Fort Calhoun
4Q/2014 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance: W Oct 16, 2014
Identified By: NRC
Item Type: VIO Violation
Failure to Correctly Translate Design Requirements into Installed Plant Configuration
The team identified a violation of 10 CFR Part 50, Appendix B, Criterion III, “Design Control,” associated with the licensee’s failure to assure that applicable regulatory requirements and the design bases, as defined in 10 CFR 50.2 and as specified in the license application, for those structure, systems and components to which this appendix applies, were correctly translated into specifications, drawings, procedures, and instructions. Specifically, from initial construction through October 2013, the licensee failed to fully incorporate applicable design requirements for components needed to ensure the capability to shut down the reactor and maintain it in a safe shutdown condition following a high energy line break. The licensee addressed this deficiency by reconstituting the design analysis associated with the high energy line break and environmental qualification programs, receiving a change to the facilities licensing basis, and implementing plant modifications. This issue was entered into the licensee’s corrective action program as Condition Report CR 2013-2857.
The failure to ensure that design requirements were correctly translated into installed plant equipment was a performance deficiency. This performance deficiency was more than minor, and therefore a finding, because it is associated with the equipment performance attribute of the Mitigating Systems Cornerstone and affected the associated objective to ensure availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the licensee’s failure to translate the design requirements into installed plant equipment resulted in a condition where structures, systems, and components necessary to mitigate the effects of a high energy line break may not have functioned as required. The team evaluated the finding using Inspection Manual Chapter (IMC) 0609, Appendix A, “The Significance Determination Process (SDP) for Findings At-Power,” dated June 19, 2012, and determined that this finding required a detailed risk evaluation because it was a deficiency affecting the design and qualification of a mitigating structure, system, or component that resulted in a loss of operability or functionality and represented a loss of system and/or function.
The Region IV senior reactor analyst performed a detailed risk evaluation in accordance with Appendix A, Section 6.0, “Detailed Risk Evaluation.” The detailed risk evaluation concluded the finding was best characterized as having low to moderate safety significance (White). The minimum calculated change in core damage frequency of 4.1 x 10-6 was dominated by a reactor coolant pump seal cooler loss of coolant accident followed by the failure of four containment isolation valves that were not properly qualified for a harsh environment. The upper bound was shown quantitatively and/or qualitatively to be less than 1.0 x 10-5. The analyst determined that the finding did not affect the external events initiator risk and would not involve a significant increase in the risk of a large early release of radiation.
The team determined that this finding does not have a cross-cutting aspect because the most significant contributor of this finding would have occurred more than three years ago, and therefore, does not reflect current licensee performance.
Inspection Report# : 2013018 *(pdf)*

Significance: G Oct 16, 2014
Identified By: NRC
Item Type: NCV Non-Cited Violation
Use of Non-conservative Values in Design Analyses
The team identified two examples of a non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," associated with non-conservative errors identified in station calculations. Specifically, the licensee failed to use the yield strength for the most limiting type steel installed in the facility when evaluating changes to the chemical and volume control system, and failed to ensure that the acceptance criteria used for seismic anchors and supports verified that they were within the design requirements. The licensee performed an operability determination for the affected areas that established a reasonable expectation for operability pending final resolution of the problems. This issue was entered into the licensee's corrective action program as Condition Report CR 2013-2857.
The use of non-conservative values in station design analyses is a performance deficiency. This performance deficiency was more than minor, and therefore a finding, because it is associated with the design control attribute of the Mitigating Systems Cornerstone and affected the associated objective to ensure availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the licensee's use of non-conservative yield strength to analyze the pipe break loads during a high energy line break resulted in a condition where structures, systems, and components necessary to mitigate the effects of a high energy pipe break may not have functioned as required. Additionally, the failure to use appropriate acceptance criteria resulted in a condition where structures, systems and components may not have functioned as designed during a seismic event. Using Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," Exhibit 2, "Mitigating Systems Screening Questions," dated July 1, 2012, the inspectors determined that the finding was of very low safety significance (Green) because the finding: (1) was not a deficiency affecting the design and qualification of a mitigating structure, system, or component, and did not result in a loss of operability or functionality; (2) did not represent a loss of system and/or function; (3) did not represent an actual loss of function of at least a single train for longer than its allowed outage time, or two separate safety
systems out-of-service for longer than their technical specification allowed outage time; and (4) does not represent an actual loss of function of one or more non-technical specification trains of equipment designated as high safety-significant for greater than 24 hours in accordance with the licensee's maintenance rule program. The finding has a cross-cutting aspect in the area of human performance associated with the resources component because the licensee failed to maintain long term plant safety by maintenance of design margins. Specifically, Calculation FC 07885 failed to use the most limiting yield strength when determining potential pipe break loads which resulted in a reduction of design margin.
Inspection Report# : 2013018 *(pdf)*

Significance: G Oct 16, 2014
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Furnish Evidence of Activities Affecting Quality
The team identified three examples of a non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVII, "Quality Assurance Records," associated with the licensee's failure to furnish evidence of an activity affecting quality. Specifically, the licensee failed to maintain records demonstrating that: the temperature limits for structural concrete in the Auxiliary building would not be exceeded during a high energy line break event, that the predicted flood level in Room 81 during a high energy line break event would not affect required equipment, and that electrical splices inside of the containment were installed in accordance with the plant and the vendor installation instructions. The licensee performed an operability determination for the deficiencies that established a reasonable expectation for operability pending final resolution of the problems. The licensee entered these deficiencies into their corrective action program for resolution as Condition Reports CR 2013-22556, and CR 2013-12359.
The licensee's failure to furnish evidence of completing analyses or maintaining records for the flood level in Room 81 during a high energy line break event, the structural concrete temperatures in the Auxiliary building, and electrical

splice installations, is a performance deficiency. This performance deficiency was determined to be more than minor, and therefore a finding, because it was associated with the design control attribute of the Mitigating Systems Cornerstone, and affected the associated cornerstone objective to ensure availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Using Inspection Manual Chapter 0609, Appendix A, "Initial Screening and Characterization of Findings," dated July 1, 2012, the inspectors determined that the finding was of very low safety significance (Green) because the finding: (1) was not a deficiency affecting the design and qualification of a mitigating structure, system, or component, and did not result in a loss of operability or functionality; (2) did not represent a loss of system and/or function; (3) did not represent an actual loss of function of at least a single train for longer than its technical specification allowed outage time, or two separate safety systems out-of-service for longer than their technical specification allowed outage time; and (4) does not represent an actual loss of function of one or more non-technical specification trains of equipment designated as high safety-significant for greater than 24 hours in accordance with the licensee's maintenance rule program. The team determined that this finding does not have a cross-cutting aspect because the most significant contributor of this finding would have occurred more than three years ago, and therefore, does not reflect current licensee performance.
Inspection Report# : 2013018 *(pdf)*

Significance: G Oct 16, 2014
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Promptly Identify and Correct Inadequate Internal Flooding Analysis
The team identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Actions," associated with the licensee's failure to adequately evaluate and take prompt corrective actions to address an identified condition adverse to quality related to the internal flooding analysis for Room 81 of the Auxiliary building. Specifically, the team could not locate the analyses for water level in Room 81 following a high energy line break in the room. This deficiency had previously been identified by the licensee and entered into its corrective action program, however, it was improperly closed without completing the analysis. The licensee performed operability assessments for the affected areas that established a reasonable expectation for operability pending final resolution of the problems. The licensee entered this deficiency into their corrective action program for resolution as Condition Report CR 2013-11831.
The licensee's failure to adequately evaluate and take prompt corrective actions to address an identified condition adverse to quality related to the internal flooding analysis for Room 81 was a performance deficiency. 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 affected the associated objective to ensure availability, reliability, and capability of systems that responds to initiating events to prevent undesirable consequences. Specifically, the licensee failed to take prompt corrective actions to address an identified condition adverse to quality related to the internal flooding analysis for Room 81 of the Auxiliary building. Using Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," Exhibit 2, "Mitigating Systems Screening Questions," dated July 1, 2012, inspectors determined that the finding was of very low safety significance (Green) because the finding: (1) was not a deficiency affecting the design and qualification of a mitigating structure, system, or component, and did not result in a loss of operability or functionality; (2) did not represent a loss of system and/or function; (3) did not represent an actual loss of function of at least a single train for longer than its allowed outage time, or two separate safety systems out-of-service for longer than their technical specification allowed outage time; and (4) does not represent an actual loss of function of one or more non-technical specification trains of equipment designated as high safety-significant for greater than 24 hours in accordance with the licensee's maintenance rule program. The finding has a cross-cutting aspect in the area of problem identification and resolution associated with the corrective action program component because the licensee failed to thoroughly evaluate problems such that the resolutions address the causes.
Inspection Report# : 2013018 *(pdf)*

Significance: G Oct 16, 2014
Identified By: NRC
Item Type: NCV Non-Cited Violation
Use of Non-Conservative Inputs in Thermal Lag Analyses
The team identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," involving the failure to use conservative inputs. Specifically, the licensee failed to verify that all inputs used in the thermal lag analysis for the environmental qualification program were representative of the most limiting condition. The licensee performed an operability determination for the affected areas that established a reasonable expectation for operability pending resolution of the problems. The licensee entered this deficiency into their corrective action program for resolution as Condition Report CR 2013-14504, and CR 2013-14168.
The failure to verify that all inputs used in the thermal lag analysis for the environmental qualification program were representative of the most limiting condition was a performance deficiency. 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 affected the associated objective to ensure availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the performance deficiency called into question the availability and reliability of components required to mitigate the effects of a high energy line break. Using Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," Exhibit 2, "Mitigating Systems Screening Questions," dated July 1, 2012, inspectors determined that the finding was of very low safety significance (Green) because the finding: (1) was not a deficiency affecting the design and qualification of a mitigating structure, system, or component, and did not result in a loss of operability or functionality; (2) did not represent a loss of system and/or function; (3) did not represent an actual loss of function of at least a single train for longer than its allowed outage time, or two separate safety systems out-of-service for longer than their technical specification allowed outage time; and (4) does not represent an actual loss of function of one or more non-technical specification trains of equipment designated as high safety-significant for greater than 24 hours in accordance with the licensee's maintenance rule program. The team determined this finding has a cross-cutting aspect in the area of human performance associated with the decision-making component involving the failure to use conservative assumptions in decision-making and adopt a requirement to demonstrate that the proposed action is safe in order to proceed rather than a requirement to demonstrate it is unsafe in order to disapprove the action.
Inspection Report# : 2013018 *(pdf)*

Significance: G Oct 16, 2014
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Recognize Adverse Design Changes
The team identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," associated with the licensee's failure to maintain design control of the auxiliary feedwater system. Specifically, the licensee implemented a modification to the facility that placed vent holes in the steam supply line guard piping for the steam driven auxiliary feedwater pump which were located below the evaluated flood height in Room 81 and potentially rendered the pump inoperable. The licensee implemented a facility modification to protect the vent holes from water intrusion. The licensee entered this deficiency into their corrective action program for resolution as Condition Reports CR 2013-18308 and CR 2013-18605.
The failure to ensure that design requirements were correctly translated into installed plant equipment was a performance deficiency. 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 affected the associated objective to ensure availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the licensee's failure to translate the design requirements into installed plant equipment resulted in a condition where the steam driven auxiliary feedwater pump may not have been able to perform its specified safety function. The team evaluated the finding using Inspection Manual Chapter (IMC) 0609, Appendix A, "The Significance Determination Process (SDP) for Findings at Power," dated June 19, 2012, and

determined that this finding required a detailed risk evaluation because the turbine driven auxiliary feedwater pump was inoperable for longer than the technical specification allowed outage time. A regional senior reactor analyst performed a detailed risk evaluation and determined this finding to be of very low safety significance (Green) because the bounding change to the core damage frequency was approximately 1.2E-9/year. The dominant core damage sequences included feedwater and main steam line breaks with the consequential failure of the turbine driven auxiliary feedwater pump combined with other random failures of Train A and B equipment trains. Equipment that helped mitigate the risk included the diesel driven and motor-driven auxiliary feedwater pumps, which remained functional for the vast majority of sequences. This finding has a cross-cutting aspect in the area of human performance associated with the decision-making component because the licensee failed to use conservative assumptions in decision-making and adopt a requirement to demonstrate that the proposed action is safe in order to proceed rather than a requirement to demonstrate it is unsafe in order to disapprove the action.
Inspection Report# : 2013018 *(pdf)*

Significance: G Oct 16, 2014
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Maintain Design Control of the Auxiliary Feedwater System
The team identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, “Design Control,” associated with the licensee’s failure to maintain design control of the auxiliary feedwater system. Specifically, the licensee implemented a modification to the facility that involved the installation of flood barriers surrounding the guard pipes and portions of the steam driven auxiliary feedwater pump steam supply lines that are below the evaluated flood height in Room 81. This modification would have acted like a catch basin and potentially caused the steam driven auxiliary feedwater pump (FW-10) to be inoperable during a high energy line break event. The licensee implemented a facility modification to protect the steam supply piping and vent holes from water intrusion. The licensee entered this deficiency into their corrective action program for resolution as Condition Report CR 2013-22770.
The failure to maintain design control of the auxiliary feedwater system was a performance deficiency. 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 affected the associated objective to ensure availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the flood barrier installed only protected the FW-10 steam supply from flood waters rising from the floor; however, this water is postulated from a high energy line break, which would both spill onto the floor and spray into Room 81 without regard for direction. This resulted in a condition where the steam driven auxiliary feedwater pump may not have been able to perform its specified safety function. The team evaluated the finding using Inspection Manual Chapter (IMC) 0609, Appendix A, “The Significance Determination Process (SDP) for Findings at Power,” dated June 19, 2012, and determined that this finding required a detailed risk evaluation because the turbine driven auxiliary feedwater pump was inoperable for longer than the technical specification allowed outage time. A regional senior reactor analyst performed a detailed risk evaluation and determined that the finding was of very low safety significance (Green) because the bounding change to the core damage frequency was approximately 1.2E-9/year. The dominant core damage sequences included feedwater and main steam line breaks with the consequential failure of the turbine driven auxiliary feedwater pump combined with other random failures of Train A and B equipment trains. Equipment that helped mitigate the risk included the diesel driven and motor-driven auxiliary feedwater pumps, which remained functional for the vast majority of sequences. The finding was determined to have a cross-cutting aspect in the area of problem identification and resolution associated with the corrective action component because the licensee did not take appropriate corrective actions to address safety issues, in that, an additional modification was required to protect the FW-10 steam supply from the effects of a high energy line crack or break.
Inspection Report# : 2013018 *(pdf)*

Significance: G Sep 30, 2014

Identified By: NRC
Item Type: FIN Finding
Failure to Implement Procedural and Alarm Setpoint Changes in Support of an Operability Evaluation
The inspectors identified a Green finding for the licensee's failure to implement procedural changes and water level alarm setpoint changes relied upon by operators to initiate compensatory actions to maintain the operability of raw water pump AC-10C. The licensee subsequently implemented these changes.
The performance deficiency is more than minor because it is related to the Equipment Performance attribute of the Mitigating Systems cornerstone and adversely affected the cornerstone objective to ensure the reliability of systems that respond to initiating events to prevent undesirable consequences, in that the failure to implement the required procedure and setpoint changes increased the likelihood that the affected raw water pump cable would become inoperable after significant rainfall or flooding. The inspectors performed an initial screening of the finding in accordance with NRC Manual Chapter IMC 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." Using IMC 0609, Appendix A, Exhibit 2, "Mitigating Systems Screening Questions," dated July 1, 2012, this finding is of very low safety significance (Green) because it: (1) was not a deficiency affecting the design or qualification of a mitigating system; (2) did not represent a loss of system and/or function; (3) did not represent an actual loss of function of a single train for greater than its technical specification allowed outage time; and (4) does not represent an actual loss of function of one or more non-technical specification trains of equipment designated as high safety-significant in accordance with the licensee's maintenance rule program for greater than 24 hours. The finding has a cross-cutting aspect in the Human Performance area associated with the Avoiding Complacency aspect because operators did not recognize and plan for the possibility of mistakes and assumed that the necessary procedural and alarm setpoint changes had been made.
Inspection Report# : 2014004 *(pdf)*

Significance: G Sep 30, 2014
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Maintain a Testing Program for the CS System (Section 1R15)
The inspectors identified a Green non-cited violation of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control," because the licensee failed to ensure that a surveillance test program was sufficient to demonstrate that the containment spray (CS) system would perform satisfactorily in service. Specifically, from February, 2014, to September, 2014, the licensee failed on several occasions to adequately adjust the frequency of testing for gas voids in the CS system upon identification of gas voids beyond acceptance criteria. Consequently, the test monitoring frequency did not ensure operability of the CS system between tests. Subsequently, the licensee increased the CS monitoring frequency.

The performance deficiency is more than minor because it is associated with the Equipment Performance attribute of the Mitigating Systems cornerstone and adversely affected the cornerstone objective to ensure the reliability of systems that respond to initiating events to prevent undesirable consequences. The inspectors performed an initial screening of the finding in accordance with NRC Manual Chapter IMC 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." Using IMC 0609, Appendix A, Exhibit 2, "Mitigating Systems Screening Questions," dated July 1, 2012, this finding is of very low safety significance (Green) because it: (1) was not a deficiency affecting the design or qualification of a mitigating system; (2) did not represent a loss of system and/or function; (3) did not represent an actual loss of function of a single train for greater than its technical specification allowed outage time; and (4) does not represent an actual loss of function of one or more non-technical specification trains of equipment designated as high safety-significant for greater than 24 hours in accordance with the licensee's maintenance rule program. The finding has a cross-cutting aspect in the Problem Identification and Resolution area and the Trending aspect because the licensee failed to trend and analyze information from the corrective action program and other assessments in the aggregate to identify programmatic and common cause issues.
Inspection Report# : 2014004 *(pdf)*

Significance: G Sep 30, 2014
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Verify the Adequacy of the Design of the FO-10 to FO-1 Fuel Oil Transfer System
The inspectors identified a Green non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control." because the licensee did not implement design-control measures commensurate with those applied to the original design when they implemented a system modification to the emergency diesel generator's (EDG's) fuel oil transfer systems. Specifically, in 1991, the licensee did not implement the design change or modification process when they placed an auxiliary boiler underground fuel oil storage tank fuel oil transfer system into service to meet the support function of transferring sufficient fuel to meet the mission time of the EDG's safety function. The licensee has scheduled a design review of this modification.
The performance deficiency is more than minor because it is associated with the Design Control attribute of the Mitigating Systems cornerstone and adversely affected the cornerstones objective to ensure the reliability of systems that respond to mitigating events to prevent undesirable consequences. Despite not performing a design review of this modification, no loss of the fuel oil transfer system function occurred. The inspectors performed an initial screening of the finding in accordance with NRC Manual Chapter IMC 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." Using IMC 0609, Appendix A, Exhibit 2, "Mitigating Systems Screening Questions," dated July 1, 2012, this finding is of very low safety significance (Green) because it: (1) was not a deficiency affecting the design or qualification of a mitigating system; (2) did not represent a loss of system and/or function; (3) did not represent an actual loss of function of a single train for greater than its technical specification allowed outage time; and (4) does not represent an actual loss of function of one or more non-technical specification trains of equipment designated as high safety-significant for greater than 24 hours in accordance with the licensee's maintenance rule program. The finding does not have a cross-cutting aspect because the failure to implement the design change verification process is not indicative of current licensee performance. The licensee's current design change procedures require design reviews of this type of in-field modification.
Inspection Report# : 2014004 *(pdf)*

Significance: G Sep 12, 2014
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Initiate Condition Reports for Gaps Identified in Resolving NRC Non-Cited Violations
A non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instruction, Procedures, and Drawings," was identified involving the failure to follow procedures to initiate condition reports to enter conditions adverse to quality into the corrective action program. Specifically, the licensee failed to initiate condition reports in accordance with Procedure FCSG 24-1, "Condition Report Initiation," Step 4.1.1.G, when deficiencies related to the station's corrective actions implemented for NRC violations were identified. The licensee entered this issue into its corrective action program as Condition Report 2014-09063 and initiated action to write condition reports for identified gaps related to previous NRC violations.

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. The team performed an initial screening of the finding in accordance with NRC Manual Chapter IMC 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." Using IMC 0609 Appendix A, Exhibit 2, "Mitigating Systems Screening Questions," dated July 1, 2012, this finding was of very low safety significance (Green) because it did not involve a loss or degradation of equipment or function specifically designed to mitigate a seismic, flooding, or severe weather initiating event. This finding has a cross-cutting aspect in the area of human performance because the licensee elected to use an informal system to resolve these issues rather than the corrective action program.
Inspection Report# : 2014009 *(pdf)*

Significance: G Sep 12, 2014
Identified By: NRC
Item Type: NCV Non-Cited Violation
Multiple Examples of Failure to Evaluate Operability of Degraded or Non-Conforming Conditions
Multiple examples of a non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified involving the failure to follow Procedure OP-FC-108-115, "Operability Determinations," Revision 0a. In each example, the team identified that the licensee failed to make an immediate determination of operability for a degraded or non-conforming condition or failed to make an immediate determination of operability based on a detailed examination of the deficiency. The licensee took immediate corrective actions to update the incomplete or inaccurate operability determinations and entered the collective failures to follow station operability procedures into their corrective action program as Condition Report 2014-09163.

This performance deficiency was more than minor, and therefore a finding, because it affected the equipment performance attribute of the Mitigating Systems Cornerstone objective of ensuring the reliability of systems that respond to initiating events. The NRC performed an initial screening of the finding in accordance with NRC Manual Chapter IMC 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." Using IMC 0609, Appendix A, Exhibit 2, "Mitigating Systems Screening Questions," dated July 1, 2012, this finding is of very low safety significance (Green) because it: (1) was not a deficiency affecting the design or qualification of a mitigating system; (2) did not represent a loss of system and/or function; (3) did not represent an actual loss of function of a single train for greater than its technical specification allowed outage time; and (4) does not represent an actual loss of function of one or more non-technical specification trains of equipment designated as high safety-significant in accordance with the licensee's maintenance rule program for greater than 24 hours. This finding has a cross-cutting aspect in the area of human performance because the licensee failed to use decision-making practices that demonstrate that a proposed action is to be safe in order to proceed, rather than unsafe in order to stop. Specifically, the licensee made non-conservative decisions related to the impact of degraded or non-conforming conditions.
Inspection Report# : 2014009 *(pdf)*

Significance: G Sep 12, 2014
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Adequately Perform an Operability and 50.59 Evaluation
A non-cited violation of 10 CFR 50.59, "Changes, Tests, and Experiments," and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified involving the failure to evaluate and implement adequate compensatory measures for a degraded condition associated with raw water pump AC-10C. Specifically, the licensee's operability determination established a compensatory measure to place pump AC-10C in pull-to-lock, contrary to the system single failure analysis design criteria described in the Updated Safety Analysis Report. The licensee entered this issue into its corrective action program as Condition Reports 2014-09104 and 2014-08515 and performed an operability evaluation and associated 10 CFR 50.59 evaluation that used an acceptable compensatory measure to pump water from affected manholes prior to affecting the degraded power feeder cable for raw water pump AC-10C.

The NRC evaluated this performance deficiency as both a reactor oversight process finding and a traditional enforcement violation. The NRC performed an initial screening of the finding in accordance with NRC Manual Chapter IMC 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." Using IMC 0609, Appendix A, Exhibit 2, "Mitigating Systems Screening Questions," dated July 1, 2012, this finding is of very low safety significance (Green) because it: (1) was not a deficiency affecting the design or qualification of a mitigating system; (2) did not represent a loss of system and/or function; (3) did not represent an actual loss of function of a single train for greater than its technical specification allowed outage time; and (4) does not represent an

actual loss of function of one or more non-technical specification trains of equipment designated as high safety-significant for greater than 24 hours in accordance with the licensee's maintenance rule program. This finding has a cross-cutting aspect in the area of problem identification and resolution with an aspect of evaluation because the licensee failed to ensure that resolutions address causes and extent of conditions commensurate with their safety significance.

In addition, because this performance deficiency had the potential to impact the NRC's ability to perform its regulatory function in that the failure to obtain a license amendment for a change that could result in a malfunction of a structure, system or component with a different result than previously evaluated in the Updated Safety Analysis Report is in violation of 10 CFR 50.59(c)(2)(vi), the NRC also evaluated the violation using traditional enforcement. Since this violation is associated with a Green reactor oversight process violation, the traditional enforcement violation was determined to be a Severity Level IV violation, consistent with the example in paragraph 6.1.d(2) of the NRC Enforcement Policy.
Inspection Report# : 2014009 *(pdf)*

Significance: G Sep 12, 2014
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Perform an Evaluation for a New Operator Manual Action to Refill Component Cooling Water System During Post-Accident Conditions
A non-cited violation of 10 CFR 50.59, "Changes, Test, and Experiments," was identified involving the failure to evaluate if a change to the facility as described in the Updated Safety Analysis Report would require prior NRC review and approval. Specifically, the licensee failed to evaluate if a change implemented under Engineering Change 59252 that credited the non-safety related demineralized water system as a make-up source to the component cooling water system during post-accident conditions represented an adverse change to the Updated Safety Analysis Report described design function. The licensee entered this deficiency into its corrective action program for resolution as Condition Report 2014-09151 and established action items to update Engineering Change 59252.

The NRC determined that the licensee's failure to perform an evaluation prior to implementing a proposed change described in the Updated Safety Analysis Report was a violation of 10 CFR 50.59. Because this violation had the potential to impact the NRC's ability to perform its regulatory function, the NRC evaluated the violation using traditional enforcement. In accordance with Section 2.1.3.E.6 of the NRC Enforcement Manual, the NRC evaluated this finding using the significance determination process to assess its significance. The NRC performed an initial screening of the finding in accordance with NRC Manual Chapter IMC 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." Using IMC 0609, Appendix A, Exhibit 2, "Mitigating Systems Screening Questions," dated July 1, 2012, the finding was of very low safety significance (Green) because it: (1) was not a deficiency affecting the design or qualification of a mitigating structure, system, or component, and did not result in a loss of operability or functionality; (2) did not represent a loss of system and/or function; (3) did not represent an actual loss of function of at least a single train for longer than its technical specification allowed outage time, or two separate safety systems out-of-service for longer than their technical specification allowed outage time; and (4) did not represent an actual loss of function of one or more non-technical specification trains of equipment designated as high safety-significant in accordance with the licensee's maintenance rule program. Therefore, in accordance with Section 6.1.d.2 of the NRC Enforcement Policy, this performance deficiency is characterized as a Severity Level IV violation. The team determined that a cross-cutting aspect was not applicable because the issue involving the failure to perform an adequate 10 CFR 50.59 evaluation was strictly associated with a traditional enforcement violation.

Inspection Report# : 2014009 *(pdf)*

Significance: G Sep 12, 2014
Identified By: NRC
Item Type: NCV Non-Cited Violation
Inadequate Design Inputs into Safety Injection Piping Stress Calculation
A non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," was identified involving the failure to implement appropriate design control measures associated with a safety-related pipe stress calculation. Specifically, several unverified and potentially non-conservative inputs were identified associated with Calculation FC07240 used to analyze stresses on a pipe reduction tee in the safety injection system. The licensee entered this issue into the corrective action program as Condition Report 2014-09098 and initiated action to update Calculation FC07240.

This performance deficiency was more than minor, and therefore a finding, because it affected the design control attribute of the Mitigating Systems Cornerstone objective to ensure the availability, reliability, and capability of components that respond to initiating events. The NRC performed an initial screening of the finding in accordance with NRC Manual Chapter IMC 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." Using IMC 0609, Appendix A, Exhibit 2, "Mitigating Systems Screening Questions," dated July 1, 2012, this finding is of very low safety significance (Green) because it: (1) was not a deficiency affecting the design or qualification of a mitigating system; (2) did not represent a loss of system and/or function; (3) did not represent an actual loss of function of a single train for greater than its technical specification allowed outage time; and (4) does not represent an actual loss of function of one or more nontechnical specification trains of equipment designated as high safety-significant in accordance with the licensee's maintenance rule program for greater than 24 hours. This finding has a cross-cutting aspect in the area of human performance in that the licensee failed to apply the appropriate rigor when evaluating the overstressed pipe union tee.

Inspection Report# : 2014009 *(pdf)*

Significance: G Sep 12, 2014
Identified By: Self-Revealing
Item Type: NCV Non-Cited Violation
Failure to Maintain Design Control of Raw Water Strainer Control Panel
A self-revealing non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," was identified involving the failure to maintain design control of the raw water strainer AC-12B control panel AI-348. Specifically, the licensee failed to adequately design control panel AI-348 to protect it from the effects of spraying and wetting as required by the plant's licensing and design basis. The licensee entered this issue into its corrective action program as Condition Reports 2013-03301 and 2014-06974 and initiated action to encase control panel AI-348 to protect it against the effects of spraying and wetting.

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 affected the associated objective to ensure availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, control panel AI-348 was not designed to prevent water intrusion that resulted in a loss of power to raw water strainer AC-12B. The NRC performed an initial screening of the finding in accordance with NRC Manual Chapter IMC 609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." Using IMC 0609, Appendix A, Exhibit 2, "Mitigating Systems Screening Questions," dated July 1, 2012, this finding was of very low safety significance (Green) because it: (1) was not a deficiency affecting the design or qualification of a mitigating structure, system, or component, and did not result in a loss of operability or functionality; (2) did not represent a loss of system and/or function; (3) did not represent an actual loss of function of at least a single train for longer than its technical specification allowed outage time, or two separate safety systems out-of-service for longer than their technical specification allowed outage time; (4) did not represent an actual loss of function of one or more

non-technical specification trains of equipment designated as high safety-significant in accordance with the licensee's maintenance rule program; and (5) did not involve the loss or degradation of equipment or function specifically designed to mitigate a seismic, flooding or severe weather event. This finding has a crosscutting aspect in the area of problem identification and resolution associated with the organization thoroughly evaluating issues to ensure that resolutions address causes and extent of conditions commensurate with their safety significance.

Inspection Report# : 2014009 *(pdf)*

Significance: G Sep 12, 2014
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Accurately Model Flow Path for External Flood Mitigation
A non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," was identified involving the failure to accurately model cell level control of river water during external flooding events. Specifically, the licensee failed to account for losses due to the physical obstructions of trash racks for inflowing river water, the decreased withdrawal rate of the raw water pumps due to fouling across the traveling screens, and a bounding inleakage rate for the sluice gates when the river level is at maximum level of 1014' mean sea level and the intake cell levels are at minimum level of 976'9". The licensee entered this issue into its corrective action program as Condition Report 2014-09155, performed an operability determination, and initiated action to update station calculations related to intake cell level control.

This performance deficiency was more than minor, and therefore a finding, because if left uncorrected, the finding would have the potential to lead to a more significant safety concern. Specifically, the failure to accurately model flow in and out of the cells could adversely affect the external flooding mitigation strategy beyond previously identified equipment capacities and operator actions. This finding was associated with the Mitigating Systems Cornerstone. The NRC performed an initial screening of the finding in accordance with NRC Manual Chapter IMC 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." Using IMC 0609, Appendix A, Exhibit 2, "Mitigating Systems Screening Questions," dated July 1, 2012, this finding is of very low safety significance (Green) because it: (1) was not a deficiency affecting the design or qualification of a mitigating system; (2) did not represent a loss of system and/or function; (3) did not represent an actual loss of function of a single train for greater than its technical specification allowed outage time; (4) did not represent an actual loss of function of one or more non-technical specification trains of equipment designated as high safety-significant in accordance with the licensee's maintenance rule program; and (5) did not involve the loss or degradation of equipment or function specifically designed to mitigate a seismic, flooding or severe weather event. This finding has a cross-cutting aspect in the area of problem identification and resolution, operating experience, in that the licensee failed to incorporate relevant internal operating experience related to previous NRC inspection into Calculation FC08081.
Inspection Report# : 2014009 *(pdf)*

Significance: G Sep 12, 2014
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Incorporate Design Requirements for Switchgear Room Cooling
A non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," was identified involving the failure to translate applicable design requirements into the specifications for plant systems. Specifically, inadequate design control inputs were used for analyzing the ability of the vital switchgear room cooling system to perform its safety function under all conditions. The licensee entered this issue into its corrective action program as Condition Report 2014-08317 and initiated actions to analyze the ability of vital switchgear room cooling to meet its specified safety function.

This performance deficiency was more than minor, and therefore a finding, because it affected the design control attribute of the Mitigating Systems Cornerstone, and it directly affected the cornerstone objective to ensure availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The NRC performed an initial screening of the finding in accordance with NRC Manual Chapter IMC 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." Using IMC 0609, Appendix A, Exhibit 2, "Mitigating Systems Screening Questions," dated July 1, 2012, this finding is of very low safety significance (Green) because it: (1) was not a deficiency affecting the design or qualification of a mitigating system; (2) did not represent a loss of system and/or function; (3) did not represent an actual loss of function of a single train for greater than its technical specification allowed outage time; and (4) does not represent an actual loss of function of one or more non-technical specification trains of equipment designated as high safety-significant in accordance with the licensee's maintenance rule program for greater than 24 hours. This finding has a cross-cutting aspect in the evaluation component of the problem identification and resolution cross-cutting area because the licensee failed to thoroughly evaluate issues to ensure that resolutions address causes and extent of conditions commensurate with their safety significance. Specifically, the licensee failed to analyze and evaluate a 1998 loss of switchgear cooling event to ensure that its use as a design assumption bound the worst design basis event.

Inspection Report# : 2014009 *(pdf)*

Significance:  Sep 12, 2014
Identified By: NRC
Item Type: VIO Violation
Deficient Evaluation of NRC Bulletin 88-04, Strong Pump Weak Pump Due to Failure to Consider the Effect of AFW Pumps Discharge Check Valves Leakage
(Initial Entry)
A cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," was identified involving the failure to assure that applicable regulatory requirements and design bases were correctly translated into specifications, drawings, procedures, and instructions. Specifically, the licensee failed to properly evaluate NRC Bulletin 88-04, "Potential Safety-Related Pump Loss," for strong pump weak pump interaction regarding auxiliary feedwater pumps FW-6 and FW-10. The evaluation failed to consider pump-to-pump interaction that may result due to pump discharge check valve leakage. In addition, the licensee failed to re-evaluate the condition after surveillance testing performed on November 28, 2010, and September 1, 2012, identified leakage past both pump discharge check valves. The licensee entered this issue into its corrective action program as Condition Report 2014-08381 and initiated actions to re-evaluate NRC Bulletin 88-04.

This performance deficiency was more than minor, and therefore a finding, because it was associated with the equipment attribute of the Mitigating Systems Cornerstone, and affected the associated cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The NRC performed an initial screening of the finding in accordance with NRC Manual Chapter IMC 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." Using IMC 0609, Appendix A, Exhibit 2, "Mitigating Systems Screening Questions," dated July 1, 2012, the finding was of very low safety significance (Green) because it: (1) was not a deficiency affecting the design or qualification of a mitigating structure, system, or component, and did not result in a loss of operability or functionality; (2) did not represent a loss of system and/or function; (3) did not represent an actual loss of function of at least a single train for longer than its technical specification allowed outage time, or two separate safety systems out-of-service for longer than their technical specification allowed outage time; and (4) did not represent an actual loss of function of one or more non-technical specification trains of equipment designated as high safety-significant in accordance with the licensee's maintenance rule program. This finding has a cross-cutting aspect in the area of human performance because the licensee failed to demonstrate a conservative bias in decision making-practices. Specifically, the licensee's etermination that the event is not credible failed to consider documented check valve leakage in the auxiliary feedwater system.

(IR# 05000285/2014009 dated September 18, 2014)

(Update and Closure)
The team reviewed the licensee's corrective actions to address deficiencies related to VIO 05000285/2014009-10, "Deficient Evaluation of NRC Bulletin 88-04, Strong Pump Weak Pump Due to Failure to Consider the Effect of Auxiliary Feedwater Pumps Discharge Check Valves Leakage." The licensee's corrective actions are documented in a letter to the NRC, dated October 20, 2014 (ML14293A237). The team reviewed these corrective actions and determined them to be adequate to correct the deficiency; therefore, VIO 05000285/2014009-10 is closed.
(IR# 05000285/2015008 dated March 12, 2015)
Inspection Report# : 2014009 *(pdf)*
Inspection Report# : 2015008 *(pdf)*

Significance: G Sep 12, 2014
Identified By: NRC
Item Type: VIO Violation
Failure to Ensure Safe Operations at Design Basis Low River Level
A cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," was identified involving the failure to ensure that the safety-related raw water pumps are available for safe plant operations down to the design basis low river level. Specifically, station analysis and abnormal operating procedures would not allow operation of the raw water pumps to the design basis low river water level. The licensee entered this issue into its corrective action program as Condition Report 2014-09159 which included actions to reevaluate the capability of the raw water pumps to operate at low river levels.

This finding was more than minor, and therefore a finding, because it was associated with the design control attribute of the Mitigating Systems Cornerstone and affected the associated cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The NRC performed an initial screening of the finding in accordance with NRC Manual Chapter IMC 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." Using IMC 0609, Appendix A, Exhibit 2, Mitigating Systems Screening Questions," dated July 1, 2012, the finding was of very low safety significance (Green) because it: (1) was not a deficiency affecting the design or qualification of a mitigating structure, system, or component, and did not result in a loss of operability or functionality; (2) did not represent a loss of system and/or function; (3) did not represent an actual loss of function of at least a single train for longer than its technical specification allowed outage time, or two separate safety systems out-of-service for longer than their technical specification allowed outage time; and (4) did not represent an actual loss of function of one or more non-technical specification trains of equipment designated as high safety-significant in accordance with the licensee's maintenance rule program. This finding has a cross-cutting aspect in the area of human performance in that the licensee did not ensure that personnel, equipment, procedures and other resources are available and adequate to support nuclear safety. Specifically, the licensee deferred funding for a vendor analysis of the capabilities of the raw water pumps at the design low river level.
Inspection Report# : 2014009 *(pdf)*

Significance: G Sep 12, 2014
Identified By: NRC
Item Type: VIO Violation
Failure to Account for Worst Case Diesel Frequency in Fuel Oil Consumption Calculations
A cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," was identified involving the failure to account for design basis conditions in station calculations. Specifically, the licensee failed to account for worst-case electrical frequency when analyzing diesel fuel oil consumption and storage requirements. The licensee entered this issue into its corrective action program as Condition Report 2014-09157 and initiated action to update station

calculations.

This performance deficiency was more than minor, and therefore a finding, because it affected the design control attribute of the Mitigating Systems Cornerstone objective to ensure the availability, reliability, and capability of components that respond to initiating events. The NRC performed an initial screening of the finding in accordance with NRC Manual Chapter IMC 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." Using IMC 0609, Appendix A, Exhibit 2, "Mitigating Systems Screening Questions," dated July 1, 2012, the finding is of very low safety significance (Green) because: (1) the finding was not a deficiency affecting the design or qualification of a mitigating system; (2) the finding did not represent a loss of system and/or function; (3) the finding did not represent an actual loss of function of a single train for greater than its technical specification allowed outage time; and (4) the finding does not represent an actual loss of function of one or more non-technical specification trains of equipment designated as high safety-significant in accordance with the licensee's maintenance rule program for greater than 24 hours. This finding has a cross-cutting aspect in the area of problem identification and resolution in that the licensee failed to thoroughly evaluate issues to ensure that resolutions address causes and extent of conditions commensurate with their safety significance.
Inspection Report# : 2014009 *(pdf)*

Significance: G Sep 12, 2014
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Promptly Identify and Correct a Condition Adverse to Quality
A non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified involving the failure to take corrective actions for a condition adverse to quality. Specifically, the licensee failed to take corrective actions to address multiple issues involving gas voiding of the component cooling water system. As immediate corrective action the licensee placed a maintenance hold on the component cooling water system until adequate fill and vent procedures were established. The licensee initiated corrective actions to analyze the effects of gas accumulation on the component cooling water system and entered this issue into the corrective action program as Condition Reports 2014-08892, 2014-09011 and 2014-09034.

This 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 affected the associated objective to ensure availability, reliability, and capability of systems that responds to initiating events to prevent undesirable consequences. The NRC performed an initial screening of the finding in accordance with NRC Manual Chapter IMC 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." Using IMC 0609, Appendix A, Exhibit 2, "Mitigating Systems Screening Questions," dated July 1, 2012, the finding was of very low safety significance (Green) because the finding: (1) was not a deficiency affecting the design and qualification of a mitigating structure, system, or component, and did not result in a loss of operability or functionality; (2) did not represent a loss of system and/or function; (3) did not represent an actual loss of function of at least a single train for longer than its allowed outage time, or two separate safety systems out-of-service for longer than their technical specification allowed outage time; and (4) did not represent an actual loss of function of one or more non-technical specification trains of equipment designated as high safety-significant in accordance with the licensee's maintenance rule program. This finding has a cross-cutting aspect in the area of human performance in that the licensee failed to operate the component cooling water system within design margins and failed to place special attention on minimizing longstanding equipment issues related to gas voiding in that system.
Inspection Report# : 2014009 *(pdf)*

Significance: G Sep 12, 2014
Identified By: NRC
Item Type: NCV Non-Cited Violation

Failure to Correct Longstanding Software Classification Issues
A non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified involving the failure to take timely corrective actions to ensure the proper control and use of software products used in safety related applications. Specifically, the team identified multiple instances of uncontrolled software products in use at the licensee's facility following identification of similar deficiencies in 2009 and 2011. The licensee entered this issue into their corrective action program as Condition Report 2014-09162 and initiated action to strengthen their software control program.

The performance deficiency was more than minor, and therefore a finding, because if left uncorrected, it could lead to a more significant safety concern. The NRC performed an initial screening of the finding in accordance with NRC Manual Chapter IMC 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." Using IMC 0609, Appendix A, Exhibit 2, "Mitigating Systems Screening Questions," dated July 1, 2012, this finding is of very low safety significance (Green) because: (1) the finding was not a deficiency affecting the design or qualification of a mitigating system; (2) the finding did not represent a loss of system and/or function; (3) the finding did not represent an actual loss of function of a single train for greater than its technical specification allowed outage time; and (4) the finding does not represent an actual loss of function of one or more non-technical specification trains of equipment designated as high safety-significant in accordance with the licensee's maintenance rule program for greater than 24 hours. This finding has a cross-cutting aspect in the area of human performance in that the licensee failed to provide training and ensure knowledge transfer to maintain a knowledgeable, technically competent workforce and instill nuclear safety values. Specifically, the apparent cause report for Condition Report 2009-04715 stated that a contributing cause was "first and foremost [there is] a lack of knowledge associated with the procedural requirements for software control at FCS".
Inspection Report# : 2014009 *(pdf)*

Significance: G Sep 12, 2014
Identified By: NRC
Item Type: NCV Non-Cited Violation
Inadequate Corrective Actions to Properly Implement Applicable ASME OM Code Requirements
A non-cited violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," was identified involving the failure to correct a condition adverse to quality associated with classification of check valves in the auxiliary feedwater system. Specifically, the licensee failed to update the in-service testing program to classify auxiliary feedwater discharge check valves as Category A/C valves and include required seat leakage testing. The licensee entered this issue into its corrective action program as Condition Report 2014-08452 and initiated actions to re-assess the current in-service testing methodology of check valves in the auxiliary feedwater system.

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 affected the associated cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The NRC performed an initial screening of the finding in accordance with NRC Manual Chapter IMC 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." Using IMC 0609, Appendix A, Exhibit 2, "Mitigating Systems Screening Questions," dated July 1, 2012, this finding is of very low safety significance (Green) because: (1) the finding was not a deficiency affecting the design or qualification of a mitigating system; (2) the finding did not represent a loss of system and/or function; (3) the finding did not represent an actual loss of function of a single train for greater than its technical specification allowed outage time; and (4) the finding does not represent an actual loss of function of one or more non-technical specification trains of equipment designated as high safety-significant in accordance with the licensee's maintenance rule program for greater than 24 hours. This finding has a cross-cutting aspect in the area of problem identification and resolution because the licensee failed to thoroughly evaluate issues to ensure that resolutions address causes and extent of conditions commensurate with their safety significance. Specifically, the licensee failed to evaluate the function of discharge check valves FW-173 and FW-174 when developing the in-service testing program and addressing previous

condition reports.

Inspection Report# : 2014009 *(pdf)*

Significance: G Sep 12, 2014
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Maintain B.5.b Equipment in a State of Readiness to Support Mitigation Strategies
A non-cited violation of 10 CFR 50.54(hh)(2), "Conditions of License," was identified involving the failure to maintain available equipment needed to implement mitigating strategies to maintain or restore core, containment, and spent fuel pool cooling capabilities following large fires or explosions. Specifically, the licensee failed to maintain available a flexible suction hose related to the reactor coolant system heat removal mitigating strategy. The licensee initiated Condition Report 2014-08876 to address this deficiency and initiated action to procure and replace the missing flexible suction hose.

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 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 NRC determined that this finding was of very low safety significance (Green) using NRC Manual Chapter IMC 0609, Appendix L, "B.5.b Significance Determination Process," because it resulted in an unrecoverable unavailability of an individual mitigating strategy but did not result in multiple unavailable mitigating strategies such that reactor coolant system heat removal could not occur. This finding has a crosscutting aspect in the area of human performance in that the licensee's inadequate B.5.b inventory procedure contributed to the lack of recognition that the degraded flexible suction hose was required to implement mitigating strategies.
Inspection Report# : 2014009 *(pdf)*

Significance: G Sep 12, 2014
Identified By: Self-Revealing
Item Type: NCV Non-Cited Violation
Failure to Correct Conditions Adverse to Quality in the Diesel Generator Starting Air System
A self-revealing non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified involving the failure to take timely corrective actions to address service life related degradation of the emergency diesel generator starting air system. As a result, diesel generator 1 failed to roll during planned surveillance testing due to a degraded diesel starting air valve. The licensee replaced the faulty starting air valve and implemented corrective actions to develop preventative maintenance strategies for the starting air system. The licensee entered this issue into the corrective action program as Condition Report 2014-09424.

The 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 affected the associated objective to ensure availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Using Inspection Manual Chapter 0609, Appendix G, Attachment 1, "Shutdown Operations Significance Determination Process Phase 1 Initial Screening and Characterization of Findings", Exhibit 3, "Mitigating Systems Screening Questions," dated May 9, 2014, the finding was of very low safety significance (Green) because the finding does not represent a loss of system safety function and the finding does not represent an actual loss of safety function of a single train for greater than its technical specification allowed outage time. This finding has a cross-cutting aspect in the area of human performance in that the licensee failed to recognize and plan for the possibility of latent issues, and inherent risk, even while expecting successful outcomes when determining the repair schedule for starting air valve SA-148.

Inspection Report# : 2014009 *(pdf)*

Significance: G Sep 12, 2014
Identified By: Self-Revealing
Item Type: NCV Non-Cited Violation
Failure to Take Timely Corrective Actions for an Unsealed Raw Water System Control Panel
A self-revealing non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified involving the failure to take corrective actions to address a design deficiency affecting the control panel for raw water strainer AC-12B. Consequently, the panel experienced a water intrusion event on August 3, 2014, resulting in an unplanned inoperability of the raw water system. Following identification of this issue, the licensee implemented corrective actions to seal conduits leading to control panel AI-348 to prevent future water intrusion. The licensee entered this issue into its corrective action program as Condition Report 2014-09572.

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 affected the associated objective to ensure availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The NRC performed an initial screening of the finding in accordance with NRC Manual Chapter IMC 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." Using IMC 0609, Appendix A, Exhibit 2, "Mitigating Systems Screening Questions," dated July 1, 2012, this finding is of very low safety significance (Green) because it: (1) was not a deficiency affecting the design or qualification of a mitigating system; (2) did not represent a loss of system and/or function; (3) did not represent an actual loss of function of a single train for greater than its technical specification allowed outage time; and (4) does not represent an actual loss of function of one or more non-technical specification trains of equipment designated as high safety-significant in accordance with the licensee's maintenance rule program for greater than 24 hours. This finding has a cross-cutting aspect in the area of problem identification and resolution in that the licensee failed to adequately review and provide timely responses to past operating experience that demonstrated that panel AI-348 was susceptible to water intrusion.
Inspection Report# : 2014009 *(pdf)*

Significance: G Mar 31, 2014
Identified By: NRC
Item Type: FIN Finding
Failure to Follow Procedures for Classifying Component Failures
The inspectors identified a Green finding for the licensee's failure to follow a procedure for classifying component failures. Specifically, the licensee's failure to follow Procedure FCSG-69-5, "Failure Identification and Reporting," is a performance deficiency. As a result, the failure of the Turbine-Driven Auxiliary Feedwater Pump, FW-10, to start on demand was not identified as a functional failure. Subsequently, the licensee properly evaluated the system performance taking into consideration the functional failure. The licensee documented the finding in the corrective action program as Condition Report 2014-04217.
The performance deficiency is more than minor, and therefore a finding, because if left uncorrected the performance deficiency could have the potential to lead to a more significant safety concern. The inspectors evaluated the finding using Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process For Findings At-Power," Exhibit 2, "Mitigating Systems Screening Questions," dated June 19, 2012. The finding is of very low safety significance (Green) because it did not affect the design or qualification of a mitigating system, structure, or component (SSC), represent a loss of system function, or loss of function of single or multiple trains of equipment. The finding had a human performance cross-cutting aspect associated with training because the licensee failed to provide adequate training to the engineering staff.
Inspection Report# : 2014007 *(pdf)*

Significance: G Mar 31, 2014
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Correct Conditions Adverse to Quality in the Containment Internal Structure and Auxiliary Building
The inspectors identified multiple examples of a green, non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for the licensee's failure to promptly identify and correct conditions adverse to quality. Specifically, the licensee failed to take appropriate corrective action since 1997 when it was identified that the containment internal structure and auxiliary building had discrepant documentation between the size of structural beams and columns shown in drawings versus calculations. Subsequently, the licensee evaluated the non-conformances to provide a reasonable assurance of operability, and planned corrective actions to restore the structures to design basis requirements. The failure to correct conditions adverse to quality is a performance deficiency. The licensee documented the finding in the corrective action program as Condition Report 2014-04219.
The performance deficiency was determined to be more than minor because it adversely affected the Mitigating Systems cornerstone objective of ensuring the availability, reliability, and capability of the safety injection system and the shutdown cooling system. The inspectors evaluated the finding using Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process (SDP) For Findings At-Power," Exhibit 2, "Mitigating Systems Screening Questions," dated June 19, 2012, and determined that the finding is of very low safety significance (Green) because the finding was a deficiency affecting the design or qualification of a mitigating SSC that did not affect operability or functionality. The finding does not have a cross-cutting aspect because it is not reflective of current plant performance.
Inspection Report# : 2014007 *(pdf)*

Significance: G Mar 31, 2014
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Check the Adequacy of the Design for the Reactor Vessel Head Structural Elements
The inspectors identified a green, non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the licensee's failure to ensure the design of the Containment Internal Structure (CIS) for the reactor vessel head stand met Current Licensing Basis (CLB) requirements. Specifically the design did not meet the CLB requirements as defined in Updated Safety Analysis Report . The failure to ensure the design of structures, systems, or components meet their Current Licensing Basis is a performance deficiency. The licensee documented the finding in the corrective action program as Condition Report 2014-04218.
The performance deficiency is more than minor, and therefore a finding, because if left uncorrected the failure to ensure structures, systems, or components meet their Current Licensing Basis design requirements could lead to a more significant safety concern. The inspectors evaluated the finding using Inspection Manual Chapter 0609, Appendix G, "Shutdown Operations Significance Determination Process (SDP)," Attachment 1, "Shutdown Operations Significance Determination Process Phase 1 Operational Checklists for Both PWRs and BWRs," dated May 25, 2004, and determined that the finding is of very low safety significance (Green) because the finding did not require quantitative assessment. The finding has a crosscutting aspect in the area human performance because the licensee did not ensure the CIS at elevation 1045 ft. for storage of the reactor vessel head maintained adequate design margin.

Inspection Report# : 2014007 *(pdf)*

Significance: G Mar 31, 2014
Identified By: NRC
Item Type: NCV Non-Cited Violation

Failure to Follow an Immediate Operability Determination Procedure
The inspectors identified a green non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the licensee's failure to follow an operability determination procedure. Upon identifying that that a relief valve had not been tested within the required frequency the licensee failed to adequately address how this deficiency could affect the safety function of the component. Specifically, the licensee concluded the valve was operable based only on the consideration that it was not leaking. Subsequently, the licensee performed an evaluation providing adequate reasonable assurance of operability. The licensee documented the finding in the corrective action program as Condition Report 2014-03055.
The performance deficiency is more than minor, and therefore a finding, because if left uncorrected the failure to determine the ability of a structure, system, or component to perform its current licensing basis function in accordance with station procedures could lead to a more significant safety concern. The inspectors evaluated the finding using Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process (SDP) For FindingsAt-Power," Exhibit 2, "Mitigating Systems Screening Questions," dated June 19, 2012, and determined that the finding is of very low safety significance (Green) because it did not affect the design or qualification of a mitigating SSC, represent a loss of system function or loss of function of single or multiple trains of equipment. The finding has a cross-cutting aspect in the human performance area because the licensee did not create and maintain complete, accurate, and up-to-date documentation.
Inspection Report# : 2014007 *(pdf)*

Significance: G Mar 31, 2014
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Implement an Adequate PMT Procedure
The inspectors identified a green non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," involving the failure to establish and implement an adequate procedure for Post Maintenance Testing (PMT). Specifically, following maintenance on a raw water strainer the licensee's PMT failed to verify the flow capacity through the system required to determine operability. The failure to establish an adequate procedure to determine PMT is a performance deficiency. Subsequently, the licensee performed an adequate PMT verifying system flows were adequate and documented the deficiency in the corrective action program as Condition Report 2014-03084.
The performance deficiency is more-than-minor and therefore a finding because inadequate PMT following maintenance activities could adversely affect the Mitigating Systems Cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated the finding using Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process (SDP) For Findings At-Power," Exhibit 2, "Mitigating Systems Screening Questions," dated June 19, 2012, and determined that the finding is of very low safety significance (Green) because the finding did not affect the design or qualification of a mitigating SSC, represent a loss of system function or loss of function of single or multiple trains of equipment. The finding has a crosscutting aspect in the area of problem identification and resolution because the licensee did not thoroughly evaluate issues to ensure that resolutions address causes and extent of conditions commensurate with their safety significance.

Inspection Report# : 2014007 *(pdf)*

Significance: G Mar 31, 2014
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Perform an Immediate Operability Determination
The inspectors identified a green non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the licensee's failure to perform an operability determination as required by NOD-

QP-31, “Operability Determinations Process (ODP).” Specifically, following the failure of an auxiliary building ventilation damper to open the licensee failed to evaluate the operability of equipment potentially impacted. The failure to perform an immediate operability determination is a performance deficiency. The licensee documented the finding in the corrective action program as Condition Report 2014-00211.
The performance deficiency is more than minor, and therefore a finding, because if left uncorrected the failure to determine the ability of a structure, system, or component to perform its current licensing basis function in accordance with station procedures could lead to a more significant safety concern. The inspectors evaluated the finding using Inspection Manual Chapter 0609, Appendix A, “The Significance Determination Process (SDP) For Findings At-Power,” Exhibit 2, “Mitigating Systems Screening Questions,” dated June 19, 2012, and determined that the finding is of very low safety significance (Green) because the finding did not affect the design or qualification of a mitigating SSC, represent a loss of system function or loss of function of single or multiple trains of equipment. The finding has a crosscutting aspect in the area human performance because the licensee did not provide training and ensure knowledge transfer to maintain a knowledgeable, technically competent workforce and instill nuclear safety values.

Inspection Report# : 2014007 *(pdf)*

Significance: W Mar 14, 2014
Identified By: NRC
Item Type: VIO Violation
Failure to Ensure Tornado Missile Protection for Site Components
The team identified multiple examples of a violation of 10 CFR 50, Appendix B, Criterion III, “Design Control,” involving the failure to establish applicable tornado missile protection design requirements for components needed to ensure the capability to shut down the reactor and maintain it in a safe shutdown condition. Specific examples included the steam driven auxiliary feedwater pump exhaust stack, auxiliary feedwater components located in Room 81, raw water pump electrical pull boxes PB-128T and PB-129T, and diesel generator fuel oil storage tank fill and vent lines. The licensee implemented plant modifications to adequately protect all affected equipment from tornado generated missiles and entered the deficiencies into its corrective action program for resolution as Condition Reports CR 2013-03839, 2013-03842, 2013-14117, and 2013-14246.

The failure to ensure that station components were adequately protected from tornado missiles was a performance deficiency. In accordance with NRC Inspection Manual Chapter 0612, Appendix B, “Issue Screening,” the performance deficiency was determined to be more than minor, and therefore a finding, because it was associated with the design control attribute of the Mitigating Systems Cornerstone, and affected the associated cornerstone objective to ensure availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the finding affected the reliability of required components following a postulated tornado-generated missile impact. The team evaluated the finding using Inspection Manual Chapter (IMC) 0609, Appendix A, “The Significance Determination Process (SDP) for Findings at Power,” Exhibit 4, “External Events Screening Questions.” The finding required a detailed risk evaluation because it involved the lack of equipment specifically designed to mitigate a severe weather initiating event (tornado) and could have degraded two or more trains of a multi-train system.

The Region IV senior reactor analyst performed a detailed risk evaluation in accordance with Appendix A, Section 6.0, “Detailed Risk Evaluation.” The NRC concluded the finding was characterized as having low to moderate safety significance (White). The calculated change in core damage frequency of 2.6 x 10-6 was dominated by a tornado-induced non-recoverable loss of offsite power with the failure of the emergency power supply system. The analyst determined that the finding did not affect the internal events initiator risk and would not involve a significant increase in the risk of a large early release of radiation.

The finding has a cross-cutting aspect in the area of problem identification and resolution associated with the corrective action program component because the licensee failed to thoroughly evaluate problems such that the

resolutions address the causes.

The NRC has concluded that the information regarding the reason for the violation, the corrective actions implemented to correct the violation and prevent recurrence, and the date when full compliance was achieved was obtained by the NRC during our inspection activities. Therefore, the licensee is not required to respond to this letter unless the description contained in the enclosed report does not accurately reflect corrective actions or the licensee's position. Additionally, since this issue was identified and resolved by the station during the extended shutdown, under increased NRC oversight of the Inspection Manual Chapter 0350 Process, this issue will not be used for future plant performance assessment inputs and is considered closed.
Inspection Report# : 2013017 *(pdf)*

Significance: G Mar 14, 2014
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Promptly Identify and Correct a Condition Adverse to Quality
The team identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, “Corrective Actions,” involving the failure to promptly identify and correct a condition adverse to quality. Specifically, from August 2005 to July 15, 2013 the licensee failed to promptly identify and correct inadequate Class 1 structures wall thickness deficiencies to protect systems and components contained within from tornado generated missiles. The licensee resolved this issue by implementing changes to the facility through a licensing amendment that was reviewed and approved by the NRC. This issue has been entered into the corrective action program as Condition Report CR 2013-14363.

The licensee’s failure to promptly identify and correct conditions adverse to quality was a performance deficiency. This performance deficiency is more than minor, and therefore a finding, because it is associated with the design control attribute of the Mitigating Systems Cornerstone, and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Using Inspection Manual Chapter 0609, Appendix A, “The Significance Determination Process for Findings at Power,” the finding was determined to have very low safety significance (Green) because it: (1) was not a deficiency affecting the design or qualification of a mitigating structure, system, or component, and did not result in a loss of operability or functionality; (2) did not represent a loss of system and/or function; (3) did not represent an actual loss of function of at least a single train for longer than its technical specification allowed outage time, or two separate safety systems out-of-service for longer than their technical specification allowed outage time; (4) did not represent an actual loss of function of one or more non-technical specification trains of equipment designated as high safety-significance in accordance with the licensee’s maintenance rule program; and (5) did not involve the loss or degradation of equipment or function specifically designed to mitigate a seismic, flooding, or severe weather event. The team determined this finding has a cross-cutting aspect in the area of human performance associated with the decision-making component involving the failure to use conservative assumptions in decision-making and adopt a requirement to demonstrate that the proposed action is safe in order to proceed rather than a requirement to demonstrate it is unsafe in order to disapprove the action. Specifically, in 2005 the licensee identified that wall thicknesses for areas of the auxiliary building and intake structure were less than design requirements. The licensee failed to enter this deficiency into the corrective action process and inappropriately used an alternate acceptance criteria that was not part of the facility licensing basis.
Inspection Report# : 2013017 *(pdf)*

Significance: G Mar 14, 2014
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Follow Operability Procedure

The inspectors identified two examples of a non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," associated with the licensee's failure to follow Station Procedure NOD-QP-31, "Operability Determination Process," when evaluating deficiencies associated with inadequate tornado missile protection for required components. Specifically, Step 4.3.15 required, in part, that, "A positive determination of operability must be justified, including … a technical discussion of why the concern identified does not prevent the item from fulfilling its intended safety function." In each example, the team identified that the operability determination lacked adequate technical justification for why the item was operable with the degraded or nonconforming condition. The licensee addressed these issues by taking corrective actions that provided adequate tornado missile protection in accordance with design basis requirements. The licensee entered this deficiency into its corrective action program for resolution as Condition Reports CR 2013-15429 and 2013-14006.

The failure to properly assess and document the basis for operability when a degraded or nonconforming condition was identified was a performance deficiency. This performance deficiency is more than minor, and therefore a finding, because it is associated with the equipment performance attribute of the Mitigating Systems Cornerstone, and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Since the finding involving inadequate operability determinations occurred while in a shutdown condition, the team used Manual Chapter 0609, Appendix G, "Shutdown Operations Significance Determination Process," and determined the finding to have very low safety significance (Green) because the finding did not increase the likelihood of a loss of reactor coolant system inventory, the finding did not degrade the licensee's ability to terminate a leak path or add reactor coolant system inventory when needed, and the finding did not degrade the licensee's ability to recover decay heat removal once it was lost. This finding has a cross-cutting aspect in the area of human performance associated with the decision-making component because the licensee failed to use conservative assumptions in decision making when performing operability determinations.
Inspection Report# : 2013017 *(pdf)*

Significance:  Mar 14, 2014
Identified By: NRC
Item Type: NCV Non-Cited Violation
Inadequate Temporary Modification to Protect Against Tornado Generated Missiles
The team identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," associated with the licensee's failure to provide adequate instructions or procedures for the construction of temporary barriers to protect raw water pump electrical pull boxes PB-128T and PB-129T from tornado generated missiles in temporary modification EC 60183. The licensee addressed this issue by modifying the temporary barriers. This issue has been entered into the licensee's corrective action program as Condition Report CR 2013-13955.

The failure to provide adequate instructions for construction of temporary barriers to protect the raw water pump electrical pull boxes from tornado generated missiles was a performance deficiency. This performance deficiency is more than minor, and therefore a finding, because it is associated with the equipment performance attribute of the Mitigating Systems Cornerstone, and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Since the finding involving inadequate operability determinations occurred while in a shutdown condition, the team used Manual Chapter 0609, Appendix G, "Shutdown Operations Significance Determination Process," and determined the finding to have very low safety significance (Green) because the finding did not increase the likelihood of a loss of reactor coolant system inventory, the finding did not degrade the licensee's ability to terminate a leak path or add reactor coolant system inventory when needed, and the finding did not degrade the licensee's ability to recover decay heat removal once it was lost. This finding has a cross-cutting aspect in the area of human performance associated with the work practices component because the licensee failed to ensure supervisory and management oversight of work activities, including contractors, such that nuclear safety was supported.
Inspection Report# : 2013017 *(pdf)*

Significance: G Feb 15, 2014
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Translate HPSI Pump Design Requirements to Design Documents (Section 4OA3.2).
A non-cited violation of 10 CFR 50, Appendix B, Criterion III, "Design Control," was identified involving the failure to translate the High Pressure Safety Injection (HPSI) pump design and runout characteristics to design documents such as the Updated Safety Analysis Report or design calculations. On June 21, 2013, the licensee completed Engineering Change 59874, which permanently installed flow-limiting orifices in the discharge line of each pump, effectively preventing HPSI runout conditions from occurring for all plant conditions.
This finding was more than minor because it adversely impacted the design control attribute of the Mitigating Systems Cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences.
The inspectors reviewed NRC IMC 0609, Attachment 4, "Initial Characterization of Findings," Table 3 – SDP Appendix Router. While this issue was identified during a refueling outage, the inspectors determined that the majority of the exposure time for this violation occurred with the reactor at power. As such, the inspectors determined the finding should be evaluated using the SDP in accordance with IMC 0609, "The Significance Determination Process (SDP) for Findings at-Power," Appendix A, Exhibit 2, "Mitigating Systems Screening Questions." The finding required a detailed risk evaluation because the high pressure safety injection system was inoperable for some of the large break loss of coolant accident scenarios (at reactor pressures less than 100 psi). A Region IV senior reactor analyst performed a bounding detailed risk evaluation. The change to the core damage frequency was 8E-8/year and, therefore, determined to be of very low safety significance (Green). The dominant core damage sequences included loss of coolant accidents where the high and low pressure safety injection systems failed during recirculation. The non-degraded low pressure safety injection system contributed to minimize the risk. The inspectors determined there was no cross-cutting aspect associated with this finding because events related to identification of needed procedures and specifications occurred in the 1970's and are not indicative of current performance. (Section 4OA3.2).
Inspection Report# : 2014002 *(pdf)*

Significance: G Feb 15, 2014
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Maintain Design Control of HPSI Injection Valve (Section 4OA3.4)
Two examples of a non-cited violation of 10 CFR 50, Appendix B, Criterion III, "Design Control," were identified. The first example involved the failure to establish procedures or Technical Specifications to accomplish required HPSI injection flow balancing. The second example involved the failure to provide controls or testing to ensure that replacement parts for HPSI injection valves were suitable for the application and were capable of supporting the safety-related functions of the HPSI system. The licensee has since implemented Engineering Change 59874 which included throttling of the HPSI loop injection valves. This change was completed on August 20, 2013, restoring the original plant design and overcoming the configuration control errors introduced on three of the eight injection valves. Post-work testing for the completed modification included flow balance testing for the HPSI loop injection lines. The inspectors reviewed the results of this testing and determined that the UFSAR assumptions regarding balanced loop flows were adequately addressed by licensee corrective actions.
This finding was more than minor because it adversely impacted the design control attribute of the Mitigating Systems Cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences.
The inspectors reviewed NRC IMC 0609, Attachment 4, "Initial Characterization of Findings," Table 3 – SDP Appendix Router. While this issue was identified during a refueling outage, the inspectors determined that the majority of the exposure time for this violation occurred with the reactor at power. As such, the inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "The SDP for Findings at-Power," Appendix A, Exhibit 2, "Mitigating Systems Screening Questions." The inspectors answered "yes" to the question of

"Does the finding represent a loss of system and/or function?" The inspectors determined the finding required a detailed risk evaluation per IMC 0609 Paragraph 6.0, because the operability of the high pressure safety injection system (both trains) was in question. A Region IV senior reactor analyst performed a detailed risk evaluation and determined the flow imbalance did not result in a loss of safety function. Since the high pressure safety injection system was capable of meeting the functional success criteria, there was no quantifiable change to the core damage frequency and therefore was determined to be of very low safety significance (Green). The inspectors determined there was no cross-cutting aspect associated with this finding because events related to identification of needed procedures and specifications occurred in the 1970's and are not indicative of current performance. Additionally, the errant replacement of parts of three HPSI injection valves occurred between 1993 and 2006, and are also not indicative of current performance. (Section 4OA3.4).
Inspection Report# : 2014002 *(pdf)*

Significance: G Feb 15, 2014
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Request a License Amendment for Required Change to Technical Specifications (Section 4OA3.4)
A Severity Level IV non-cited violation of 10 CFR 50.59, "Changes, Tests, and Experiments," and an associated Green finding was identified involving the failure to request a license amendment for a facility change that required a change to the Technical Specifications. This issue is also associated with a Green finding related to the licensee's failure to follow Procedure NOD-QP-3, "10 CFR 50.59 and 10 CFR 72.48 Reviews," and Procedure FCSG-23, "10 CFR 50.59 Resource Manual," both of which require submittal of a license amendment request prior to making a facility change that requires a change to Technical Specifications. The licensee initiated CR 2014-01029 on January 23, 2014, to document this violation and track corrective actions. This performance deficiency was considered to be of more than minor safety significance because it was associated with the procedure quality attribute of the mitigating systems cornerstone and it 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 failure to follow station procedures for the 10 CFR 50.59 process caused the Technical Specifications to become insufficient to ensure that the limiting conditions for operation will be met. Using Inspection Manual Chapter 0609 Appendix G, Checklist 4, the inspectors determined that the finding did not result in the loss of any accident mitigation capability and did not require a quantitative risk assessment. This finding was determined to be of very low risk significance. This performance deficiency was also determined to be subject to traditional enforcement because it impeded the regulatory process, in that the failure to submit a license amendment and add required surveillance testing was in violation of 10 CFR 50.59(c)(1)(i) and caused the NRC-approved Technical Specifications to be out of alignment with the safety analysis for the facility. This violation is associated with a finding that has been evaluated by the SDP and communicated with an SDP color reflective of the safety impact of the deficient licensee performance. The SDP, however, does not specifically consider the regulatory process impact. Thus, although related to a common regulatory concern, it is necessary to address the violation and finding using different processes to correctly reflect both the regulatory importance of the violation and the safety significance of the associated finding. This violation was determined to be a Severity Level IV violation, because it is consistent with the examples in Paragraph 6.1.d of the NRC Enforcement Policy. The finding had a cross-cutting aspect in the training aspect of the human performance cross-cutting area because the licensee's staff failed to understand and misapplied NRC generic guidance related to discovery of inadequate Technical Specifications.

Inspection Report# : 2014002 *(pdf)*

Significance: G Feb 15, 2014
Identified By: NRC
Item Type: NCV Non-Cited Violation
Inadequate 10 CFR 50.59 Screening for Containment Spray Design Change (Section 4OA3.8

A non-cited violation of 10 CFR 50, Appendix B, Criterion V, “Instructions, Procedures, and Drawings” was identified involving the licensee’s failure to complete a 10 CFR 50.59 screening that met the requirements of Procedure NOD-QP-3, “10 CFR 50.59 and 10 CFR 72.48 Reviews,” Revision 37. The licensee’s staff subsequently re-performed the 50.59 screening on November 29, 2013, and determined that a 10 CFR 50.59 evaluation was required. The NRC staff reviewed the 10 CFR 50.59 screening and evaluation and determined that they had been properly performed, and that a license amendment request was not required prior to implementation of the activity. The licensee documented this procedural violation in CR 2014-01357 on January 29, 2014.
This performance deficiency was considered to be of more than minor safety significance because it was associated with the design control attribute of the mitigating systems cornerstone and it 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 failure to follow station procedures for the 10 CFR 50.59 process prevented the licensee’s staff from evaluating the adverse impacts of the change on the facility. Using Inspection Manual Chapter 0609 Appendix G, Checklist 4, the inspectors determined that the finding did not result in the loss of any accident mitigation capability and did not require a quantitative risk assessment. This finding was determined to be of very low risk significance. The inspectors determined that this finding had a cross-cutting aspect of conservative bias in the human performance area, because the licensee’s staff ensured that the proposed design change was safe in order to proceed rather than unsafe to stop [H.14]. (Section 4OA3.8).
Inspection Report# : 2014002 *(pdf)*

Significance: G Feb 15, 2014
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Adequately Design Anchorage for Containment Spray and Raw Water System Pipe Supports
Several examples of a non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, “Design Control,” were identified involving the failure to ensure the adequacy of the anchorage for several raw water system and containment spray system pipe supports. Specifically the anchorage design was non-conservative with respect to the design basis requirements. The licensee entered these issues into the corrective action program as CR 2013-05304 and performed an operability determination as immediate actions. Long term actions to resolve the errors in the calculations are documented in the condition report.
The performance deficiency was determined to be more than minor because it was associated with the Mitigating Systems cornerstone attribute of design control and affected the cornerstone objective of ensuring the availability, reliability, and capability of the containment spray system and raw water system. Using Inspection Manual Chapter 0609, Attachment 4 “Initial Characterization of Findings,” and Appendix A “The Significance Determination Process (SDP) for findings at-power,” both dated 6/19/12, the inspectors determined the performance deficiency affected the mitigating systems cornerstone and screened to Green because the finding affected the design and qualification of a mitigating component but remained operable. The inspectors used the at-power SDP because the condition existed since construction and while the plant was predominantly at power. The inspectors determined there was no cross-cutting aspect associated with this finding because the calculations were from the 1980’s and therefore were not reflective of current performance. (Section 4OA5.1).
Inspection Report# : 2014002 *(pdf)*

Significance: G Feb 15, 2014
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Adequately Implement Design Requirements for Containment Air Cooler Pipe Supports
A non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, “Design Control,” was identified involving the failure to ensure the adequacy of the U-bolts for containment air cooler pipe supports VAS-1 and VAS-2. Specifically the U-bolt design was non-conservative with respect to the design basis requirements. The licensee entered these issues into the corrective action program as CR 2013-03722. The licensee revised the calculation to support

operability. In addition, the licensee generated engineering change EC59570 to fix the degraded VAS-1 and VAS-2 supports.
The performance deficiency was determined to be more than minor because it was associated with the Mitigating Systems cornerstone attribute of design control and affected the cornerstone objective of ensuring the availability, reliability, and capability of several safety injection tank valves. Specifically, the one-directional U-bolts for VAS-1 and VAS-2 are not designed to withstand two-directional loading and the condensate drain piping line has the potential to adversely impact the safety injection tank discharge isolation valves HCV-2934 and HCV-2974 during a design basis event. The licensee updated calculation FC05918 and provided an operability evaluation to address the degraded condition. The inspectors reviewed the information and did not find any issues. Using Inspection Manual Chapter 0609, Attachment 4 "Initial Characterization of Findings," and Appendix A "The Significance Determination Process (SDP) for findings at-power," both dated June 19, 2012, the inspectors determined performance deficiency affected the mitigating systems cornerstone and screened to Green because the finding affected the design and qualification of a mitigating SSC but remained operable. The inspectors used the at-power SDP because the condition existed since construction and while the plant was predominantly at power. The inspectors determined there was no cross-cutting aspect associated with this finding because the calculation was from the 1980s, and therefore was not reflective of current performance.
Inspection Report# : 2014002 *(pdf)*

Significance: N/A Mar 01, 2013
Identified By: NRC
Item Type: VIO Violation
Continued Failure to Classify Intake Structure Sluice Gates as Safety Class 3
The inspectors identified a cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for licensee's failure to classify the six intake structure exterior sluice gates and their motor operators as Safety Class 3 as defined in the Updated Safety Analysis Report, Appendix N. This violation was first presented in Inspection Report 05000285/2012002 and the licensee has remained in non-compliance.

The inspectors determined that the continued failure to classify the intake structure exterior sluice gates and their motor operators as Safety Class 3 was a performance deficiency. This finding was more than minor because it adversely impacted the protection against external events attribute of the Mitigating Systems Cornerstone objective of ensuring the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences. The significance of this finding is bounded by the significance of a related Yellow finding regarding the ability to mitigate an external flooding event (Inspection Report 05000285/2010008). This finding has a cross-cutting aspect in the area of problem identification and resolution, corrective action program, for failure to thoroughly evaluate problems such that the resolutions address causes and extent of conditions. This also includes conducting effectiveness reviews of corrective actions to ensure that the problems are resolved [P.1(c)]
Inspection Report# : 2013011 *(pdf)*

Barrier Integrity

Significance: G Feb 15, 2014
Identified By: NRC
Item Type: VIO Violation
Failure to Restore Compliance for Containment Spray Runout Conditions
(Initial Entry)
A cited violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," was identified involving the failure to take timely corrective action for a condition adverse to quality. Specifically, the licensee failed to restore

compliance following NRC identification of the licensee's failure to correct a runout condition of the containment spray system (CS) documented in NCV 05000285/2008003-05, in August 2008. Licensee corrective actions to correct the issue included completion of an analysis of containment spray pump operation during the main steam line break (MSLB) event; revision of CS design documentation; analysis of motor performance by an electrical vendor; and completion of a temporary modification to throttle the CS pump discharge valves to provide additional system resistance preventing pump runout. Future corrective actions include a permanent design change to prevent CS pump runout. The licensee initiated CR 2014-02242 on February 19, 2014, to document this failure to restore compliance.

This finding was more than minor because it adversely impacted the Barrier Integrity cornerstone objective to provide reasonable assurance that physical design barriers (containment) protect the public from radionuclide releases caused by accidents or events. The inspectors reviewed NRC IMC 0609, Attachment 4, "Initial Characterization of Findings", Table 3 – SDP Appendix Router. While this issue was identified during a refueling outage, the inspectors determined that the majority of the exposure time for this violation occurred with the reactor at power and should be evaluated using the Significance Determination Process in accordance with IMC 0609, "The Significance Determination Process (SDP) for Findings at-Power," Appendix A, Exhibit 3, "Barrier Integrity Screening Questions." The inspectors determined that the finding did not represent an actual open pathway in containment or containment isolation logic, nor did the finding represent an actual reduction in the function of containment hydrogen igniters. Based on the guidance in the Exhibit 3 checklist the inspectors determined that the finding was of very low safety significance. The inspectors determined that the finding had a cross-cutting aspect of avoiding complacency in the human performance area, because the licensee's staff failed to recognize latent issues even while expecting successful outcomes.
(IR# 05000285/2014002 dated March 19, 2014)

(Update and Closure)
The team reviewed the licensee's corrective actions to address deficiencies related to VIO 05000285/2014002-06, "Failure to Restore Compliance for Containment Spray Runout Conditions." The NRC concluded in Inspection Report 05000285/2014002 (ADAMS Accession No. ML14078A666) that temporary corrective actions taken on November 24, 2013, restored FCS to compliance. The team found these corrective actions to be sufficient to adequately address the violation. The team also reviewed corrective actions scheduled to occur in the upcoming refueling outage and found them to be adequate to permanently correct the deficiency; therefore, VIO 05000285/2014002-06 is closed.
(IR# 05000285/2015008 dated March 12, 2015)
Inspection Report# : 2014002 *(pdf)*
Inspection Report# : 2015008 *(pdf)*

Emergency Preparedness

Significance:  Sep 12, 2014
Identified By: NRC
Item Type: VIO Violation
Failure to Maintain Effectiveness of an Emergency Plan
A cited violation of 10 CFR 50.54(q)(2), "Conditions of License," was identified involving the failure to maintain the effectiveness of the site's emergency plan. Specifically, the licensee established an "Alert" low river level emergency classification criteria that was below the raw water pump's minimum suction requirements, contrary to the standard emergency action level scheme. The licensee entered this issue into its corrective action program as Condition Report 2014-08757 which included actions to re-evaluate the capability of the raw water pumps to operate at low river levels.

This finding was more than minor, and therefore a finding, because it was associated with the emergency response organization performance attribute of the Emergency Preparedness Cornerstone and affected the associated cornerstone objective to ensure 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. Specifically, inaccurate emergency actions levels degrade the licensee's ability to implement adequate measures to protect public health and safety. The finding was evaluated using the Emergency Preparedness Significance Determination Process, and was determined to be of very low safety significance (Green) because the finding was not a lost or degraded risk significant planning function. The planning standard function was not degraded because the emergency classifications would have been declared although potentially in a delayed manner. This finding has a cross-cutting aspect in the area of human performance in that the licensee did not ensure that personnel, equipment, procedures and other resources are available and adequate to support nuclear safety. Specifically, the licensee deferred funding for a vendor analysis of the capabilities of the raw water pumps at the design low river level.
Inspection Report# : 2014009 *(pdf)*

Occupational Radiation Safety

Significance: G Jun 30, 2014
Identified By: Self-Revealing
Item Type: NCV Non-Cited Violation
Failure to Control an Entry to a High Radiation Area Resulting in a Dose Rate Alarm
The inspectors reviewed a self-revealing, non-cited violation of Technical Specification 5.11.1.b, which resulted from an individual entering a high radiation area without being aware of the radiological conditions. Specifically, on July 19, 2013, an operator was performing valve lineup work in the reactor building. Although the operator was on a radiation work permit that allowed access to high radiation areas, access was only allowed with knowledge of the dose rates in the areas entered. As immediate corrective actions, the radiation protection supervisors coached the operator on properly informing Radiation Protection of his planned work areas and coached the radiation protection technician on having a more intrusive questioning attitude during briefings so that radworkers are properly informed of all hazards and radiological conditions. This issue was documented in the licensee's corrective action program as Condition Report CR 2014-14693.
The entry into a high radiation area without knowledge of the radiological conditions is a performance deficiency and is a violation of Technical Specification 5.11.1.b. The performance deficiency is more than minor because it is associated with the Occupational Radiation Safety cornerstone attribute of program and process (exposure control) and adversely affects the cornerstone objective of ensuring adequate protection of worker health and safety from exposure to radiation. Using Inspection Manual Chapter 0609, Appendix C, "Occupational Radiation Safety Significance Determination Process," dated August 19, 2008, the inspectors determined the violation has very low safety significance because: (1) it was not an as low as is reasonably achievable finding, (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 teamwork, because the operator did not properly communicate his work locations to the radiation protection technician for briefing and the technician did not display a questioning attitude to understand the work locations for the operator to properly brief him and ensure nuclear safety was maintained.

Inspection Report# : 2014003 *(pdf)*

Public Radiation Safety

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

Significance: N/A Sep 12, 2014
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Report Loss of Environmental Qualification of Safety Related Limit Switches within Required Time Limits
A non-cited violation of 10 CFR 50.73(a)(1), "Licensee Event Report System," was identified involving the failure to submit a required licensee event report. Specifically, the licensee failed to report within 60 days the discovery that Namco™ Type EA 180 limit switches were not environmentally qualified as required due to inadequate maintenance procedures, a condition that resulted in operation prohibited by the plant's technical specifications. The licensee restored compliance by submitting Licensee Event Report 05000285/2014-004 on June 20, 2014. The licensee entered this issue into its corrective action program as Condition Report 2014-08454.

The NRC determined that the failure to submit a licensee event report within the time limits specified in regulations was a violation of 10 CFR 50.73. This violation was evaluated using Section 2.2.4 of the NRC Enforcement Policy, because the failure to submit a required licensee event report may impact the ability of the NRC to perform its regulatory oversight function. As a result, this violation was evaluated using traditional enforcement. In accordance with Section 6.9 of the NRC Enforcement Policy, this violation was determined to be a Severity Level IV, non-cited violation. The NRC determined that a cross-cutting aspect was not applicable because the issue was strictly associated with a traditional enforcement violation.
Inspection Report# : 2014009 *(pdf)*

Significance: G Sep 12, 2014
Identified By: NRC
Item Type: VIO Violation
Failure to Perform Evaluation for Design Change
A cited violation of 10 CFR 50.59, "Changes, Tests, and Experiments," was identified involving the failure to evaluate if a change to the facility as described in the Updated Safety Analysis Report would require prior NRC review and approval. Specifically, the licensee did not evaluate a change that would permanently substitute a manual action for an automatic action to add water and nitrogen gas to the component cooling water surge tank. The licensee entered this issue into its corrective action program as Condition Report 2014-09080 and initiated action to evaluate the change to the component cooling water system.

The NRC determined that the licensee's failure to perform an evaluation prior to implementing a proposed change described in the Updated Safety Analysis Report was a violation of 10 CFR 50.59. Because this performance deficiency had the potential to impact the NRC's ability to perform its regulatory function, the NRC evaluated the performance deficiency using traditional enforcement. In accordance with Section 2.1.3.E.6 of the NRC Enforcement Manual, the team evaluated this finding using the significance determination process to assess its significance. The NRC performed an initial screening of the finding in accordance with NRC Manual Chapter IMC 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." Using IMC 0609, Appendix A, Exhibit 2, "Mitigating Systems Screening Questions," dated July 1, 2012, the finding was of very low safety significance (Green) because it: (1) was not a deficiency affecting the design or qualification of a mitigating structure, system, or component, and did not result in a loss of operability or functionality; (2) did not represent a loss of system and/or function; (3) did not represent an actual loss of function of at least a single train for longer than its technical specification allowed outage time, or two separate safety systems out-of-service for longer than their technical specification allowed outage time; and (4) did not represent an actual loss of function of one or more non-technical specification trains of equipment designated as high safety-significant in accordance with the licensee's maintenance rule program. Therefore, in accordance with Section 6.1.d.2 of the NRC Enforcement Policy this performance deficiency is being characterized as a Severity Level IV violation. The team determined that a cross-cutting aspect was not applicable to this finding because the issue was strictly associated with a traditional enforcement violation.
Inspection Report# : 2014009 *(pdf)*

Significance:  Sep 12, 2014
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Complete Corrective Actions in a Timely Manner
A non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified involving the failure to take timely corrective actions to address deficiencies in station calculations. Specifically, the licensee failed to update station calculations to incorporate actual test data for sluice gate leakage to ensure design basis flood levels do not adversely affect equipment important to safety. The licensee entered this issue into its corrective action program as Condition Report 2014-09156 and initiated actions to update station calculations.

This finding was more than minor, and therefore a finding, because if left uncorrected, the finding would have the potential to lead to a more significant safety concern. Specifically, failure to complete accurate calculations that support engineering modifications for mitigating the consequences of an external flooding event could lead to unanalyzed conditions adversely affecting safety related systems or components. The NRC performed an initial screening of the finding in accordance with NRC Manual Chapter IMC 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." Using IMC 0609, Appendix A, Exhibit 2, "Mitigating Systems Screening Questions," dated July 1, 2012, this finding is of very low safety significance (Green) because: (1) the finding was not a deficiency affecting the design or qualification of a mitigating system; (2) the finding did not represent a loss of system and/or function; (3) the finding did not represent an actual loss of function of a single train for greater than its technical specification allowed outage time; (4) did not represent an actual loss of function of one or more non-technical specification trains of equipment designated as high safety-significant in accordance with the licensee's maintenance rule program; and (5) did not involve the loss or degradation of equipment or function specifically designed to mitigate a seismic, flooding or severe weather event. This finding has a cross-cutting aspect in the area of human performance in that the licensee failed prioritize an update to Calculation FC08081 following completion of the May 2013 in-leakage test.
Inspection Report# : 2014009 *(pdf)*

Significance:  Mar 14, 2014
Identified By: NRC

Item Type: NCV Non-Cited Violation
Failure to Obtain Prior NRC Approval for a Change in Method of Evaluation
The team identified three examples of a non-cited violation of 10 CFR 50.59, "Changes, Test, and Experiments," associated with the licensee's failure to adequately evaluate changes to determine if prior NRC approval is required. Specifically, from April 19, 2011, through August 17, 2012, the licensee failed to obtain a license amendment pursuant to Section 50.90 prior to implementing a proposed change, test, or experiment if the change, test, or experiment would result in a departure from a method of evaluation described in the Updated Safety Analysis Report. The licensee addressed these issues by submitting a license amendment which was reviewed and approved by the NRC. This issue has been entered into the licensee's corrective action program as Condition Reports CR 2013-03839, 2013-04266, 2013-05210, 2013-14363, and 2013-14665.

The licensee's failure to implement the requirements of 10 CFR 50.59 and adequately evaluate changes to requirements for tornado missile protection described in the Updated Safety Analysis Report was a performance deficiency. Because this performance deficiency had the potential to impact the NRC's ability to perform its regulatory function, the team evaluated the performance deficiency using traditional enforcement. In accordance with Section 2.1.3.E.6 of the NRC Enforcement Manual, the team evaluated this finding using the significance determination process to assess its significance. Using Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process for Findings At-Power," the finding was determined to have very low safety significance (Green) because it: (1) was not a deficiency affecting the design or qualification of a mitigating structure, system, or component, and did not result in a loss of operability or functionality; (2) did not represent a loss of system and/or function; (3) did not represent an actual loss of function of at least a single train for longer than its technical specification allowed outage time, or two separate safety systems out-of-service for longer than their technical specification allowed outage time; (4) did not represent an actual loss of function of one or more nontechnical specification trains of equipment designated as high safety-significance in accordance with the licensee's maintenance rule program; and (5) did not involve the loss or degradation of equipment or function specifically designed to mitigate a seismic, flooding, or severe weather event. Therefore, in accordance with Section 6.1.d.2 of the NRC Enforcement Policy, the team characterized this performance deficiency as a Severity Level IV violation. The team determined that a cross-cutting aspect was not applicable to this performance deficiency because the failure to adequately evaluate changes in accordance with 10 CFR 50.59 was strictly associated with a traditional enforcement violation.
Inspection Report# : 2013017 *(pdf)*

Significance: N/A Feb 15, 2014
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Make Required 10 CFR 50.46 Report Within Required Time (Section 4OA3.2)
A Severity Level IV non-cited violation of 10 CFR 50.46, "Acceptance criteria for emergency core cooling systems (ECCS) for light-water nuclear power reactors," was identified involving the failure to submit a report within 30 days of discovery of a significant change in the application of the ECCS model that affected the peak cladding temperature. The licensee submitted the required 10 CFR 50.46 report late on September 20, 2013 (ML13266A108). This report was subsequently reviewed by the NRC staff date October 2, 2013, and determined to be acceptable. The NRC staff determined that while the configuration change to the HPSI system resulted in a higher peak cladding temperature, it is within the regulatory requirements of 10 CFR 50.46(b)(1). The licensee initiated CRs-2014-00674 and 2014-01356 to address issuance of the late report.
This performance deficiency was determined to be subject to traditional enforcement because it impeded the regulatory process, in that the failure to submit a timely report of significant ECCS analytical changes prevented the NRC technical staff from independently evaluating the potential safety implications of reductions in safety injection flow into the reactor during an accident. This violation was determined to be a Severity Level IV violation because it is consistent with the examples in Paragraph 6.9.d of the NRC Enforcement Policy. Because this violation is subject to traditional enforcement, no cross-cutting aspects have been assigned. (Section 4OA3.2).

Inspection Report# : 2014002 *(pdf)*

Significance: N/A Feb 15, 2014
Identified By: NRC
Item Type: VIO Violation
Untimely Submittal of Required Licensee Event Reports
Two examples of a cited Severity Level IV violation of 10 CFR 50.73, "Immediate Notification Requirements for Operating Nuclear Power Reactors," were identified involving the failure to submit a required licensee event report (LER) within 60 days following discovery of an event requiring a report. In the first example, LER 2013-010-0 was submitted on July 2, 2013, seventy-nine days after the flow imbalance was observed by the licensee's staff. In the second example, LER 2013-017-0 was submitted to the NRC on December 27, 2013, 62 days after the event date on the licensee's reportability evaluation and sixty-six days after a condition report documented the reportable condition. The licensee initiated CR 2014-01358 on January 29, 2014 to document this repetitive violation.
The violation was evaluated using Section 2.2.4 of the NRC Enforcement Policy, because the failure to submit a required LER may impact the ability of the NRC to perform its regulatory oversight function. As a result, this violation was evaluated using traditional enforcement. In accordance with Section 6.9(d)(9) of the NRC Enforcement Policy, this violation was determined to be a Severity Level IV violation. The inspetors determined that a cross-cutting aspect was not applicable to this performance deficiency because the failure to make a required report was strictly associated with a traditional enforcement violation.
Inspection Report# : 2014002 *(pdf)*
Inspection Report# : 2014009 *(pdf)*

Significance: N/A Sep 30, 2012
Identified By: NRC
Item Type: VIO Violation
Failure to Update the Updated Safety Analysis Report- Solid Waste
The inspectors identified a cited violation of 10 CFR 50.71(e), "Maintenance of Records, Making of Reports," for the failure to update the Updated Safety Analysis Report with a detailed description of the Original Steam Generator Storage Facility. Specifically, since December 2006, the licensee stored a significant source of radioactivity in the Original Steam Generator Storage Facility, but failed to describe the volume of waste, the principal sources of radioactivity, the total quantity of radioactivity, and the estimated dose rate at the site boundary per curie of radioactivity in the Updated Safety Analysis Report. The licensee has entered this violation into their corrective action program as Condition Report 2012-05725.

This issue was evaluated using traditional enforcement because it has the potential to impact the NRC's ability to perform its regulatory function. This issue is being characterized as a Severity Level IV violation in accordance with Section 6.1.d.3 of the NRC Enforcement Policy. Cross-cutting aspects are not assigned to traditional enforcement violations
Inspection Report# : 2012005 *(pdf)*

Last modified : April 01, 2015