Clinton
1Q/2012 Plant Inspection Findings

Initiating Events

Significance: G Mar 31, 2012
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
FAILURE TO INCORPORATE OPERATING EXPERIENCE INTO PREVENTIVE MAINTENANCE ACTIVITIES.
A self-revealed finding of very low safety significance was identified with an associated Non-Cited Violation of 10 CFR 50.65, "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants." The licensee failed to incorporate operating experience into its preventive maintenance practices associated with steam bypass system control circuit cards. Specifically, during two operating experience driven initiatives performed by the licensee in 2001 and 2007, and once again on September 24, 2011, the licnesee failed to implement any preventive maintenance activity for critical component circuit cards, which resulted in age-related failure and a reactor scram on November 29, 2011. The licensee initiated corrective actions to replace system circuit cards, perform periodic replacement/refurbishment maintenance activities, and trend circuit card performance during routine calibration.

The finding was of more than minor significance because it was sufficiently similar to Inspection Manual Chapter 0612, "Power Reactor Inspection Reports," Appendix E, "Examples of Minor Issues," Example 7 (c), in that this violation of 10 CFR 50.65(a)(3) had a consequence "...such as equipment problems attributable to failure to take industry operating experience into account when practicable." The finding was a licensee performance deficiency of very low safety significance because it (1) did not contribute to the likelihood of a loss-of-collant accident initiator, (2) did not contribute to both the likelihood of a reactor scram AND the likelihood that mitigation equipment or functions would not be available, and (3) did not increase the likelihood of a fire or internal/external flooding event. The inspectors concluded that this finding affected the cross-cutting area of human performance. Specifically, in the area of work control, the licensee did not appropriately coordinate work activities by incorporating actions to plan work activities to support long-term equipment reliability by scheduling maintenance as more preventive than reactive. (IMC 0310, H.3(b))
Inspection Report# : 2012002 *(pdf)*

Significance: G Jun 30, 2011
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO MEET SURVEILLANCE TESTING REQUIREMENT FOR REACTOR COOLANT SYSTEM PRESSURE ISOLATION VALVES
The inspectors identified a finding of very low safety significance (Green) with an associated Non Cited Violation of Technical Specification Surveillance Requirement (TSSR) 3.4.6.1. The licensee failed to correctly incorporate the required test pressure limits of the TSSR into the surveillance test procedure and subsequently tested multiple reactor coolant system (RCS) pressure isolation valves (PIVs) at pressures greater than the maximum test pressure of 1025 pounds-per-square-inch gage, invalidating the testing. The licensee performed a risk assessment of the missed surveillance in accordance with TSSR 3.0.3, which determined that completion of the surveillance could be delayed up to the 24 month surveillance interval without a significant increase in plant risk. The licensee also completed an operability evaluation for the TS nonconformance and concluded that there was reasonable assurance that the affected RCS PIVs were operable based on engineering judgment.

The finding was of more than minor significance because it affected the Initiating Events Cornerstone and was associated with the Procedure Quality attribute. Specifically, the licensee did not correctly incorporate the required test pressure limits of TSSR 3.4.6.1 into the surveillance test procedure. This resulted in testing multiple RCS PIVs at pressures greater than the maximum test pressure of 1025 psig. The finding was determined to be a licensee performance deficiency of very low safety significance because the finding would not result in exceeding the TS limit

for RCS leakage and would not have likely affected mitigation systems resulting in a loss of safety function. The inspectors concluded that because the licensee's missed opportunity to correct the test pressure discrepancy in its surveillance test procedure occurred in January 2005 and no other more recent opportunities reasonably existed to identify and correct the problem, this issue would not be reflective of current licensee performance and no cross-cutting aspect was identified.

Inspection Report# : 2011003 *(pdf)*

Significance: G Jun 03, 2011
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO PERFORM EFFECTIVENESS REVIEW.
The inspectors identified a finding of very low safety significance with an associated NCV of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings." The licensee failed to perform an effectiveness review (EFR) to ensure that corrective actions (CAs) taken to prevent recurrence of a significant condition adverse to quality were actually effective to preclude repetition. The licensee entered this violation into its corrective action program as ARs 1221616, 1221661, and 1223806 to investigate the cause and to identify appropriate CAs.

The finding was of more than minor significance because it was similar to Example 4a in IMC 0612, "Power Inspection Reports," Appendix E, "Examples of Minor Issues," in that, the licensee routinely failed to perform EFR evaluations on similar CAs related to significant conditions adverse to quality. The finding was a licensee performance deficiency of very low safety significance due to answering 'no' to all questions under the Initiating Events Cornerstone column of IMC 0609 Attachment 4, "Phase 1 - Initial Screening and Characterization of Findings," The inspectors concluded that this finding affected the cross-cutting aspect of problem identification and resolution. Specifically, the licensee failed to thoroughly evaluate problems to include conducting EFRs of CAs to ensure that problems were resolved. [IMC 0310 P.1(c)]
Inspection Report# : 2011008 *(pdf)*

Mitigating Systems

Significance: G Dec 31, 2011
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO PROPERLY APPLY AN APPROVED ASME CODE CASE
The inspectors identified a finding of very low safety significance with an associated Non-Cited Violation of 10 CFR 50.55a due to the licensee's failure to adequately apply American Society of Mechanical Engineers Section XI Code Case N-513-3 when it evaluated a degraded section of safety related shutdown service water system piping for operability. Specifically, the licensee failed to perform required daily walkdowns to confirm its analysis of conditions used in its operability evaluation remained valid. After this issue was identified by the inspectors, the licensee promptly resumed the daily compensatory action to verify the leak rate until the piping system was repaired.

The finding was of more than minor significance because it was associated with the Protection Against External Factors attribute of the Mitigating Systems Cornerstone, and it directly affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Additionally, if left uncorrected, improper application of an approved code case would become a more significant safety concern in that it could result in the failure to identify inoperable safety related piping. The finding was a licensee performance deficiency of very low safety significance because it did not result in an actual loss of safety function of a single train for greater than its Technical Specification allowed outage time. The inspectors concluded that there was no specific performance characteristic that was a significant cause to the performance deficiency in this instance; therefore no cross-cutting aspect was identified.
Inspection Report# : 2011005 *(pdf)*

Significance: G Sep 30, 2011
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO PERFORM CODE REQUIRED CAUSE AND EFFECT FAILURE EVALUATIONS FOR DIESEL STARTING AIR AND FUEL OIL SYSTEM RELIEF VALVES.
The inspectors identified a finding of very low safety significance with an associated Non-Cited Violation of 10 CFR 50.55a. The licensee failed to perform American Society of Mechanical Engineers (ASME) Code required cause and effect failure evaluations for set pressure test failures of diesel generator (DG) starting air and fuel oil system relief valves. The licensee entered this issue into its corrective action program for evaluation and subsequently completed an engineering evaluation to address past operability of the associated DG starting air and fuel oil systems due to the relief valve test failures. The licensee also moved up its schedule to test the remaining relief valves.

The finding was of more than minor significance because it could lead to a more significant safety concern if left uncorrected. Specifically, the failure to perform Code required cause and effect evaluations for relief valve set pressure test failures could lead to a generic problem with valves in the same or other valve groups remaining uncorrected with a potential impact on operability of safety significant mitigating systems. Because the DG starting air and fuel oil systems are relied upon to support DG operability, the inspectors concluded that this issue was associated with the Mitigating Systems Cornerstone. The finding was determined to be a licensee performance deficiency of very low safety significance because the finding: (1) was not a design or qualification deficiency; (2) did not represent an actual loss of safety function of a system; (3) did not represent an actual loss of safety function of a single train or greater than its Technical Specification (TS) allowed outage time; (4) did not represent an actual loss of safety function of one or more non-TS trains of equipment designated as risk significant; and (5) did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. The inspectors concluded that the finding affected the cross-cutting area of human performance in that the licensee's work practices did not ensure adequate supervisory and management oversight of work activities, such that nuclear safety was supported. Specifically, the relief valve test failures were left unresolved and were not evaluated as required by the Code for an extended period of time with several failed tests. (IMC 0310, H.4(C))
Inspection Report# : 2011004 *(pdf)*

Significance: G Sep 30, 2011
Identified By: NRC
Item Type: FIN Finding
FAILURE TO CORRECT A CONDITION ADVERSE TO QUALITY FOR IMPROPERLY IMPLEMENTED ENGINEERING CORRECTIVE ACTIONS
The inspectors identified a finding of very low safety significance due to the licensee's failure to effectively implement corrective actions for a condition adverse to quality described in Apparent Cause Evaluation 1095413, "NOS [Nuclear Oversight] Identified Improperly Implemented Engineering Corrective Actions Cause Repeat Operational Challenges." No violation of regulatory requirements was identified. The licensee entered this issue into its corrective action program to investigate the cause and to identify appropriate corrective actions.

The finding was of more than minor significance because it was associated with the Equipment Performance attribute of the Mitigating Systems Cornerstone and directly affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, improperly implemented engineering corrective actions could result in additional repeat operational equipment challenges. The finding was of very low safety significance because the issue: (1) was not a design or qualification deficiency; (2) did not represent an actual loss of safety function of a system; (3) did not represent an actual loss of safety function of a single train for greater than its Technical Specification (TS) allowed outage time; (4) did not represent an actual loss of safety function of one or more non-TS trains of equipment designated as risk significant; and (5) did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. The inspectors concluded that this finding affected the cross-cutting area of problem identification and resolution. Specifically, the licensee failed to take appropriate corrective actions to address known deficiencies in its process for tracking and closing work orders that implement corrective actions. The actions taken were neither lasting nor effective. (IMC 0310, P.1(d))
Inspection Report# : 2011004 *(pdf)*

Significance: G Jun 30, 2011
Identified By: NRC
Item Type: NCV NonCited Violation
DEFICIENCIES WITH RCIC ROOM HEAT-UP ANALYSES
The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, “Design Control,” having very low safety significance for the failure to include all of the applicable heat loads in the reactor core isolation cooling (RCIC) room heat up calculation and not having a calculation of record for the RCIC room heat up under a station blackout (SBO) scenario. The licensee entered this issue into the corrective action program and performed preliminary calculations to verify that the issues did not exceed any design limits.

The performance deficiency was determined to be more than minor because it was associated with the Mitigating Systems Cornerstone attribute of Equipment Performance, and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding screened as very low safety significance because the licensee determined the RCIC room cooler was capable of removing the additional heat load; and RCIC room temperature remained within the design limits without the room cooler during a SBO scenario. The inspectors determined that this finding did not represent current licensee performance and no cross-cutting aspect was assigned.

Inspection Report# : 2011003 *(pdf)*

Significance: G Jun 03, 2011
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO MAINTAIN A QUALITY RECORD AS EVIDENCE OF AN ACTIVITY AFFECTING QUALITY OF SAFETY-RELATED EQUIPMENT DUE TO INAPPROPRIATE CORRECTIVE ACTIONS
The inspectors identified a finding of very low safety significance with an associated NCV of 10 CFR Part 50, Appendix B, Criterion XVII, “Quality Assurance Records.” Specifically, the licensee failed to maintain a quality record documenting a nondestructive examination (NDE) of a safety-related spreader beam lifting device. After losing the original NDE report, the licensee’s corrective action (CA) was to recreate the report from memory and maintain the recreated report as the quality record. Upon review and questioning from the NRC, the licensee was able to locate the missing NDE report in the records archive. This issue was entered into the licensee’s CAP as AR1223723.

The inspectors determined the finding was more than minor because, if left uncorrected, failure to maintain a quality record as evidence of an activity affecting quality of safety related equipment due to inappropriate disposition of CAs pertaining to missing/lost quality records could become a more significant safety concern. This finding was of very low safety significance because this finding did not represent an actual loss of any safety function of the Mitigation Systems. The inspectors concluded that this finding affected the cross-cutting aspect of Problem Identification and Resolution. Specifically, the licensee did not take appropriate corrective actions to address a lost quality record. [IMC 0310 P.1(d)]
Inspection Report# : 2011008 *(pdf)*

Significance: G Jun 03, 2011
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO ACCOUNT FOR CABLE RESISTANCE IN OPERABILITY DETERMINATIONS.
The inspectors identified a finding of very low safety significance with an associated NCV of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," related to calculational errors found in the licensee's operability determination. Specifically, on four separate operability determinations, the licensee failed to account for the cable resistance when determining the maximum allowable contact resistance associated with the second level undervoltage (UV) relays for the 4.16 kV Buses. The licensee entered this violation into its corrective action program as Action Requests 1226340 and 1224313 and performed a preliminary calculation which determined that the error reduced the available margin in the circuit resistance but did not change the overall conclusions for the past operability calls made for the four different occasions.

The inspectors determined that this finding was more than minor because it was associated with the Mitigating Systems Cornerstone attribute of design control and adversely affected the cornerstone objective of ensuring availability and reliability of systems that respond to initiating events to prevent undesirable consquences. This finding was of very low safety significance (Green) because the licensee was able to demonstrate that the operability calls that were previously made relating to the second level UV relays were still valid and acceptable. The inspectors condcluded that this finding affected the cross-cutting aspect of human performance. Specifically, the licensee failed to use conservative assumptions in decision making related to immediate operability determinations of conditions adverse to quality. [IMC 0310 H.1(b)]
Inspection Report# : 2011008 *(pdf)*

Barrier Integrity

Significance: G Mar 31, 2012
Identified By: NRC
Item Type: NCV NonCited Violation
UNACCEPTABLE PRECONDITIONING OF LOW PRESSURE COOLANT INJECTION FROM RESIDUAL HEAT REMOVAL 'A' CHECK VALVE PRIOR TO LEAK RATE TEST MEASUREMENT
The inspectors identified a finding of very low safety significance with an associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings." The licensee failed to establish an adequate procedure to perform required leak rate testing for the Low Pressure Coolant Injection from Residual Heat Removal 'A' Check Valve. Specifically, the surveillance test procedure resulted in unacceptable preconditioning of the valve prior to a leak rate test measurement due to improper test sequencing. In addition, the licensee failed to correctly evaluate a failed leak rate test of the valve. The licensee entered this issue into its corrective action program for evaluation and initiated corrective actions to revise the test procedure and train engineering personnel.

The finding was of more than minor significance since it was associated with the Procedure Quality attribute for the containment and adversely affected the Barrier Integrity Cornerstone objective to provide reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. Because the preconditioning altered the as-found condition of the check valve, the data collected through the performance of the surveillance test was not fully indicative of the true valve performance trend. Additionally, the licensee's failure to correctly evaluate the initial failed leak rate test would become a more significant safety concern if left uncorrected because it could reasonably result in an unrecognized condition with a check valve failing to fulfill a safety related function. Therefore, this performance deficiency had a direct effect on the licensee's ability to fully assess the past operability, as well as the ability to trend as-found data for the purpose of assessing the reliability of the check valve. The finding was a licensee performance deficiency of very low safety significance because it would not result in exceeding the Technical Specification limit for reactor coolant system leakage and would not have likely affected mitigation systems resulting in a loss of safety function. In addition, the finding did not represent an actual open pathway in the physical integrity of the reactor containment. Based on consultation and review with the Regional Senior Reactor Analyst, the inspectors concluded that the finding did not result in an increase in the likelihood of an initiating event such as an inter-system loss-of-coolant accident or a containment bypass event because the redundant isolation valve and closed loop system piping passed leak rate measurement test during the refueling outage with considerable margin. The inspectors concluded that this finding affected the cross cutting area of human performance. Specifically, the licensee did not have adequately trained and knowledgeable personnel available to correctly evaluate the cause of the initial failed leak rate measurement test and to ensure that appropriate actions to correct the test sequence in the procedure were identified.
(IMC 0310,H.2(b))

Inspection Report# : 2012002 *(pdf)*

Significance: G Dec 31, 2011
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO CONTROL THE WORK HOURS OF A COVERED WORKER.

The inspectors identified a finding of very low safety significance with an associated Non-Cited Violation of 10 CFR 26.205(c) and (d) for the licensee's failure to schedule and control the work hours of a covered worker performing surveillance testing on containment isolation valves during the refueling outage. Specifically, an engineer performing local leak rate testing during the refueling outage was scheduled for successive 12-hour shifts and was inappropriately excluded from the work hour limits specified in 10 CFR 26.205(d)(1) and 10 CFR 26.205(d)(2). The licensee removed the engineer from covered work activities for the remainder of the refueling outage and reviewed the work activities of other engineers to ensure that any engineer performing covered work appropriately met work hour limits.

The finding was of more than minor signficance since the failure to schedule and control the work hours of a worker performing covered work, if left uncorrected, would become a more significant safety concern because it could reasonably result in human performance errors that could affect the function of safety-related structures, systems, and components. Since the issue involved leak rate testing on containment isolation valves performed during the refueling outage, the inspectors concluded that this issue was associated with the Barrier Integrity Cornerstone. The finding was a licensee performance deficiency of very low safety significance because it did not represent an actual open pathway in the physical integrity of the reactor containment. The inspectors concluded that this finding affected the cross-cutting area of human performance. Specifically, the engineer did not meet expectations regarding the performance of covered work activities because he did not challenge directions given to him by the leak rate test team supervisor and the leak rate test team supervisor did not meet expectations to ensure that the engineer was in compliance with the 10 CFR 26.205 (a) work requirements. Therefore, the inspectors concluded that the licensee's work practices which support human performance were less than effective. (IMC 0310, H.4(b))

Inspection Report# : 2011005 *(pdf)*

Significance: G Dec 31, 2011
Identified By: NRC
Item Type: NCV NonCited Violation
UNACCEPTABLE PRECONDITIONING OF REACTOR CORE ISOLATION COOLING SYSTEM CHECK VALVE PRIOR TO LEAK RATE TEST MEASUREMENT
The inspectors identified a finding of very low safety significance with an associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings." The licensee failed to establish an adequate procedure to perform required leak rate testing for the reactor core isolation cooling turbine exhaust check valve. Specifically, the surveillance test procedure resulted in unacceptable preconditioning of the valve prior to an as-found leak rate test measurement. The licensee entered this issue into its corrective action program for evaluation and initiated a corrective action to revise the test procedure.

The finding was of more than minor significance since it was associated with the Procedure Quality Cornerstone attribute for the Containment and adversely affected the Barrier Integrity Cornerstone objective to provide rasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. Because the preconditioning altered the as-found condition of the check valve, the data collected through the performance of the surveillance test was not fully indicative of the true valve performance trend. Therefore, this performance deficiency had a direct effect on the licensee's ability to fully assess the past operability, as well as the ability to trend as-found data for the prupose of assessing the reliability of the check valve. The finding was a licensee performance deficiency of very low safety significance because it did not involve an actual open pathway in the physical integrity of the reactor containment. The inspectors concluded that this finding affected the cross-cutting area of problem identification and resolution. Specifically, the licensee did not implement operating experience into station processes, procedures, and training in that the licensee did not update/revise the surveillance test procedure consistent with NRC guidance and its corporate technical positon to prevent unacceptable preconditioning of the check valve. (IMC 0310, P.2(b))
Inspection Report# : 2011005 *(pdf)*

Significance: G Sep 30, 2011
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO MEET TECHNICAL SPECIFICATION 3.7.3 FOR OPERABILITY OF CONTROL ROOM

VENTILATION SYSTEM
The inspectors identified a finding of very low safety significance with an associated non-cited violation of Technical Specification (TS) 3.7.3, "Control Room Ventilation System," following the discovery of a crack on the Train B Control Room ventilation (VC) system return fan hub during investigation of the cause for high noise and vibration levels observed on May 23, 2011. The licensee failed to correctly evaluate the operability of the Train B VC system return fan in a timely manner to prevent exceeding the TS allowed outage time for entry into Mode 3. The licensee replaced the fan and returned it to an operable status.

The failure to correctly evaluate a degraded/nonconforming condition potentially affecting the operability of structures, systems, and components (SSCs) required to be operable by TS would become a more significant safety concern if left uncorrected because it could reasonably result in an unrecognized condition of an SSC failing to fulfill a safety-related function. The finding was, therefore, of more than minor significance. Because the Control Room ventilation system supports the radiological barrier function to protect operators inside the Control Room following certain design basis accidents, the inspectors concluded that this issue was associated with the Barrier Integrity Cornerstone. The finding was a licensee performance deficiency of very low safety significance because it involved only a degradation of the radiological barrier function provided for the Control Room. The inspectors concluded that this finding affected the cross-cutting area of human performance. Specifically, licensee decision making to delay inspection of the fan hub and blades until after a new fan was delivered on site to confirm the initial operability determination was not conservative and not consistent with demonstrating that nuclear safety is an overriding priority. (IMC 0310, H.1(b))
Inspection Report# : 2011004 *(pdf)*

Significance: G Sep 30, 2011
Identified By: NRC
Item Type: FIN Finding
FAILURE TO EVALUATE OPERABILITY OF CONTROL ROOM VENTILATION SYSTEM FOR DEGRADED FLOW CONDITION
The inspectors identified a finding of very low safety significance. The licensee failed to appropriately evaluate the operability of Control Room Ventilation Train A after identifying a degraded/nonconforming system flow condition while performing surveillance testing on April 1, 2011, that could have affected the ability of the system to perform its safety function. No violation of regulatory requirements was identified. The licensee initiated corrective actions to provide "read & sign" training for licensed operators and a procedure change to add an acceptance criterion for filtered flow rate in the surveillance test procedure.

The failure to correctly evaluate a degraded/nonconforming condition potentially affecting the operability of structures, systems, and components (SSCs) required to be operable by Technical Specifications (TS) would become a more significant safety concern if left uncorrected because it could reasonably result in an unrecognized condition of an SSC failing to fulfill a safety-related function. The finding was therefore of more than minor significance. Because the Control Room ventilation system supports the radiological barrier function to protect operators inside the Control Room following certain design basis accidents, the inspectors concluded that this issue was associated with the Barrier Integrity Cornerstone. The finding was a licensee performance deficiency of very low safety significance because it involved only a degradation of the radiological barrier function provided for the Control Room. The inspectors concluded that this finding affected the cross-cutting area of human performance. Specifically, licensee decision making using a systematic process to evaluate the operability of an SSC required to be operable by TS when a degraded/nonconforming condition was identified was not appropriately implemented as designed by licensed senior reactor operators. (IMC 0310 H.1(a))
Inspection Report# : 2011004 *(pdf)*

Emergency Preparedness

Significance: G Sep 30, 2011
Identified By: NRC
Item Type: NCV NonCited Violation

MISSING RESPIRATOR SPECTACLE KITS
The inspectors identified a finding of very low safety significance and associated NCV of 10 CFR 50.54(q) for the failure to provide spectacle adapter kits for all eyeglass wearers (i.e, non-soft contact wearers) who were key emergency response organization (ERO) personnel that were potentially required to wear a self-contained breathing apparatus (SCBA) in order to fulfill emergency response functions. The licensee's corrective actions included revising procedures that govern the training and qualification of licensed operators to include steps that ensure licensed operators and other ERO members who require corrective lenses are provided SCBA lens inserts.

The finding was more than minor because it was associated with the Emergency Planning Cornerstone and, if left uncorrected, the performance deficiency has the potential to lead to a more significant safety concern, in that, emergency responders having inadequate vision could challenge the licensee's state of operational readiness and emergency response capabilities. The finding was assessed using IMC 0609, Attachment B , "Emergency Preparedness Significance Determination Process" and determined to be of very low safety significance because this failure to comply represented a planning standard issue, however, it did not result in a risk significant planning standard nor was it indicative of a planning standard functional failure. The failure to make provisions for respirator vision corrective lenses to licensed operators that required corrective lenses as a condition of their license was caused by a program weakness. Consequently, the cause of this finding has a cross-cutting aspect in the area of human performance. Specifically, the licensee did not ensure that equipment was available for key emergency response personnel. (IMC 0310,H.2(d))
Inspection Report# : 2011004 *(pdf)*

Significance: SL-IV Jun 22, 2011
Identified By: NRC
Item Type: NCV NonCited Violation
CHANGES TO EAL BASIS DECREASED THE EFFECTIVENESS OF THE PLAN WITHOUT PRIOR NRC APPROVAL (TRADITIONAL ENFORCEMENT PORTION)
The inspector identified a finding of very low safety significance involving a Severity Level IV NCV of 10 CFR 50.54 (q) for failing to obtain prior approval for an emergency plan change which decreased the effectiveness of the plan. Specifically, the licensee modified the Emergency Action Level (EAL) Basis in EAL HU6, Revision 12, which indefinitely extended the start of the 15 minute emergency classification clock beyond a credible notification that a fire is occurring or indication of a valid fire detection system alarm. This change decreased the effectiveness of the emergency plan by reducing the capability to perform a risk significant planning function in a timely manner.

The violation affected the NRC’s ability to perform its regulatory function because it involved implementing a change that decreased the effectiveness of the emergency plan without NRC approval. Therefore, this issue was evaluated using Traditional Enforcement. The NRC determined that a Severity Level IV violation was appropriate due to the reduction of the capability to perform a risk significant planning standard function in a timely manner. The licensee entered this issue into its corrective action program and revised the EAL basis to restore compliance.

The related performance deficiency is tracked as item 2010-502-02.
Inspection Report# : 2010502 *(pdf)*

Significance: G Jun 22, 2011
Identified By: NRC
Item Type: NCV NonCited Violation
CHANGES TO EAL BASIS DECREASED THE EFFECTIVENESS OF THE PLAN WITHOUT PRIOR NRC APPROVAL (PERFORMANCE DEFICIENCY PORTION)
The inspector identified a finding of very low safety significance involving a Severity Level IV NCV of 10 CFR 50.54 (q) for failing to obtain prior approval for an emergency plan change which decreased the effectiveness of the plan. Specifically, the licensee modified the Emergency Action Level (EAL) Basis in EAL HU6, Revision 12, which indefinitely extended the start of the 15 minute emergency classification clock beyond a credible notification that a fire is occurring or indication of a valid fire detection system alarm. This change decreased the effectiveness of the emergency plan by reducing the capability to perform a risk significant planning function in a timely manner.

The finding was more than minor using IMC 0612, 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 IMC 0609, Appendix B, the inspector determined that the finding had a very low safety significance because the finding is a failure to comply with 10 CFR 50.54(q) involving the risk significant planning standard 50.47(b)(4), which, in this case, met the example of a Green finding because it involved one Unusual Event classification (EAL HU6).

The associated traditional enforcement is tracked as item 2010-502-01.
Inspection Report# : 2010502 *(pdf)*

Occupational Radiation Safety

Significance: G Dec 31, 2011
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
FAILURE TO IMPLEMENT APPROPRIATE RADIOLOGICAL CONTROLS FOR THE REMOVAL OF INSULATION IN A POSTED HIGH CONTAMINATION AREA
A self-revealed finding of very low safety significance and an associated Non-Cited Violation of Technical Specification 5.4.1.a was identified. Specifically, the licensee failed to implement appropriate radiological controls for the removal of insulation in a posted high contamination area. The issue was entered in the licensee's corrective action program as AR 01297713. The licensee's immediate corrective actions placed the job on hold, assessed the radiological significance for the issue, and suspended qualifications for the radiation protection technician (RPT) involved.

The finding is more than minor because the performance deficiency is associated with the Program and Process attribute of the Occupational Radiation Safety Cornerstone and adversely affected the cornerstone objective to ensure the adequate protection of the worker's health and safety from exposure to radiation from radioactive material during routine civilian nuclear reactor operation. Specifically, the failure to implement the radiological controls established in the radiation worker permit (RWP) as-low-reasonably-achievable (ALARA) file caused workers to receive additional, unplanned dose to the workers. The finding was assessed using the Occupational Radiation Safety, Public Radiation Safety and was determined to be of very-low safety significance because this was not related to ALARA, did not result in an overexposure, or a substantial potential for overexposure, nor was the ability to assess dose compromised. The radiological controls specified in RWP 10012059 for this activity were not implemented because the RPT assumed the scope of work and failed to review the RWP ALARA requirements before the briefing. Consequently, the inspectors determined that the cause of this incident involved a cross-cutting component in the human performance area for work practices. Specifically personnel work practices did not support human performance. (IMC 0310, H.4(a))
Inspection Report# : 2011005 *(pdf)*

Significance: G Dec 31, 2011
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
FAILURE TO IMPLEMENT APPROPRIATE RADIOLOGICAL CONTROLS AFTER RADIATION PROTECTION IDENTIFIED THAT A WORKER WAS POTENTIALLY CONTAMINATED DUE TO INAPPROPRIATE PROTECTIVE CLOTHING.
A self-revealed finding of very low safety significance and an associated Non-Cited Violation of Technical Specification 5.4.1.a was identified. Specifically, the licensee failed to implement appropriate radiological controls after radiation protection identified that the worker was potentially contaminated due to the inappropriate protective clothing. This issue was entered in the licensee's corrective action program as AR 01017724. The licensee's corrective actions included the replacement of all contamination monitors used at the site. The new contamination monitors have a radon subtract feature designed to mitigate the large number nuisance alarms caused by radon interference at this site.

The finding is more than minor because if left uncorrected the performance deficiency would have the potential to lead to a more significant safety concern. Specifically, bypassing every level of defense could result in additional dose to worker outside the radiological control area. The finding was assessed using the Significance Determination Process and was determined to be of very-low safety significance because these radioactive material control issues were not related to transportation and dose to members of the public was less than 0.005 rem. The inspectors observed the operation of the new contamination monitors and response of radiation protection technicians assigned to monitor authorized exit points during a refueling outage. The new monitors did not exhibit nuisance alarms and the technicians treated every alarm as a potential contamination event until proven otherwise with another instrument. Futhermore, these technicans informed the inspectors the briefing received before the outage by the radiation protection manager about alarm response expectations. The inspectors determined that the events involved in this performance deficiency are not indicative of current performance. Consequently, the inspectors did not assess the performance deficiency for cross-cutting aspects.
Inspection Report# : 2011005 *(pdf)*

Public Radiation Safety

Significance: G Sep 30, 2011
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO IMPLEMENT PACKAGE DESIGN SPECIFICATIONS
The inspectors identified a finding of very low-safety-significance and an associated non-cited violation of 10 CFR 71.5 for the failure to implement package design specifications. Specifically, the licensee failed to ensure the proper closure of a DOT 7A Type A package as required by Department of Transportation (DOT) regulations for packaging contained within 49 CFR 173. As a part of their corrective actions, the licensee completed a detailed review of all radioactive material shipments for the past 36 months to ensure Package Certification documents for other packages used as a Type A container satisfied requirements.

The finding was more than minor because it affected the Public Radiation Safety Cornerstone objective to ensure adequate protection of public health and safety from exposure to radioactive materials during transit. Specifically, the failure to correctly close a DOT Type A package could lead to a more significant safety concern by increasing the potential for a package breach occuring during transit. Using IMC 0609, Attachment D for the Public Radiation Safety Significance Determination Process (SDP) the inspectors determined the finding to be of very low safety significance. This deficiency has a cross-cutting aspect in Human Performance (Resources). (IMC 0310 H.2(b))
Inspection Report# : 2011004 *(pdf)*

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 : May 29, 2012