River Bend 1
3Q/2014 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance: G Aug 22, 2014
Identified By: NRC
Item Type: NCV NonCited Violation
Improper Sequencing of Maintenance of 4160 Vac Circuit Breakers Prior to As-Found Tests
The inspectors identified a Green, non-cited violation of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control," which states, in part, "A test program shall be established to assure that all testing required to demonstrate that structures, systems, and components will perform satisfactorily in service is identified and performed in accordance with written test procedures which incorporate the requirements and acceptance limits contained in applicable design documents." Specifically, the licensee's preventive maintenance Procedure T429, "ABB 5HK Clean/Inspection," failed to incorporate completion of contact resistance testing prior to maintenance into the preventative maintenance procedures for 4160 Vac circuit breakers as specified by Entergy, the manufacturer, and industry guidance. This condition does not represent an immediate safety concern. This finding has been entered into licensee's corrective action program as Condition Report CR-RBS- 2014-4104.

This performance deficiency was more than minor, and therefore a finding, because, if left uncorrected, it would have the potential to lead to a more significant safety concern. Specifically, the failure to perform contact resistance tests prior to maintenance was a significant programmatic deficiency which would have the potential to cause unacceptable or degraded conditions to go undetected. In accordance with Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," dated June 19, 2012, Exhibit 2, "Mitigating Systems Screening Questions," the issue screened as having very low safety significance (Green) because it was a design or qualification deficiency that did not represent a loss of operability or functionality; did not represent an actual loss of safety function of the system or train; did not result in the loss of one or more trains of non-technical specification equipment; and did not screen as potentially risk-significant due to seismic, flooding, or severe weather. This finding had a cross-cutting aspect associated with identification in the area of problem identification and resolution because the licensee failed to identify issues completely, accurately, and in a timely manner in accordance with the corrective action program [P.1].
Inspection Report# : 2014007 *(pdf)*

Significance: G Aug 22, 2014
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Complete and Justify Extension of Preventative Maintenance on Division III 4160 Vac Safety Related Breakers
The inspectors identified a Green, non-cited violation of Technical Specification 5.4.1, "Procedures," which states, in part, "Written procedures shall be established, implemented, and maintained, covering the following activities: The applicable procedures recommended in Regulatory Guide 1.33, Appendix A, February 1978." Regulatory Guide 1.33,

Appendix A, Section 9, “Procedures for Performing Maintenance,” paragraph b., requires that preventive maintenance schedules should be developed to specify lubrication schedules, inspections of equipment, and inspection or replacement of parts that have a specific lifetime. Specifically, the licensee failed to implement the six-year cleaning and inspection preventive maintenance for Division III 4160 Vac safety-related circuit breakers, E22-S004-ACB1, E22-S004-ACB2, and E22-S004-ACB4. These conditions do not represent an immediate safety concern. These conditions have been entered into the licensees corrective action program as Condition Reports CR-RBS-2014-4106 and CR-RBS-2014-4108.

This performance deficiency was more than minor, and therefore a finding, because it was associated with the equipment performance attribute of the mitigating systems cornerstone and adversely affects the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to events to prevent undesirable consequences. Specifically, the licensee’s failure to complete preventive maintenance reduces the reliability and capability of the safety-related circuit breakers. In accordance with Inspection Manual Chapter 0609, Appendix A, “The Significance Determination Process (SDP) for Findings At-Power,” dated June 19, 2012, Exhibit 2, “Mitigating Systems Screening Questions,” the issue screened as having very low safety significance (Green) because it was a design or qualification deficiency that did not represent a loss of operability or functionality; did not represent an actual loss of safety function of the system or train; did not result in the loss of one or more trains of non-technical specification equipment; and did not screen as potentially risk-significant due to seismic, flooding, or severe weather. This finding had a cross-cutting aspect associated with design margin in the area of human performance because the licensee did not operate or maintain equipment within design margin and failed to make changes to the margin through a systematic and rigorous process [H.6].
Inspection Report# : 2014007 *(pdf)*

Significance: G Aug 22, 2014
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Perform an Adequate Operability Determination for Missed Preventive Maintenance on Safety-Related Circuit Breakers
The inspectors identified a Green, non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, “Instructions, Procedures, Drawings,” which states, “Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings.” Specifically, River Bend Station failed to accomplish operability determination activities in accordance with Procedure EN-OP-104, “Operability Determination Process,” after the licensee identified that safety-related Division III 4160 Vac circuit breakers exceeded their replacement and refurbishment schedule. As an immediate corrective action, the licensee completed a new operability determination, which determined the condition as operable, but degraded/nonconforming, established an interim inspection schedule and established a plan to refurbish the breakers prior to the next refueling outage. This condition has been entered into the licensees corrective action program as Condition Report CR-RBS-2014-3872.

The performance deficiency was more than minor, and therefore a finding, because it was associated with the equipment performance attribute of the mitigating system cornerstone and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the operability determination performed did not consider the degraded condition of the circuit breaker so that effective interim or compensatory measures would be developed to ensure the reliability of the safety-related Division III 4160 Vac circuit breakers. In accordance with Inspection Manual Chapter 0609, Appendix A, “The Significance Determination Process (SDP) for Findings At-Power,” dated June 19, 2012, Exhibit 2, “Mitigating Systems Screening Questions,” the issue screened as having very low safety significance (Green) because it was a design or qualification deficiency that did not represent a loss of operability or functionality; did not represent an actual loss of safety function of the system or train; did not result in the loss of one or more trains of non-technical specification equipment; and did not screen as potentially risk-significant due to seismic, flooding, or severe weather.

This finding had a cross-cutting aspect associated with conservative bias in the area of human performance because licensee personnel failed to use conservative assumptions and did not verify the validity of the underlying assumptions used in making safety-significant decisions [H.14].
Inspection Report# : 2014007 *(pdf)*

Significance: G Aug 22, 2014
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Correct Identified Negative Safety Margin in Design Documents for Reactor Core Isolation Cooling Valves under Postulated High Energy Line Break Conditions
The inspectors identified a Green, non-cited violation of 10 CFR 50, Appendix B, Criteria XVI, "Corrective Action," which states in part, "Measures shall be established to assure that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and nonconformances are promptly identified and corrected." Specifically, the licensee failed to correct an identified deficiency in calculations for reactor core isolation cooling steam isolation valves with the design function of closing under High Energy Line Break concurrent with degraded voltage through either a calculation revision or engineering change against the calculation. The licensee's corrective actions included completing an operability determination with test data to demonstrate operability. This finding was entered into the licensee corrective action program as Condition Report CR-RBS-2014-3977.

The performance deficiency was more than minor, and therefore a finding, because it was associated with the design control attribute of the Mitigating Systems Cornerstone and adversely affected the cornerstone objective of assuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the licensee programmatically failed to update design basis documents to reflect plant modifications. The inspectors identified multiple opportunities for the licensee to correct this condition. In accordance with Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," dated June 19, 2012, Exhibit 2, "Mitigating Systems Screening Questions," the issue screened as having very low safety significance (Green) because it was a design or qualification deficiency that did not represent a loss of operability or functionality; did not represent an actual loss of safety function of the system or train; did not result in the loss of one or more trains of non-technical specification equipment; and did not screen as potentially risk-significant due to seismic, flooding, or severe weather. The inspectors determined that this finding had a cross-cutting aspect associated with resolution in the area of problem identification and resolution because the licensee failed to take effective corrective actions to address issues in a timely manner commensurate with their safety significance [P.3].
Inspection Report# : 2014007 *(pdf)*

Significance: G Jul 08, 2014
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Promptly Correct Adverse Conditions associated with Non-cited Violation 05000458/2011008-06
The inspectors identified a Green, non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, Corrective Action, which states, "Measures shall be established to assure that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and nonconformances are promptly identified and corrected." Specifically, the licensee failed to promptly correct a condition adverse quality by implementing compensatory measures to restore compliance with the standby service water system 30-day mission requirements pending NRC approval of a license amendment. On July 8, 2014, the licensee implemented compensatory measures to restore compliance to ensure a 30-day inventory in the standby service water system. This issue was entered into the corrective action program as Condition Report CR 2014 3212.

This performance deficiency was more than minor, and therefore a finding, because, if left uncorrected, it would lead to a more significant safety concern. Specifically, the licensee failed to implement compensatory measures to ensure the standby service water system would meet its 30-day mission requirement. In accordance with NRC Inspection Manual Chapter 0609, Attachment 4, “Initial Screening and Characterization of Findings,” the finding represented a loss of system safety function in that the ultimate heat sink could not meet its 30-day mission time to provide decay heat removal. Therefore, a detailed risk evaluation was necessary. An assessment was performed in accordance with Inspection Manual Chapter 0609, Appendix M, “Significance Determination Process Using Qualitative Criteria.” The finding was determined to be of very low safety significance (Green) because the frequency of events that would require long term use of the ultimate heat sink is very low and the difference in the failure probability to replenish the ultimate heat sink in 10 days versus 30 days is very small. This was because an early depletion of the inventory would be easily detected and would become a priority. At the time that replenishment would be needed, plant conditions should be stable and local transportation arteries should be restored. This finding has a cross-cutting aspect associated with evaluation in the area of problem identification and resolution because the licensee failed to thoroughly evaluate problems to ensure that resolutions address cause and extent of condition commensurate with their safety significance [P.2].
Inspection Report# : 2014007 *(pdf)*

Significance:  Jun 30, 2014
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Failure to Follow Tagging Clearance Instructions
The inspectors reviewed a self-revealing non-cited violation of Technical Specification 5.4.1.a., "Procedures," for the failure to adhere to procedural requirements to ensure that other fire suppression ring header valves are/are not correctly positioned. Specifically, on May 19, 2014, the licensee failed to follow the specified instructions in tagging clearance 1C16 / 251-001-O-FPW-P1A, to verify that there were no other ring header valves isolated before implementing the clearance, resulting in the inadvertent isolation of the fire protection ring header. The licensee entered this issue into their corrective action program as Condition Report CR-RBS-2014-02489.

The failure to follow procedures is a performance deficiency. The performance deficiency is more than minor and, therefore, a finding because it adversely impacted the protection against external factors attribute of the Mitigating System Cornerstone, in that the licensee isolated the fire suppression header to the majority of the plant for approximately 36 hours. Using NRC Inspection Manual Chapter 0609, Attachment 4, "Initial Characterization of Findings," dated June 19, 2012, the inspectors determined that the issue affected the Mitigating Systems Cornerstone and that the finding pertained to a degraded condition while the plant was in operation. As a result, the inspectors were directed to Inspection Manual Chapter 0609, Appendix F, "Fire Protection Significance Determination Process," dated September 20, 2013. The inspectors determined that Appendix F did not address the loss of the fire protection ring header to most of the facility and Appendix F, "Assumptions and Limitations," states "the SDP approach is intended to support the assessment of known issues only in the context of an individual fire area. A systematic plant-wide search and assessment effort is beyond the intended scope of the fire protection SDP." Therefore, a senior reactor analyst (SRA) performed a detailed risk evaluation. The total exposure period was 36 hours. The bounding change to the core damage frequency was 2E-7/year. The bounding change to the large early release frequency was 4E-8 per year. The finding was of very low safety significance (Green). The dominant core damage sequences included a fire-induced loss of offsite power, failure of operators to suppress the fire, and damage to Division I, II, and III components. The reactor core isolation cooling system and the short exposure period helped to minimize the risk. The finding has a cross-cutting aspect in the area of human performance associated with avoiding complacency because the licensee failed to recognize and plan for the possibility for mistakes and did not implement appropriate error reduction tools [H.12].
Inspection Report# : 2014003 *(pdf)*

Significance: G Apr 28, 2014
Identified By: NRC
Item Type: NCV NonCited Violation
Failure of the Plant Referenced Simulator to Demonstrate Expected Plant Response with Three Examples
Title 10 CFR Part 55.46(c)(1), "Plant-Referenced Simulators," states, in part, "A plant referenced simulator used for the administration of the operating test…must demonstrate expected plant response to operator input and to normal, transient, and emergency conditions to which the simulator has been designed." Contrary to this,

•Operators were unable to open the main steam isolation valves because the River Bend Station simulator did not correctly model the differential pressure across the main steam isolation valves. Because of this, the job performance measure had to be rejected and another developed. This modeling deficiency was entered into the licensee's corrective action program as Condition Report CR-RBS-2014-965.

•On multiple occasions, the River Bend Station simulator randomly initiated a main turbine runback when plant conditions did not warrant this action. After unsuccessful attempts were made to resolve this modeling deficiency, the applicants were briefed to ignore this event should it occur. This modeling deficiency was entered into the licensee's corrective action program as Condition Reports CR-RBS-2014-965 and CR-RBS-2014-1496.

•The River Bend Station simulator initiated a control rod drift during a scenario where plant conditions did not support this response. After identification, the licensee entered the issue into the licensee's corrective action program as Condition Report CR-RBS-2014-1496.

These failures of the plant-referenced simulator to demonstrate expected plant response during conditions to which the simulator has been designed to respond was a performance deficiency. The finding was more than minor because it is associated with the human performance attribute of the Mitigating Systems Cornerstone and adversely affected the cornerstone objective of ensuring availability, reliability, and capability of systems needed to respond to initiating events to prevent undesired consequences. Specifically, the incorrect simulator response could adversely affect the operating crew's ability to assess plant conditions and take actions in accordance with approved procedures. In accordance with NRC Inspection Manual Chapter 0609, "Significance Determination Process," Phase 1 Worksheets, and the associated Appendix I, "Licensed Operator Requalification Significance Determination Process (SDP)," Block 15, the finding was determined to be of very low safety significance because the deficient simulator performance did not negatively impact operator performance in the actual plant during a reportable event.

Following the operating test, it was discovered the modeling deficiencies were introduced as part of a simulator upgrade more than ten years ago and therefore, are not considered to be a reflection of current performance. The hardware failure associated with the main steam line pressure gauge was determined to have no actual operator impact and was not a generic training issue. Therefore, this finding has no cross-cutting aspect associated with it.
Inspection Report# : 2014301 *(pdf)*

Significance: G Mar 31, 2014
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Maintain Design Control for Performance Testing of the Control Building Chillers
The inspectors identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for failing to verify acceptable performance of the control building chillers. Specifically, station personnel failed to evaluate the increase in instrument uncertainty and increase in design basis accident heat loads in a calculation used to determine the thermal performance for control building chillers. The station's corrective actions included reanalyzing the performance calculation to account for the increased chiller loads and instrument uncertainty; revising the acceptance criteria used in the surveillance test procedures; and revising the surveillance test procedures to use

instruments of similar or better accuracy than the instruments used in the performance calculation. The licensee entered this issue into their corrective action program as Condition Reports CR-RBS-2013-07133 and CR-RBS-2013-7105.

The failure to evaluate the decrease in temperature accuracy in measuring chilled water and service water temperatures, and evaluate the increase in control building heat loads in the performance calculation to ensure that the chiller capacity acceptance criteria stated in the surveillance test procedures was acceptable, was a performance deficiency. The performance deficiency was more than minor, and therefore a finding, because if left uncorrected the performance deficiency would have the potential to lead to a more significant safety concern. Specifically, station personnel used incorrect assumptions in the performance calculation that created a reasonable doubt of the operability of the Divisions 1 and 2 control building chillers. In addition, the potential existed that in future testing the as-left instrument uncertainty plus the design basis load could exceed the chiller's load capacity. The inspectors determined the finding to be of very low safety significance (Green) in accordance with Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process for Findings At-Power," dated June 19, 2012. Using Exhibit 2, which contains the screening questions for the Mitigating Systems Cornerstone, the inspectors determined that the finding screened as Green because it was not a deficiency affecting the design or qualification deficiency; it did not represent a loss of system or function; it did not represent the loss of function for any technical specification system, train, or component beyond the allowed technical specification outage time; it did not represent an actual loss of function of any non technical specification trains of equipment designated as high safety-significant; and it did not screen as potentially risk-significant due to a seismic, flooding, or severe weather initiating event. These performance deficiencies occurred in 2003 and 2009 and therefore are not indicative of current licensee performance.
Inspection Report# : 2014002 *(pdf)*

Significance: G Mar 31, 2014
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Assess and Manage Risk for Electrical Switchyard Impacting Maintenance
The inspectors identified a non-cited violation of 10 CFR 50.65(a)(4), "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants." Specifically, on February 12, 2014, the licensee failed to correctly assess and manage the increase in risk associated with work in the station's Fancy Point electrical switchyard. Corrective actions included reevaluating risk for the time period and issuing interim guidance on planning and evaluating the risk of switchyard work. The station planned to revise the OSP-0048 procedure to include the interim guidance. The licensee entered this issue into their corrective action program as Condition Report CR-RBS-2014-01221.

The failure to perform an adequate risk assessment and implement appropriate risk management actions was a performance deficiency. The inspectors used Inspection Manual Chapter 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, to determine that the performance deficiency was more than minor, and therefore a finding, 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). Manual Chapter 0609, Attachment 4, directs the inspectors to Appendix K for Maintenance Risk Assessment issues. The inspector used NRC Inspection Manual Chapter 0609, Appendix K, "Maintenance Risk Assessment and Risk Management Significance Determination Process," dated May 19, 2005. The licensee provided "Risk Assessment Related to CR-RBS-2014-1220/-1221 Switchyard Work," dated March 31, 2014. The exposure period was 20 hours. The licensee identified the risk deficit as 2.6E-8/year. Since the risk deficit was less than 1E-6, the finding was of very low safety significance (Green). This finding was not significant to the large early release frequency. The apparent cause of the finding involved the failure to fill a position to act as a point of contact for switchyard work management for a period of four months due to the station's staffing reorganization. Therefore, this finding has a cross cutting aspect in the area of human performance associated with change in management because

the licensee failed to effectively transition the switchyard point-of-contact position through the staff reorganization [H.3].
Inspection Report# : 2014002 *(pdf)*

Significance: G Mar 31, 2014
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Adequately Control Design Basis Documents for the Emergency Diesel Generators
The inspectors identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," involving the licensee's failure to correctly translate the design basis for the diesel fuel oil transfer system into specifications, drawings, procedures, and instructions. Specifically, the station confirmed through calculations that the emergency diesel generator fuel oil transfer system could not perform its seven day mission time to provide filtered fuel oil to emergency diesel generators at the Technical Specification maximum allowable value for fuel oil particulates, with the number of filters available on site. In response to this issue, the licensee verified that the diesel fuel oil particulate level had never approached the technical specification limit; therefore, operability of the emergency diesel generators was never challenged. This finding was entered into the licensee's corrective action program as Condition Report CR-RBS-2013-04780.

The failure to translate into specifications, drawings, procedures, and instructions, the diesel fuel oil transfer system limitations to perform its seven day mission time associated with the number of filters available on site was a performance deficiency. The performance deficiency was more than minor, and therefore a finding, because it was associated with Mitigating Events Cornerstone attribute of Design Control, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. In accordance with Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," dated June 19, 2012, Exhibit 2, "Mitigating Systems Screening Questions," the finding screened as having very low safety significance (Green) because it was not a design or qualification deficiency that represented a loss of operability or functionality; did not represent an actual loss of safety function of the system or train; did not result in the loss of one or more trains of non-technical specification equipment; and did not screen as potentially risk significant due to seismic, flooding, or severe weather. The inspectors determined that this finding did not have a cross-cutting aspect because the most significant contributor did not reflect current licensee performance.
Inspection Report# : 2014002 *(pdf)*

Significance: G Mar 31, 2014
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Promptly Correct a Degraded Emergency Diesel Generator Voltage Regulator
The inspectors identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for failure to promptly correct a degraded voltage regulator in the Division 3 emergency diesel generator. Specifically, the station failed to use operating experience in a timely manner, which resulted in the lockout of the Division 3 emergency diesel generator output breaker. The station replaced the voltage regulator to correct this condition. The licensee entered this issue into their corrective action program as Condition Report CR-RBS-2013-06789.

The inspectors determined that the failure of the licensee to promptly correct the cause of erratic KVAR/voltage output from the Division 3 emergency diesel generator is a performance deficiency. The performance deficiency is more than minor, and therefore a finding, because it is associated with the Mitigating Systems Cornerstone attribute of equipment performance 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 used the NRC Inspection Manual 0609, Appendix A, Exhibit 2, "Mitigating Systems Screening Questions."

The finding required a detailed risk evaluation because it involved a potential loss of one train of safety related equipment for longer than the technical specification allowed outage time. The total exposure period was 20.3 days. The allowed outage time was 72 hours. The analyst determined the change to the core damage frequency was 1.6E-7/year (Green). The finding was of very low safety significance (Green). The dominant core damage sequences included loss of offsite power events leading to station blackout. Equipment that helped mitigate the risk included recovery of an emergency diesel generator or offsite power. The finding was not a significant contributor to the large early release frequency (LERF). The cause of the performance deficiency appeared to be the ineffective use of industry operating experience. Therefore, the finding had a cross cutting aspect in the area of problem identification and resolution, associated with the operating experience component because the licensee failed to systematically and effectively collect, evaluate, and implement relevant internal and external operating experience in a timely manner [P.5].
Inspection Report# : 2014002 *(pdf)*

Significance: G Dec 30, 2013
Identified By: NRC
Item Type: VIO Violation
Failure to Resolve Noncompliances Associated with Multiple Spurious Operations in a Timely Manner
The team identified a Green violation of License Condition 2.C.(10) for the failure to implement and maintain in effect all provisions of the approved fire protection program associated with multiple spurious operations concerns. Specifically, the licensee failed to implement all of the required corrective actions for multiple spurious operations concerns prior to November 2, 2012, which marked the expiration of enforcement discretion for multiple spurious operations contained in Enforcement Guidance Memorandum 09-002. The licensee entered this issue into their corrective action program as Condition Report CR-RBS-2013-03465.

The failure to implement all of the required corrective actions for multiple spurious operations concerns in a timely manner was a performance deficiency. The performance deficiency was more than minor because it was associated with the protection against external events (fire) attribute of the Mitigating Systems Cornerstone and it adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The team evaluated this finding using Inspection Manual Chapter 0609, Appendix F, “Fire Protection Significance Determination Process,” dated September 20, 2013, because it affected the ability to reach and maintain safe-shutdown conditions in case of a fire. A senior reactor analyst performed a Phase 3 evaluation to determine the risk significance of this finding since it involved multiple fire areas. The senior reactor analyst determined this finding was of very low safety significance (Green).

The finding had a cross-cutting aspect in the Work Practices component of the Human Performance area because the licensee failed to ensure supervisory and management oversight of work activities, including contractors, such that nuclear safety was supported [H.4(c)].

Inspection Report# : 2013007 *(pdf)*

Significance: G Dec 30, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Alternative Shutdown Procedure
The team identified a Green non-cited violation of Technical Specification 5.4.1.d for the failure to implement and maintain adequate written procedures covering fire protection program implementation. Specifically, the licensee failed to maintain an alternative shutdown procedure that ensured operators could safely shutdown the plant under all postulated control room fire scenarios. The licensee entered this issue into their corrective action program as Condition Report CR-RBS-2013-03150.

The failure to maintain adequate written procedures covering fire protection program implementation was a performance deficiency. The performance deficiency was more than minor because it was associated with the procedure quality attribute of the Mitigating Systems Cornerstone and it adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The team evaluated this finding using Inspection Manual Chapter 0609, Appendix F, "Fire Protection Significance Determination Process," dated September 20, 2013, because it affected the ability to reach and maintain safe-shutdown conditions in case of a fire. A senior reactor analyst performed a Phase 3 evaluation to determine the risk significance of this finding since it involved a postulated control room fire that led to control room evacuation. The senior reactor analyst determined this finding was of very low safety significance (Green).

The finding did not have a cross-cutting aspect since it was not indicative of present performance in that the performance deficiency occurred more than three years ago.
Inspection Report# : 2013007 *(pdf)*

Significance: G Dec 30, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Properly Calculate the Time Available for Operator Actions
The team identified a Green non-cited violation of License Condition 2.C.(10) for the failure to implement and maintain in effect all provisions of the approved fire protection program. Specifically, the licensee failed to properly calculate the amount of time available for operators to perform time critical actions for all control room fire scenarios. The licensee entered this issue into their corrective action program as Condition Report CR-RBS-2013-03472.

The failure to properly calculate the amount of time available for operators to perform time critical actions for all control room fire scenarios was a performance deficiency. The performance deficiency was more than minor because it was associated with the protection against external events (fire) attribute of the Mitigating Systems Cornerstone and it adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The team evaluated this finding using Inspection Manual Chapter 0609, Appendix F, "Fire Protection Significance Determination Process," dated September 20, 2013, because it affected the ability to reach and maintain safe-shutdown conditions in case of a fire. A senior reactor analyst performed a Phase 3 evaluation to determine the risk significance of this finding since it involved a postulated control room fire that led to control room evacuation. The senior reactor analyst determined this finding was of very low safety significance (Green).

The finding had a cross-cutting aspect in the Decision Making component of the Human Performance area because the licensee failed to use conservative assumptions in decision-making when applying the guidance for control room fires contained in the safe-shutdown analysis [H.1(b)].
Inspection Report# : 2013007 *(pdf)*

Significance: G Dec 30, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Maintain Communication Systems Required for Alternative Shutdown Scenarios
The team identified a Green non-cited violation of License Condition 2.C.(10) for the failure to implement and maintain in effect all provisions of the approved fire protection program. Specifically, the licensee failed to ensure that the communications systems would work under all postulated control room fire scenarios. The licensee entered this issue into their corrective action program as Condition Reports CR RBS 2013-03243 and CR-RBS-2013-03397.

The failure to ensure that the communications systems would work under all postulated control room fire scenarios was a performance deficiency. The performance deficiency was more than minor because it was associated with the protection against external events (fire) attribute of the Mitigating Systems Cornerstone and it adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The team evaluated this finding using Inspection Manual Chapter 0609, Appendix F, "Fire Protection Significance Determination Process," dated September 20, 2013, because it affected the ability to reach and maintain safe-shutdown conditions in case of a fire. A senior reactor analyst performed a Phase 3 evaluation to determine the risk significance of this finding since it involved a postulated control room fire that led to control room evacuation. The senior reactor analyst determined this finding was of very low safety significance (Green).

The finding had a cross-cutting aspect in the Work Practices component of the Human Performance area because the licensee failed to ensure supervisory and management oversight of work activities, including contractors, such that nuclear safety was supported [H.4(c)].
Inspection Report# : 2013007 *(pdf)*

Significance: G Dec 30, 2013
Identified By: NRC
Item Type: FIN Finding
Failure to Implement the Engineering Change Process for Appendix R Lighting
The team identified a Green finding for the failure to properly implement the engineering change process. Specifically, the licensee failed to update the Maintenance Rule program and perform the required preventive maintenance tasks after the addition of three 8-hour Appendix R emergency lights. During subsequent discharge testing, two of the three lights failed. The licensee entered this issue into their corrective action program as Condition Reports CR-RBS-2013-03118 and CR-RBS-2013-03273.

The failure to properly implement the engineering change process was a performance deficiency. The performance deficiency was more than minor because it was associated with the protection against external events (fire) attribute of the Mitigating Systems Cornerstone and it adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The team evaluated this finding using Inspection Manual Chapter 0609, Appendix F, "Fire Protection Significance Determination Process," dated September 20, 2013, because it affected the ability to reach and maintain safe-shutdown conditions in case of a fire. The team assigned the finding a low degradation rating since the ability to reach and maintain safe-shutdown conditions in the event of a control room fire would be minimally impacted by the failure of the three emergency lights to function for 8-hours. Specifically, the team determined that the alternative shutdown procedure provided operators with an alternate method of verifying that the emergency diesel generator breaker was closed. Because this finding had a low degradation rating, it screened as having very low safety significance (Green).

The finding did not have a cross-cutting aspect since it was not indicative of present performance in that the performance deficiency occurred more than three years ago.
Inspection Report# : 2013007 *(pdf)*

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Significance: G Sep 30, 2014
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Provide Positive Exposure Control Within a Locked High Radiation Area
The inspectors identified a non-cited violation of Technical Specification 5.7.2 because a radiation protection technician did not provide positive exposure control to workers entering an area with dose rates greater than 1,000 millirem/hour. Radiation protection representatives removed the workers' radiological controlled area access privileges, counseled the workers, conducted a stand-down meeting, and performed an apparent cause evaluation.

The failure to provide positive control to workers entering an area with dose rates greater than 1,000 millirem/hour is a performance deficiency. The significance of the performance deficiency was more than minor because it was associated with an Occupational Radiation Safety cornerstone attribute (exposure control) and adversely affected the associated cornerstone objective because it allowed workers to be exposed to higher-than-planned radiation dose rates. The violation had very low safety significance because: (1) it was not an as low as is reasonably achievable finding because a collective dose threshold was not challenged, (2) there was no overexposure, (3) there was no substantial potential for an overexposure, and (4) the ability to assess dose was not compromised. This violation has a cross-cutting aspect in the human performance area, associated with avoiding complacency, because the radiation protection technician did not recognize and plan for the possibility of mistakes by the operators in identifying the correct valve to tag, and the inherent risk of the operators entering an unsurveyed area [H.12].
Inspection Report# : 2014004 *(pdf)*

Public Radiation Safety

Significance: G Dec 31, 2013
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Failure to Perform a Survey on Water Leak
IInspectors reviewed a self-revealing non-cited violation of 10 CFR 20.1501(a) because the licensee failed to perform radiation surveys to evaluate radiological conditions associated with a 5 gallons per minute water leak to ensure compliance with 10 CFR 20.1406(c). The leak continued for approximately five months before a radiological survey was completed that identified the leak source to be the circulating water blowdown system which contained liquid radioactive waste. This issue was entered into the corrective action program as Condition Report CR-RBS-2013-02400.

The failure to perform a timely radiological survey was a performance deficiency. The finding was more than minor because if left uncorrected it could have led to a more significant concern. If not for the outage, the unidentified releases would have continued depositing radioactivity onsite and into the environment. Using NRC Manual Chapter 0609, Appendix D, "Public Radiation Safety Significance Determination Process," issued February 12, 2008, the finding was determined to be of very low safety significance because it was not a failure to implement an effluent program and public dose was not greater than Appendix I criteria or 10 CFR 20.1301(e). The finding had a cross-cutting aspect associated with the problem identification and resolution component because the licensee did not thoroughly evaluate the source of the leak in a timely manner [P.1(c)].

Inspection Report# : 2013005 *(pdf)*

Significance: N/A Dec 31, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Periodically Update the UFSAR
The inspectors identified two examples of a Severity Level IV non-cited violation of 10 CFR 50.71(e) for failure to update the Updated Safety Analysis Report. Specifically, the licensee failed to adequately describe the Low-Level Radwaste Storage Facility and the Independent Spent Fuel Storage Installation in the Updated Safety Analysis Report in accordance with Regulatory Guide 1.70, Revision 3. The licensee entered the issue into their corrective action program as Condition Report CR-RBS-2013-07265.

The failure to update the Updated Safety Analysis Report to reflect changes made to the facility was a violation of regulatory requirements of 10 CFR 50.71(e), "Maintenance of Records, Making of Reports." This issue was evaluated using traditional enforcement because it had the potential to impact the NRC's ability to perform its regulatory function. The issue was characterized as a Severity Level IV violation in accordance with Section 6.1.d.3 of the NRC Enforcement Policy, issued January 28, 2013, because the erroneous information in the Updated Safety Analysis Report was not used to make an unacceptable change to the facility or procedures. Since this issue was dispositioned using traditional enforcement, there is no cross-cutting aspect.

Inspection Report# : 2013005 *(pdf)*

Security

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page. Therefore, the cover letters to security inspection reports may be viewed.

Miscellaneous

Last modified : November 26, 2014