefore, leakage from these systems that meet the EAL thresholds would not constitute an Unusual Event declaration, using the licensee's revised wording. This change was made without prior NRC approval.

The performance deficiency was more than minor and of very low safety-significance using MC 0612 and MC 0609, Appendix B, because it is associated with the emergency preparedness cornerstone attribute of procedure quality for EAL and emergency plan changes, and it adversely affected the cornerstone objective of ensuring that the licensee is capable of implementing adequate measures to protect the health and safety of the public in the event of a radiological emergency. Therefore, the performance deficiency was a finding. Using MC 0609, Appendix B, the inspectors determined that the finding had a very low safety significance. The inspectors also determined that the finding had a cross-cutting aspect in the area of Human Performance, decision making because the licensee did not recognize that the change that was made to the EAL Technical Basis document decreased the effectiveness of the emergency plan. (H.1.(b)) (Section 1EP4)

The associated SLIV is Item 05000305/2010502-01.

Inspection Report# : 2010502 *(pdf)*

Occupational Radiation Safety

Significance: G Sep 30, 2010
Identified By: NRC
Item Type: NCV NonCited Violation

Unauthorized Entry into an HRA
A finding of very low safety significance and an associated non-cited violation (NCV) of Technical Specification 6.13 was identified by the inspectors after a worker entered a high radiation area on October 15, 2009. Radiation protection did not authorize the worker to enter the area nor was the worker made knowledgeable of the dose rate level in the area. The work was temporarily assigned from the turbine building to the containment building to assist with the cleaning of containment in preparation for containment close out. The worker received a briefing from radiation protection regarding the radiological condition of containment, but was instructed not to enter any high radiation areas. The worker entered the radiological controlled area on radiation work permit 09-0202-1, which allowed access to containment but did not allow access to high radiation areas and the electronic dosimeter worn by the worker was set to alarm at 50 mrem/hour. During the course of the work activity, the worker was instructed to retrieve a piece of equipment from the basement elevation of containment. An unknown individual held the swing gate open, which also blocked the HRA posting, and the worker entered the basement elevation of containment. The worker, alerted to the higher dose rate conditions through an electronic dosimeter alarm, then exited the work area. The worker immediately reported the event to the radiation protection staff who confirmed the basement elevation of containment was a posted HRA and the dose rates were greater than 100 mrem/hour. The maximum dose rate measured by the ED was 106 mrem/hour. The corrective actions taken by the licensee included temporarily restricting the individual's further access to the radiologically controlled area and counseling of the individual by the licensee's Radiation Protection Manager.

The inspectors identified Example 6(h) of inspection manual chapter (IMC) 0612, Appendix E, as similar to the performance issue, in that, the worker was neither authorized by radiation protection to work in specific locations within containment, nor was the worker made knowledgeable of the dose rate level in the area. Therefore, in accordance with IMC 0612 and Example 6(h) of Appendix E, the inspectors determined that the performance deficiency was more than minor. Additionally, the performance deficiency impacted the program and process attribute of the Occupational Radiation Safety Cornerstone and adversely affected the cornerstone objective of ensuring adequate protection of worker health and safety from exposure to radiation, in that, unauthorized entry into areas without knowledge of the radiological conditions placed the worker at increased risk for unnecessary radiation exposure. The finding was assessed using the Occupational Radiation Safety significance determination process (SDP) and was determined to be of very low safety significance because the problem was not an as low as is reasonably achievable planning issue, there were no overexposures nor substantial potential for overexposures given the worker's reaction to the electronic dosimeter alarm and the dose rate ranges, and the licensee’s ability to assess dose was not compromised. The inspectors determined that the cause of this incident involved a cross cutting component in the human performance area for inadequate work control. Specifically, the licensee did not appropriately coordinate work activities by incorporating necessary to assure human performance (H.3(b)).
Inspection Report# : 2010004 *(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

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