Fort Calhoun
1Q/2014 Plant Inspection Findings

Initiating Events

Significance: G May 29, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
HPSI Pump Flow Imbalance
The NRC identified a non-cited violation of Technical Specification 5.8.1.a for failure to establish, implement, and maintain a procedure recommended in Regulatory Guide 1.33, Revision 2, Appendix A. Specifically, the licensee failed to establish a procedure for changing load on the Main Turbine as required by Section 2.f, "Changing Load or Load Follow." The licensee entered this into their corrective action program as Condition Report 2013-08572.

Failure to comply with technical specifications is a performance deficiency. The finding is more than minor because it adversely affects the Procedure Quality attribute of the Initiating Events Cornerstone objective to limit the likelihood of events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Using the Initiating Events Screening Questions in Manual Chapter 0609, Appendix A, Exhibit 1, the finding was determined to not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available; therefore, the finding is of very low safety significance.

This finding was determined to have a cross-cutting aspect in the area of human performance, associated with resources, because the licensee failed to ensure that procedures are available and adequate to assure nuclear safety. Specifically, the licensee did not establish a quality procedure for changing load on the Main Turbine as recommended by Regulatory Guide 1.33, Revision 2, Appendix A.

Inspection Report# : 2013010 *(pdf)*

Significance: G Feb 02, 2012
Identified By: NRC
Item Type: VIO Violation
Inadequate Corrective Actions to Ensure Reliability of Raw Water Pump Power Cables
The NRC identified a cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for failure to take effective corrective action following the initial discovery of water intrusion in cable vault manholes MH-5 and MH-31 in 1998, 2005, 2009, and 2011. Specifically, the licensee failed to take effective corrective action to establish an appropriate monitoring frequency, which took into account variable environmental conditions to mitigate potential common mode failure of raw water 4160 V motor cables in underground ducts and manholes identified during the Component Design Basis Inspection performed in 2009. The violation is being cited because the licensee had failed to restore compliance in a reasonable period following documentation of the issue as a non-cited violation issued December 30, 2009.
The failure to take effective corrective action to ensure the reliability and capability of the safety-related cables powering the raw water pump motors was a performance deficiency. Furthermore, the finding was within the licensee's ability to foresee and correct because the licensee had multiple opportunities to correct the continuing challenge to the safety-related cables and raceways for the raw water system over an extended period. The finding was more than minor because it adversely affected the Mitigating Systems Cornerstone attribute of design control for

ensuring the availability, reliability, and capability of systems that respond to Initiating Events to prevent undesirable consequences. The finding is of very low safety significance because it was a design deficiency that did not result in loss of operability or functionality.

This finding has a crosscutting aspect in the decision-making program component of the human performance area because the licensee failed to use conservative assumptions in decision-making and adopt a requirement to demonstrate that the proposed action was safe in order to proceed rather than a requirement to demonstrate that it was unsafe in order to disapprove the action. Specifically, from 2005 until 2011, the licensee chose to postpone installation of proposed water level control corrective actions and failed to appropriately monitor water intrusion into underground ducts and manholes MH-5 and MH-31 for raw water 4160 V motor cables multiple times.
Inspection Report# : 2011006 *(pdf)*
Inspection Report# : 2013019 *(pdf)*

Mitigating Systems

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. 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 (SDP) 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 crosscutting 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 NonCited 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 1993 when they 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. 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 licensee failed to take appropriate corrective action when they 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. The performance deficiency is more-than-minor and therefore a finding because if left uncorrected the performance deficiency has the potential to lead to a more significant safety concern. The failure to take appropriate corrective actions for conditions adverse 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 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 crosscutting 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 NonCited 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 NonCited Violation
Failure to follow an immediate operability determination procedure
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 follow an operability determination procedure. Upon identifying that that a relief valve had not been testing within the required testing 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. 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 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 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 crosscutting 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 NonCited 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 NonCited 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: G Feb 15, 2014
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Translate HPSI Pump Design Requirements to Design Documents (Section 4OA3.2).
The inspectors identified a Green non-cited violation of 10 CFR 50, Appendix B, Criterion III, "Design Control." Specifically, the licensee failed to translate HPSI pump design and runout characteristics to design documents such as the Updated Safety Analysis Report or design calculations. On Jun 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 in any plant conditions. The licensee has also completed or proposed a broad range of programmatic corrective actions to improve maintenance and knowledge of the plant's design and license basis.

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 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 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). Therefore, a Region IV senior reactor analyst performed a bounding detailed risk evaluation. The change to the core damage frequency was 8E-8/year. The analyst determined that the finding was of very low safety significance. 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 helped 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 NonCited Violation
Failure to Maintain Design Control of HPSI Injection Valve (Section 4OA3.4)
The inspectors identified two examples of a Green non-cited violation of 10 CFR 50, Appendix B, Criterion III, "Design Control." The first example involved the licensee's 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 re-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 are now reflected by plant performance.

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 IM 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 IM 0609, “The Significance Determination Process (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 therefore determined that the finding would require 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. Therefore, a Region IV senior reactor analyst performed a bounding detailed risk evaluation. The analyst noted that the NRC’s “Standardized Plant Analysis Risk” model included system functional success criteria – See Table 4.2, “System Functional Success Criteria.” The high pressure safety injection system functional success criteria specified: delivery of water to the reactor vessel using one high pressure safety injection pump and at least two out of four intact cold legs. The flow imbalance specified in the functional success criteria was much worse than the actual flow imbalance identified by the finding. Probabilistic risk assessments focus on severe core damage whereas design basis requirements are focused on the potential to exceed emergency core cooling system success criteria and 10 CFR Part 100 limits, which are much more conservative. 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. The finding was not a significant contributor to the large early release frequency. The analyst determined that the finding was of very low safety significance. The dominant core damage sequences included loss of coolant accidents. However, the high pressure safety injection system remained functional for its probabilistic risk assessment function, which minimized 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. 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:  Feb 15, 2014
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Request a License Amendment for Required Change to Technical Specifications (Section 4OA3.4)
The inspectors identified a Severity Level IV non-cited violation of 10 CFR 50.59, “Changes, Tests and Experiments,” and an associated Green finding, for the licensee’s 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 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 insufficient technical specifications [H.9]. (Section 4OA3.4).

Inspection Report# : 2014002 *(pdf)*

Significance: G Feb 15, 2014
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate 10 CFR 50.59 Screening for Containment Spray Design Change (Section 4OA3.8
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 complete a 10 CFR 50.59 screening that met the requirements of NOD-QP-3, "10 CFR 50.59 and 10 CFR 72.48 Reviews," Revision 37. The licensee's staff subsequently re-performed the FC 154A screening form on November 29, 2013, and determined that a 10 CFR 50.59 evaluation was required. The NRC staff reviewed the resulting 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 NonCited Violation
Failure to Adequately Design Anchorage for Containment Spray and Raw Water System Pipe Supports
The inspection team identified several examples of a Green, non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for 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 also implemented by the referenced 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 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 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 NonCited Violation
Failure to Adequately Implement Design Requirements for Containment Air Cooler Pipe Supports (Section 4OA5.2)
The NRC identified a Green, non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, “Design Control,” for 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 the safety injection tank and 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 and valves 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 6/19/12, 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. (Section 4OA5.2).

Inspection Report# : 2014002 *(pdf)*

Significance: G Jul 19, 2013
Identified By: NRC

Item Type: NCV NonCited Violation
Failure to Complete all Testing for a Condition Averse to Quality
The team identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Actions," for the licensee's failure to promptly identify and correct a condition adverse to quality. Specifically, the licensee failed to fully implement a corrective action from a previous breaker issue, which was to perform current injection testing for the 480 Vac 1B4A bus breakers without the full function test kit. Testing with the full function test kit would not identify if zone select interface jumpers were incorrectly installed. The licensee performed current injection testing without the full functional test kit on the 480 Vac load center main breaker 1B4A and the bus tie breaker BT 1B4A. The licensee entered this deficiency into their corrective action program for resolution as Condition Report CR 2013-13262.

The licensee's failure to promptly identify and correct a condition adverse to quality was a performance deficiency. 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 team evaluated the finding using Inspection Manual Chapter 0609, Appendix G, "Shutdown Operations Significance Determination Process," Checklist 4, "PWR Refueling Operation: RCS level >23' or PWR Shutdown Operation with Time to Boil > 2 hours and Inventory in the Pressurizer," dated May 25, 2004, and determined that the finding is of very low safety significance (Green) because the finding did not require a quantitative risk assessment because adequate mitigating equipment remained available. The finding has a cross-cutting aspect in the area of human performance associated with the decision-making component because the licensee did not ensure that the proposed action was safe in order to proceed, rather than unsafe in order to disapproved the action.

Inspection Report# : 2013013 *(pdf)*

Significance: G Jul 19, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Furnish Evidence of an Activity Affecting Quality
The team identified 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 associated with the 480 V breakers. Specifically, the licensee failed to maintain design documents that detailed the correct Digital Low Resistance Ohm (DLRO) values required for ensuring proper connections between the Square D Masterpact NW breaker/cradle assemble to the GE AKD-5, 480 V cubicle stabs. The licensee re-generated acceptance criteria to address this issue. This issue was entered into the licensee's corrective action program as Condition Report CR 2013-04032.

The licensee's failure to furnish evidence that showed the required DLRO values ensured proper connections between the Square D Masterpact NW breaker/cradle assemble to the GE AKD-5, 480 V cubicle stabs was a performance deficiency. The performance deficiency was determined to be 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. Using Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," dated July 1, 2012, the finding was determined to have very low safety significance (Green) because it: (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 nontechnical specification trains of

equipment designated as high safety-significance in accordance with the licensee's maintenance rule program. This finding has a cross-cutting aspect in the area of human performance, associated with the resources component, because the licensee failed to maintain complete, accurate, and up-to-date design documentation. Specifically, the licensee did not maintain the engineering process for determining acceptable DLRO values.

Inspection Report# : 2013013 *(pdf)*

Significance: G Jul 19, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Corrective Actions to Prevent Repetition of a Significant Condition Adverse to Quality, a White MSPI SSFF Degrading Tend
The team identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, for the licensee's approval of Root Cause Analysis 2013-03424, Revision 0 and Revision 1, "MSPI Safety System Functional Failures Degrading Trend," which did not assure corrective actions to prevent repetition of a significant condition adverse to quality. The licensee entered this deficiency into their corrective action program for resolution as Condition Reports CR 2013-00584 and 2013-14614.

The licensee's failure to establish measures to assure that the cause of the degrading trend in MSPI safety system functional failures would be promptly identified and action taken to preclude repetition in accordance with 10 CFR Part 50, Appendix B, Criterion XVI, was a performance deficiency. The performance deficiency was more than minor, and therefore a finding, because the failure to correct the cause and preclude the repetition of the cause would have the potential to lead to a more significant safety concern. Specifically, failure to identify the correct cause and preclude repetition would lead to a high frequency of safety system functional failures. This finding was associated with the mitigating systems cornerstone. Using Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," dated July 1, 2012, the finding was determined to be of very low safety significance (Green) because it: (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 nontechnical specification trains of equipment designated as high safety-significance in accordance with the licensee's maintenance rule program. This finding has a cross-cutting aspect in the area of problem identification and resolution, associated with the corrective action program component, because the licensee did not thoroughly evaluate the problem and, consequently, the resolution did not identify the extent of cause as necessary.

Inspection Report# : 2013013 *(pdf)*

Significance: G Jul 19, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Control Deviations From the Design Basis Requirements for Structural Calculations Related to the Reactor Coolant System
The team identified multiple examples of a non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the licensee's failure to control deviations from design standards. Specifically, the licensee failed to control deviations from the design basis requirements for structural calculations related to the reactor coolant system. The licensee entered this deficiency into their corrective action program for resolution as Condition Reports CR 2013-19878, 2013-18361, 2013-20281, and 2013-14726.

The failure to control deviations from quality standards as required by 10 CFR Part 50, Appendix B, Criterion III, 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 (SDP) for Findings At-Power," dated July 1, 2012, the finding was determined to have very low safety significance (Green) because it: (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 nontechnical specification trains of equipment designated as high safety-significance in accordance with the licensee's maintenance rule program. There was no cross cutting aspect assigned to this finding because this issue does not reflect present licensee performance.
Inspection Report# : 2013013 *(pdf)*

Significance: G Jul 19, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Programmatic Failure to Evaluate Safety Impact of Degraded Conditions During Use of Interim Operability Criteria
The team identified multiple examples of a non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings." Specifically, the licensee's failure to follow station procedures for corrective actions, operability, and calculation preparation for instances where the interim operability procedure was invoked for degraded conditions identified with piping and pipe supports. As a result, the degraded conditions were untimely and poorly documented. This issue was entered into the licensee's corrective action program as Condition Report CR 2013-03598.

The failure to provide adequate acceptance criteria for an activity affecting quality was a performance deficiency. This performance deficiency is more than minor, and therefore a finding, because it is associated with the human 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. Using Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," dated July 1, 2012, and guidance from the Office of Nuclear Reactor Regulation, Division of Engineering technical staff for issues where the inputs to calculations deviated from approved standards, the finding was determined to have very low safety significance (Green) because: (1) the Office of Nuclear Reactor Regulation technical staff provided the team with the following input: "Office of Nuclear Reactor Regulation technical staff didn't identify gross exceedances that would render the evaluated component as inoperable or unable to perform its safety function"; (2) it 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; and (3) it 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. This finding has a cross-cutting aspect in the area of human performance associated with work practices component because the licensee failed to define and effectively communicate expectations regarding compliance with station procedures.

Inspection Report# : 2013013 *(pdf)*

Significance: G Jul 19, 2013
Identified By: NRC

Item Type: NCV NonCited Violation
Failure to Correct Overstressed Components
The team identified multiple examples of a non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings." Specifically, the licensee's failure to follow station procedures for corrective actions, operability, and calculation preparation for instances where the interim operability procedure was invoked for degraded conditions identified with piping and pipe supports. As a result, the degraded conditions were untimely and poorly documented. This issue was entered into the licensee's corrective action program as Condition Report CR 2013-03598.

The failure to provide adequate acceptance criteria for an activity affecting quality was a performance deficiency. This performance deficiency is more than minor, and therefore a finding, because it is associated with the human 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. Using Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," dated July 1, 2012, and guidance from the Office of Nuclear Reactor Regulation, Division of Engineering technical staff for issues where the inputs to calculations deviated from approved standards, the finding was determined to have very low safety significance (Green) because: (1) the Office of Nuclear Reactor Regulation technical staff provided the team with the following input: "Office of Nuclear Reactor Regulation technical staff didn't identify gross exceedances that would render the evaluated component as inoperable or unable to perform its safety function"; (2) it 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; and (3) it 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. This finding has a cross-cutting aspect in the area of human performance associated with work practices component because the licensee failed to define and effectively communicate expectations regarding compliance with station procedures.

Inspection Report# : 2013013 *(pdf)*

Significance: G Jul 19, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Non-conservative Criteria in Operability Procedure
The team identified a non-cited violation of Title 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the licensee's failure to develop an adequate procedure for assessing operability of degraded piping and pipe supports. Specifically, Station Procedure PED-MEI-17, "Interim Operability Criteria," a procedure the licensee used to evaluate CQE and L-CQE piping and piping supports that are found to exceed design basis requirements, was inadequate for this application because it did not contain all applicable constraints. This issue was entered into the licensee's corrective action program as Condition Report CR 2013-22342.

The failure to use an adequate procedure for evaluating degraded or nonconforming pipe and pipe supports 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. Using Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," dated July 1, 2012, and guidance from the Office of Nuclear Reactor Regulation, Division of Engineering technical staff for issues where the inputs to calculations deviated from approved standards, the finding was determined to have very low safety significance (Green) because: (1) the Office of Nuclear Reactor Regulation technical staff provided the team with the following input: "Office of Nuclear Reactor Regulation technical staff didn't identify gross exceedances that would render the evaluated component as inoperable or unable to perform its safety function;" (2) it 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; and (3) it 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. There was no cross-cutting aspect assigned to this finding because this issue does not reflect present licensee performance.

Inspection Report# : 2013013 *(pdf)*

Significance: G Jul 19, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Follow Operability Procedure
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 follow Station Procedure NOD-QP-31, "Operability Determination Process." 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." However, the team identified that the operability determination associated with a component identified as beyond its specified service life lacked adequate technical justification for why the item was operable with the degraded or nonconforming condition. The licensee entered this deficiency into their corrective action program for resolution as Condition Report CR 2013-12255.

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: (1) did not increase the likelihood of a loss of reactor coolant system inventory; (2) did not degrade the licensee's ability to terminate a leak path or add reactor coolant system inventory when needed; and (3) 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# : 2013013 *(pdf)*

Significance: G Jul 19, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Evaluate the Effects of Modifying the Turbine Driven Auxiliary Feedwater Pump
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 conduct an adequate evaluation of the impacts of modifying the turbine driven auxiliary feedwater pump (FW 10) during all modes of operation. Specifically, the licensee instituted an engineering change package to modify the pump from a variable speed to a constant speed setting and did not consider the dynamic system changes that could affect the pump operation for all design basis events and operating conditions. The licensee entered this deficiency into their corrective action program for resolution as Condition Report CR 2013-10465.

The failure to evaluate the effects of modifying the turbine driven auxiliary feedwater pump from a variable speed to a constant speed for all modes of operation was a performance deficiency. This performance deficiency was more than minor, and therefore a finding, because it was associated with the configuration 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 (SDP) for Findings At-Power," dated July 1, 2012, the finding was determined to have very low safety significance (Green) because it: (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 nontechnical specification trains of equipment designated as high safety-significance in accordance with the licensee's maintenance rule program. 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. Specifically, the licensee did not reanalyze the pump performance parameters to identify any potentially adverse effects of changing the pump to a constant speed control.
Inspection Report# : 2013013 *(pdf)*

Significance: G Jul 19, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Perform Adequate Operating Experience Reviews
The team identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the licensee's programmatic failure to conduct adequate operating experience reviews for root cause evaluations in accordance with Station Procedure FCSG-24-4, "Condition Report and Root Cause Evaluation," Revision 5. Specifically, during the course of the inspection, the team identified four specific examples where licensee staff failed to conduct a thorough operating experience review while performing a root cause analysis to determine whether the same or similar problems have occurred at Fort Calhoun or within the industry. Therefore, this finding is indicative of a programmatic issue. Thorough operating experience reviews are important for the construction of corrective actions to prevent the issues from recurring and help determine extent of condition and/or generic implications from the issue. This issue was entered into the licensee's corrective action program as Condition Report CR 2013-14205.

The licensee's programmatic failure to conduct adequate operating experience reviews for root cause evaluations was a performance deficiency. This performance deficiency is more than minor, and therefore a finding, because if left uncorrected it has the potential to lead to a more significant safety concern. Specifically, if the licensee does not thoroughly evaluate operating experience to determine whether the same or similar problems have occurred at the Fort Calhoun Station or within the industry, then effective corrective actions to prevent the issues from recurring may not be implemented and an adequate extent of condition and/or generic implications from the issue may not be identified. This finding was associated with the Mitigating Systems Cornerstone. Using Inspection Manual Chapter 0609, Appendix G, "Shutdown Operations Significance Determination Process," Checklist 4, "PWR Refueling Operation: RCS level >23' or PWR Shutdown Operation with Time to Boil > 2 hours and Inventory in the Pressurizer," dated May 25, 2004, this finding was determined to be of very low safety significance (Green) because the finding did not require a quantitative risk assessment because adequate mitigating equipment remained available. This finding has a cross-cutting aspect in the area of problem identification and resolution associated with the operating experience component because the licensee did not use operating experience information, including vendor recommendations and internally generated lessons learned, to support plant safety by implementing and institutionalizing operating experience through changes to station processes, procedures, equipment, and training programs.
Inspection Report# : 2013013 *(pdf)*

Significance: G Jul 19, 2013
Identified By: NRC
Item Type: NCV NonCited Violation

Failure to Incorporate Design Requirements for Switchgear Room Cooling
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 fully incorporate applicable design requirements into the plant design. Specifically, from initial construction until present, the licensee has failed to incorporate a ventilation system for the vital switchgear rooms that was capable of maintaining room temperature below design requirements under all design conditions.

The failure to fully incorporate applicable design requirements was a performance deficiency. The performance deficiency was determined to be 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. Using Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," dated July 1, 2012, the finding was determined to have very low safety significance (Green) because it: (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 nontechnical specification trains of equipment designated as high safety-significance in accordance with the licensee's maintenance rule program. This finding has a cross-cutting aspect in the area of problem identification and resolution, associated with the corrective action program component, because the licensee did not thoroughly evaluate the problem and, consequently, the resolution did not identify the extent of cause as necessary.

Inspection Report# : 2013013 *(pdf)*

Significance:  Jul 19, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Corrective Action for Non-Seismic Category 1 Piping
The team identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for the licensee's failure to take adequate corrective actions regarding non-Category I (seismic) piping in the intake structure raw water vault. The licensee entered this deficiency into their corrective action program for resolution as Condition Reports CR 2013-04782, 2013-04956, 2013-09256, 2013-10626, and 2013-22090.

The failure to take adequate corrective action regarding non-Category I (seismic) piping in the intake structure raw water vault is a performance deficiency. The performance deficiency is more than minor, and therefore a finding, as it is 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. Using Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process for Findings At-Power," dated July 1, 2012, this finding was determined to have very low safety significance (Green) because it: (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 nontechnical specification trains of equipment designated as high safety-significance 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 decision-making component such that the licensee demonstrates that nuclear safety is an overriding priority. Specifically, that the licensee uses conservative assumptions in decision making and adopts a requirement to demonstrate that the proposed action is safe in order to proceed rather than a requirement to demonstrate that it is unsafe in order to disapprove the action.

Inspection Report# : 2013013 *(pdf)*

Significance: G Jul 19, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Lack of an Adequate Operability Evaluation for Class 1 Raw Water Piping in Non-Class 1 Service Building
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 follow Station Procedure NOD-QP-31, "Operability Determination Process," to adequately assess and document the basis for operability when a nonconforming condition was identified. Specifically, the licensee did not determine the effect of a ruptured 6" stub in the raw water system with respect to the safety function provided by the raw water system during a design seismic event. The licensee entered this deficiency into their corrective action program for resolution as Condition Reports CR 2013-13410 and 2013-13634.

The failure to adequately assess and document the basis for operability regarding seismic raw water piping potentially interacting with the nonseismic service building is a performance deficiency. The performance deficiency is more than minor, and therefore a finding, as it is associated with the equipment performance 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. Using Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process for Findings At-Power," dated July 1, 2012, this finding was determined to have very low safety significance (Green) because it: (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 nontechnical specification trains of equipment designated as high safety-significance in accordance with the licensee's maintenance rule program. This finding has a cross-cutting aspect in the area of problem identification and resolution, associated with the corrective action program component, because the licensee did not thoroughly evaluate the problem such that the resolutions address causes and extent of conditions. This includes properly classifying, prioritizing, and evaluating for operability and reportability conditions adverse to quality.
Inspection Report# : 2013013 *(pdf)*

Significance: G Jul 19, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Operability Determination Due to Failure to Consider an Unavailable Raw Water Pump
The team identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings," involving the licensee's failure to follow procedures when evaluating the impact of the removal of the motor for raw water Pump B on the intake cell level control during a potential site flood. Specifically, on June 18, 2013, the operability determination for Corrective Action 018 of Condition Report CR 2011-10302 was not performed in accordance with Station Procedure NOD-QP-31, "Operability Determination Process," Step 4.3.15, and consequently, failed to evaluate the impact of having only two diversely powered available raw water pumps during a site flood on shutdown cooling system operability. This issue has been entered into the corrective action program as Condition Report CR 2013-15270.

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. Using Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," dated July 1, 2012, the finding was determined to have very low safety significance (Green) because it: (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 nontechnical specification trains of equipment designated as high safety-significance in accordance with the licensee's maintenance rule program. This finding has a cross-cutting aspect in the area of human performance associated with the work control component. Specifically, the team identified that the licensee failed to adequately plan and coordinate work activities, in which, interdepartmental coordination was necessary to assure plant and human performance.

Inspection Report# : 2013013 *(pdf)*

Significance: G Jul 19, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Translate Design Sluice Gate Leakage Into Operating Procedure
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 correctly translate the acceptance limit of intake sluice gate leakage values into procedures. Specifically, the acceptance limit from the licensee's testing was applied to 1000 feet of intake level and not to the 983 to 988 feet operating band prescribed in Section I – Flooding, of Station Procedure AOP-01, "Acts of Nature." This issue has been entered into the corrective action program as Condition Report CR 2013-15287.

The failure to fully incorporate applicable design requirements 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 associated 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 G, "Shutdown Operations Significance Determination Process," Attachment 1, Checklist 4, "PWR Refueling Operation: RCS level > 23' OR PWR Shutdown Operation with Time to Boil > 2 hours And Inventory in the Pressurizer," dated May 25, 2004, the team determined that because this finding did not increase the likelihood of a loss of reactor coolant system inventory; did not degrade the licensee's ability to terminate a leak path or add reactor coolant system inventory; and did not degrade the licensee's ability to recover decay heat removal, this finding did not require a Phase 2 or 3 analysis as stated in Checklist 4. Therefore, the finding is determined to have very low safety significance (Green). This finding has a cross-cutting aspect in the area of problem identification and resolution associated with the corrective action program component because the licensee did not thoroughly evaluate problems such that the resolutions address causes and extent of conditions.

Inspection Report# : 2013013 *(pdf)*

Significance: G Jul 19, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Procedure for Intake Cell Level Control During a Flooding Event
The team identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the licensee's failure to maintain an adequate procedure for site flooding. Specifically, since June 2013, the licensee failed to include appropriate quantitative or qualitative acceptance criteria for Section I – Flooding, of Station Procedure AOP-01, "Acts of Nature," on how to proceed if steps taken to maintain intake cell level less than

988 feet were unsuccessful. This issue has been entered into the corrective action program as Condition Report CR 2013-15289.

The licensee's failure to maintain an adequate procedure for maintaining intake cell level during a flood was a performance deficiency. This performance deficiency is more than minor, and therefore a finding, because it is associated with the procedure quality 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. Using Inspection Manual Chapter 0609, Appendix G, "Shutdown Operations Significance Determination Process," Attachment 1, Checklist 4, "PWR Refueling Operation: RCS level > 23' OR PWR Shutdown Operation with Time to Boil > 2 hours And Inventory in the Pressurizer," dated May 25, 2004, the finding is determined to have very low safety significance (Green) because the finding did not increase the likelihood of a loss of reactor coolant system inventory; did not degrade the licensee's ability to terminate a leak path or add reactor coolant system inventory; and did not degrade the licensee's ability to recover decay heat removal, this finding did not require a Phase 2 or 3 analysis as stated in Checklist 4. This finding has a cross-cutting aspect in the area of problem identification and resolution associated with the corrective action program component because the licensee did not thoroughly evaluate problems such that the resolutions address causes and extent of conditions.

Inspection Report# : 2013013 *(pdf)*

Significance: G Jul 19, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Translate Appendix R License Exemptions into the Plant's Fire Protection Program Design
The team identified a non-cited violation of License Condition 3.D, "Fire Protection Program," for the failure to translate Appendix R license exemptions into the fire protection program design. Specifically, the licensee failed to translate the exemption from 10 CFR Part 50, Appendix R, Section III.G, that was granted July 3, 1985, for the Intake Structure, Fire Area 31, into a design that met those exemptions. The licensee did not protect the cables for both pumps AC-10A and AC-10B from any credible fire in the intake structure. This issue was entered into the licensee's corrective action program as Condition Report CR 2013-16201.

The failure to translate Appendix R license exemptions into the fire protection program design was a performance deficiency. This performance deficiency was more than minor, and therefore a finding, because it was associated with the protection against external factors 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 F, "Fire Protection Significance Determination Process," dated September 20, 2013, Step 1.3, the team determined that the reactor would have been able to reach and maintain cold shutdown, therefore, this finding was determined to have very low safety significance (Green). There was no cross-cutting aspect assigned to this finding because the original license exemption request and grant was over three years ago and this issue does not reflect present licensee performance.
Inspection Report# : 2013013 *(pdf)*

Significance: G Jul 19, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Perform Adequate Extent of Condition Reviews
The team identified a non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the licensee's failure to document the extent of condition review for a number of Root Cause Analyses in accordance with corrective action program procedures. Specifically, during the course of the inspection, the team identified four examples where the licensee did not follow Station Procedure FCSG-24-4, "Condition Report and

Cause Evaluation," and, as a result, did not evaluate the extent to which the actual conditions existed with other plant processes, systems, equipment, or human performance related activities. The licensee entered this deficiency into their corrective action program for resolution as Condition Report CR 2013-18291.

The failure to follow the requirements of Station Procedure FCSG-24-4 when documenting extent of condition reviews in multiple Root Cause Analyses was a performance deficiency. The performance deficiency was more than minor, and therefore a finding, because if left uncorrected the failure to perform extent of condition reviews could lead to a more significant safety concern. Specifically, the failure to identify and address additional conditions adverse to quality in the extent of condition review has the potential to lead to a failure to recognize potentially inoperable safety-related equipment in a timely manner. This finding was associated with the Mitigating Systems Cornerstone. Using Inspection Manual Chapter 0609, Appendix G, "Shutdown Operations Significance Determination Process," Checklist 4, "PWR Refueling Operation: RCS level >23' or PWR Shutdown Operation with Time to Boil > 2 hours and Inventory in the Pressurizer," dated May 25, 2004, the team determined that this finding was of very low safety significance (Green) because the finding did not require a quantitative risk assessment because adequate mitigating equipment remained available. The team determined this finding had a cross-cutting aspect in the area of problem identification and resolution because the licensee failed to thoroughly evaluate problems such that the resolutions address the causes.

Inspection Report# : 2013013 *(pdf)*

Significance: G Jun 10, 2013
Identified By: NRC
Item Type: FIN Finding
Frazil Ice Monitor Not Operational
The team identified a finding for the licensee's failure to maintain their frazil ice detector operational. The detector was sampling a non-representative water temperature which would not have warned operators of the presence of conditions favorable for the formation of frazil ice on intake structure components. The licensee entered the issue into the corrective action program as Condition Report CR 2013-04310 and switched the points they monitored for potential frazil ice formation.
This performance deficiency is more than minor, and therefore a finding, because it is associated with the configuration 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. Using Inspection Manual Chapter 0609, Appendix G, "Shutdown Operations Significance Determination Process," Attachment 1, Checklist 4, "PWR Refueling Operation: RCS level > 23' OR PWR Shutdown Operation with Time to Boil > 2 hours And Inventory in the Pressurizer," the finding is determined to have very low safety significance (Green) because the finding did not increase the likelihood of a loss of RCS inventory; did not degrade the licensee's ability to terminate a leak path or add RCS inventory; and did not degrade the licensee's ability to recover decay heat removal, this finding did not require a Phase 2 or 3 analysis as stated in Checklist 4. This finding has a cross-cutting aspect in the area of problem identification and resolution associated with the corrective action program component because the licensee did not take appropriate corrective actions to address a similar condition during the winter of 2011-2012 in a timely manner, commensurate with the safety significance and complexity.

Inspection Report# : 2013008 *(pdf)*

Significance: G Jun 10, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Lack of Safety-Related Equipment for Design Basis Low River Level
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 have safety-related equipment to ensure safe operations down to the design basis low river level. Specifically, from initial plant operations, the licensee failed to ensure that raw water cooling was provided down to the design basis low river level by ensuring the associated specifications and procedures supported raw water pump operation. This issue has been entered into the corrective action program as Condition Reports CRs 2013-04169 and 2013-06436.
This performance deficiency is more than minor, and therefore a finding, because it is associated with the configuration 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. Using Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process for Findings At-Power," the finding is 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. This finding has a cross-cutting aspect in the area of problem identification and resolution associated with the corrective action program component because the licensee did not thoroughly evaluate problems such that the resolutions address causes and extent of conditions.

Inspection Report# : 2013008 *(pdf)*

Significance: G Jun 10, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Account for Worst Case Conditions in Fuel Oil Inventory Calculation
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 account for design basis conditions in their fuel oil consumption calculation. Specifically, since June 2011, the licensee failed to translate the worst case design emergency diesel generator frequency that could impact the consumption of fuel oil into the applicable design documentation. This issue has been entered into the corrective action program as Condition Reports CRs 2013-04311 and 2013-04470 to address the deficiency.
This performance deficiency is more than minor, and therefore a finding, because it is associated with the configuration 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. Using Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process for Findings At-Power," the finding is 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. This finding has a cross-cutting aspect in the area of problem identification and resolution associated with the corrective action program component because the licensee did not thoroughly evaluate problems such that the resolutions address causes and extent of conditions.

Inspection Report# : 2013008 *(pdf)*

Significance: G Jun 10, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Sluice Gate Leakage Not Periodically Verified
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 ensure that a critical parameter in the design calculation for intake cell level control (sluice gate leakage) was periodically measured to ensure the plant stayed within the parameters of the design calculation. Specifically, since April 2011, the licensee failed to assure that the assumed leakage of the sluice gates was translated into a procedure to periodically measure leakage against acceptance criteria to ensure the leakage was low enough to support the intake structure design calculation. This issue has been entered into the corrective action program as Condition Report CR 2013-04315.
This performance deficiency is more than minor, and therefore a finding, because it is associated with the configuration 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. Using Inspection Manual Chapter 0609, Appendix G, "Shutdown Operations Significance Determination Process," Attachment 1, Checklist 4, "PWR Refueling Operation: RCS level > 23' OR PWR Shutdown Operation with Time to Boil > 2 hours And Inventory in the Pressurizer," the finding is determined to have very low safety significance (Green) because the finding did not increase the likelihood of a loss of RCS inventory; did not degrade the licensee's ability to terminate a leak path or add RCS inventory; and did not degrade the licensee's ability to recover decay heat removal, this finding did not require a Phase 2 or 3 analysis as stated in Checklist 4. This finding has a cross-cutting aspect in the area of problem identification and resolution associated with the corrective action program component because the licensee did not thoroughly evaluate problems such that the resolutions address causes and extent of conditions.
Inspection Report# : 2013008 *(pdf)*

Significance: G Jun 10, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Accurately Model Raw Water Flow into the Intake Structure
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 accurately model the traveling screens and trash racks in the flow calculation for cell level control. Specifically, since April 2011, the licensee failed to translate the actual plant configuration for flow of water into the intake structure during flooding into the applicable design calculation. This issue has been entered into the corrective action program as Condition Reports CRs 2013-04468 and 2013-04310.
This performance deficiency is more than minor, and therefore a finding, because it is associated with the configuration 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. Using Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process for Findings At-Power," the finding is 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. 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 did not thoroughly evaluate problems such that the resolutions address causes and extent of conditions.

Inspection Report# : 2013008 *(pdf)*

Significance: G Jun 10, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Account for Usable Fuel Oil Tank Level in Inventory
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 translate the usable volume of fuel oil in tank FO-1 into the applicable design documentation. Specifically, prior to March 6, 2013, the licensee failed to ensure the proper usable volume of available fuel oil in tank FO-1 was translated into design specifications because the calculation did not address vortexing. This issue has been entered into the corrective action program as Condition Report CR 2013-04951.
This performance deficiency is more than minor, and therefore a finding, because it is associated with the configuration 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. Using Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process for Findings At-Power," the finding is 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. 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 did not thoroughly evaluate problems such that the resolutions address causes and extent of conditions.

Inspection Report# : 2013008 *(pdf)*

Significance: G Jun 10, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Root Cause for a Significant Condition Adverse to Quality
The team identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," associated with the licensee's failure to promptly identify, correct, and prevent recurrence of a significant condition adverse to quality. Specifically, from November 2009 to present, measures established by the licensee failed to assure that the cause of an identified significant condition adverse to quality was corrected and corrective actions taken would preclude repetition. This issue has been entered into the corrective action program as Condition Report Condition Report CR 2013-04037.
The performance deficiency is more than minor, and therefore a finding, because it is associated with the protection against external factors 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. Additionally, if left uncorrected, the licensee's RCA will not provide assurance that effective corrective actions are taken to preclude recurrence of a breaker trip failure. Using Inspection Manual Chapter 0609, Appendix G, "Shutdown Operations Significance Determination Process," Attachment 1, Checklist 4, "PWR Refueling Operation: Reactor Coolant System (RCS) level > 23' OR PWR Shutdown Operation with Time to Boil > 2 hours And Inventory in the Pressurizer," which contained the initial screening for pressurized water reactors that are shutdown with a time to boil of greater than 2 hours. Technical Specification 2.7, "Electrical Systems," states that the

reactor shall not be heated up or maintained at temperatures above 300 degrees Fahrenheit unless the electrical systems listed in that section [includes the 480 V busses] are operable. Because the plant was maintained below 300 degrees during the exposure period, the team determined that power availability technical specifications were being met as discussed in Checklist 4. Because the finding did not increase the likelihood of a loss of RCS inventory; did not degrade the licensee's ability to terminate a leak path or add RCS inventory; and did not degrade the licensee's ability to recover decay heat removal, this finding did not require a Phase 2 or 3 analysis as stated in Checklist 4. Therefore, the finding is determined to have very low safety significance (Green). This finding has a cross-cutting aspect in the area of accountability associated with the other safety culture components because the licensee failed to demonstrate a proper safety focus and reinforce safety principles among their peers. Specifically, the licensee focused on sending a message about the vendor rather than the licensee's failures to establish accountability for the vendor's products and services.

Inspection Report# : 2013008 *(pdf)*

Significance: G Jun 10, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Establish and Document Basis for Test Acceptance Criteria
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 assure that applicable design basis information, as defined in 10 CFR 50.2, for breaker testing was correctly translated into specifications, drawings, procedures, and instructions. Specifically, from July 2011, to the present the licensee failed to incorporate the basis for the acceptance limits of the digital low resistance ohmmeter values into specifications and procedures. Without a basis for the acceptance values the licensee cannot show that the breakers will perform satisfactorily in service, and incorrect acceptance values could allow high resistance connections to go unnoticed. This issue has been entered into the corrective action program as Condition Report CR 2013 04032.
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 associated 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 G, "Shutdown Operations Significance Determination Process," Attachment 1, Checklist 4, "PWR Refueling Operation: RCS level > 23' OR PWR Shutdown Operation with Time to Boil > 2 hours And Inventory in the Pressurizer," the team determined that because this finding did not increase the likelihood of a loss of RCS inventory; did not degrade the licensee's ability to terminate a leak path or add RCS inventory; and did not degrade the licensee's ability to recover decay heat removal, this finding did not require a Phase 2 or 3 analysis as stated in Checklist 4. Therefore, the finding is determined to have very low safety significance (Green). This finding has a cross-cutting aspect in the area of human performance associated with the work practices component because licensee personnel failed to follow procedures. Specifically, FCS personnel failed to follow the requirements specified in Procedure PED-GEI-7, "Specification of Post-Modification Test Criteria".

Inspection Report# : 2013008 *(pdf)*

Significance: G Jun 10, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Correct Conditions Adverse to Quality Involving Frequency Compatibility Issues in the 120 Vac System
The team reviewed a self-revealing non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Actions," for the licensee's failure to address frequency compatibility issues in the 120 Vac electrical distribution

system. Specifically, between June 5, 2008, and February 22, 2013, the licensee failed to correct known frequency compatibility issues in the 120 Vac instrument system that resulted in voltage transients and damage to instrumentation supplied by the 120 Vac instrument inverters. This issue has been entered into the corrective action program as Condition Report CR 2013-03866. At the close of the inspection, the licensee was still completing causal analysis and identification of corrective actions necessary to address frequency compatibility issues in the 120 Vac electrical distribution system.
This performance deficiency is more than minor, and therefore a finding, because it affected the equipment performance 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. Using Inspection Manual Chapter 0609, Appendix G, "Shutdown Operations Significance Determination Process," the finding is determined 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 had a cross-cutting aspect in the area of problem identification and resolution associated with the corrective action program component. Specifically, the team identified that the licensee failed to adequately evaluate repeated low voltage/ground alarm associated with the 120 Vac distribution system.
Inspection Report# : 2013008 *(pdf)*

Significance: G Jun 10, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Account for Additional Diesel Loading from Non-Safety Loads
The team identified a non-cited violation of 10 CFR Part 50, Appendix B, Criteria III, "Design Control," for the licensee's failure to update calculations to account for non safety-related loads supplied by the emergency diesel generator through non-qualified isolation devices and the cumulative impact on diesel fuel oil consumption. Specifically, prior to prior to April 1, 2013, Calculation EA-FC-92-072, "Diesel Generator Transient Loading Analysis Using EDSA Design Base 3.0," Revision 6, failed to account for the additional diesel fuel oil consumption that would occur due to the loads that would be supplied from the emergency diesel generators through non-CQE isolation devices. The licensee modified Calculation EA-FC-92-072 to address the team's concerns. This issue has been entered into the corrective action program as Condition Report CR 2013-09817.
The 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 adversely affected the cornerstone objective to ensure the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences. Because this performance deficiency affected the calculation used to determine the require diesel fuel oil inventory for an accident or a loss of offsite power occurring from at power conditions, the team used Manual Chapter 0609, Appendix A, "The Significance Determination Process for Findings At-Power," and determined the finding 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. This 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 the condition identified in Condition Report CR 2013-04594 to determine its impact to emergency diesel generator fuel oil consumption.

Inspection Report# : 2013008 *(pdf)*

Significance: G Jun 10, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Adequately Implement the Maintenance Rule
The team identified a non-cited violation of 10 CFR 50.65, "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," associated with the licensee's failure to adequately monitor the performance of structures, systems, and components, against established goals in a manner sufficient to provide reasonable assurance that these structures, systems, and components are capable of fulfilling their intended functions. Specifically, from June 7, 2011, to the present, the licensee failed to monitor the performance of the 480 Vac busses in a manner sufficient to provide reasonable assurance that they are capable of fulfilling their intended safety functions. This issue has been entered into the corrective action program as Condition Report CR 2013-04352.
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 associated 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 G, "Shutdown Operations Significance Determination Process," Attachment 1, Checklist 4, "PWR Refueling Operation: RCS level > 23' OR PWR Shutdown Operation with Time to Boil > 2 hours And Inventory in the Pressurizer," which contained the initial screening for pressurized water reactors that are shutdown with a time to boil of greater than 2 hours. Technical Specification 2.7, "Electrical Systems," stated that the reactor shall not be heated up or maintained at temperatures above 300 degrees Fahrenheit unless the electrical systems listed in that section [includes the 480 V busses] are operable. Because the plant was maintained below 300 degrees during the exposure period, the team determined that power availability Technical Specifications were being met as discussed in Checklist 4. Because the finding did not increase the likelihood of a loss of RCS inventory; did not degrade the licensee's ability to terminate a leak path or add RCS inventory; and did not degrade the licensee's ability to recover decay heat removal, this finding did not require a Phase 2 or 3 analysis as stated in Checklist 4. Therefore, the finding is determined to have very low safety significance (Green). 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# : 2013008 *(pdf)*

Significance: G Jun 10, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Initiate Condition Reports in Accordance with the Corrective Action Program Procedures
The team identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the licensee's failure to initiate condition reports when problems or conditions adverse to quality were identified in accordance with Procedure FCSG-24-1, "Condition Report Initiation," Revision 3. Specifically, between July 2012 and March 2013, the team identified 11 instances where licensee staff failed to initiate a condition report after identifying a deficiency or a condition adverse to quality. In some instances, licensee personnel had to be prompted by the team to initiate a condition report. As a result, the corrective actions taken to address the conditions could have been potentially untimely. This issue has been entered into the corrective action program as Condition Report CR 2013-06991.
This performance deficiency is more than minor, and therefore a finding, because if left uncorrected it has the potential to lead to a more significant safety concern. Specifically, if the licensee does not enter conditions adverse to quality into the corrective action program, the conditions adverse to quality may not be evaluated and corrected in a timely manner. This finding is associated with Mitigating Systems Cornerstone. The team determined that the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," and

conducted a Phase 1 characterization and initial screening. Using Phase 1, Table 3, “SDP Appendix Router,” the team answered ‘yes’ to the following question: “Does the finding pertain to operations, and event, or a degraded condition while the plant was shutdown?” As a result, the team used IMC 0609 Appendix G, “Shutdown Operations Significance Determination Process.” Using Appendix G, the finding is determined to have very low safety significance (Green) since it did not need a quantitative assessment. This finding has a cross-cutting aspect in the area of problem identification and resolution associated with the corrective action program component because the licensee did not implement a corrective action program with a low threshold for identifying issues.

Inspection Report# : 2013008 *(pdf)*

Significance: G Jun 10, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Identify and Correct Conditions Adverse to Quality
The team identified a 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, between July 2012 and March 2013, the team identified 6 instances where the licensee failed to identify a deficiency or a condition adverse to quality and to enter them into the corrective action program. As a result, conditions adverse to quality may not be corrected in a timely manner commensurate with the safety significance. This issue has been entered into the corrective action program as Condition Report CR 2013-07959.
This performance deficiency is more than minor, and therefore a finding, because if left uncorrected it has the potential to lead to a more significant safety concern. Specifically, the failure to identify conditions adverse to quality and enter them into the corrective action program, has the potential to lead to a failure to correct conditions adverse to quality in a timely manner commensurate with the safety significance. This finding was associated with the Mitigating Systems Cornerstone. The team determined that the finding could be evaluated using the SDP in accordance with IMC 0609, “Significance Determination Process,” and conducted a Phase 1 characterization and initial screening. Using Phase 1, Table 3, “SDP Appendix Router,” the team answered ‘yes’ to the following question: “Does the finding pertain to operations, and event, or a degraded condition while the plant was shutdown?” As a result, the team used IMC 0609 Appendix G, “Shutdown Operations Significance Determination Process.” Using Appendix G, the finding is determined to have very low safety significance (Green) since it did not need a quantitative assessment. This finding has a cross-cutting aspect in the area of problem identification and resolution associated with the corrective action program component because the licensee did not implement a corrective action program with a low threshold for identifying issues and did not identify issues completely, accurately, and in a timely manner commensurate with their safety significance.
Inspection Report# : 2013008 *(pdf)*

Significance: G Jun 10, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Effectively Monitor the Performance of Penetration Seals
The team identified a non-cited violation of 10 CFR 50.65(a)(2), “Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants,” associated with the licensee’s failure to effectively monitor the performance of penetration seals in Room 81. Specifically, from initial maintenance rule scoping in 1996 to March 2013, the licensee did not demonstrate that the performance or condition of the penetration seals in Room 81 were being effectively controlled and failed to monitor the performance or condition against licensee-established goals, in a manner sufficient to provide reasonable assurance that these components were capable of fulfilling their intended functions. This issue has been entered into the corrective action program as Condition Report CR 2013 05506.
The performance deficiency is more than minor, and therefore a finding, because it is associated with the protection against the external factors 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. Using Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process for Findings At-Power," the finding is 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. This 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# : 2013008 *(pdf)*

Significance: G Jun 10, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Procedure for Combating Loss of Raw Water
The team identified a non-cited violation of Technical Specification 5.8.1, Procedures, for the licensee's failure to maintain an adequate procedure for the loss of raw water cooling. Specifically, since April 2011, the licensee failed to maintain Procedure AOP-18, "Loss of Raw Water," to adequately align the component cooling water system for the feed and bleed mode. This issue has been entered into the corrective action program as Condition Report CR 2013-04417.
This performance deficiency is more than minor, and therefore a finding, because it is associated with the procedure quality 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. Using Inspection Manual Chapter 0609, Appendix G, "Shutdown Operations Significance Determination Process," Attachment 1, Checklist 4, "PWR Refueling Operation: RCS level > 23' OR PWR Shutdown Operation with Time to Boil > 2 hours And Inventory in the Pressurizer," the finding is determined to have very low safety significance (Green) because the finding did not increase the likelihood of a loss of RCS inventory; did not degrade the licensee's ability to terminate a leak path or add RCS inventory; and did not degrade the licensee's ability to recover decay heat removal, this finding did not require a Phase 2 or 3 analysis as stated in Checklist 4. This finding has a cross-cutting aspect in the area of problem identification and resolution associated with the corrective action program component because the licensee did not thoroughly evaluate problems such that the resolutions address causes and extent of conditions.
Inspection Report# : 2013008 *(pdf)*

Significance: G Jun 10, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Deficient Evaluation for Known Degraded Conditions: Safety-Related Air Operated Valve Elastomers not Qualified for HELB/LOCA Temperatures
The team identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," associated with the licensee's failure to properly evaluate a known degraded condition regarding safety-related air operated valve elastomers that were not qualified for high energy line break or loss of coolant accident temperatures. Specifically, from January 11 through January 18, 2013, due to a an improper application of the single failure criteria, the licensee failed to properly evaluate and correct a known degraded condition associated with safety-related air operated valve elastomers that were not qualified for high energy line break or loss of coolant accident temperatures.

This issue has been entered into the corrective action program as Condition Reports CRs 2013 01396 and 2013-02611.

This performance deficiency is more than minor, and therefore a finding, because if left uncorrected, the failure to correct the degraded condition had the potential to lead to a more significant safety concern. Specifically, the affected AOVs would have been in a condition where they would not have been qualified to perform their intended safety function. This issue was associated with the Mitigating Systems Cornerstone. Using Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process for Findings At-Power," the finding is 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. This 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# : 2013008 *(pdf)*

Significance: N/A Jun 10, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Perform an Evaluation for a Change to Component Cooling Water Make-up
The team identified a Severity Level IV non-cited violation of 10 CFR Part 50.59, with an associated Green finding, because the licensee failed to perform an evaluation for a design change that may have required NRC review and approval. Specifically, from June 2008, the licensee did not evaluate a change that would permanently substitute manual actions for an automatic action to add water and nitrogen gas to the component cooling water surge tank, which is an updated safety analysis report described design function for the component cooling water system. The licensee entered this condition into their corrective action program and planned to perform an evaluation to determine if prior NRC review and approval is needed for this design change. This issue has been entered into the corrective action program as Condition Report CR 2013-04417.
The team determined that it was reasonable for the licensee to be able to foresee and prevent the occurrence of this deficiency. The team evaluated this performance deficiency as both a traditional enforcement violation, and a reactor oversight process finding. The violation of 10 CFR Part 50.59 was more than minor because it involved a change to an updated safety analysis report design function in that there was a reasonable likelihood that the change would require NRC review and approval. This finding is associated with the Mitigating Systems Cornerstone. The team used the NRC Enforcement Manual and Inspection Manual Chapter 0609, Attachment 4, "Initial Characterization of Findings," to evaluate this issue. The finding is determined to have very low safety significance (Green) because it was a design deficiency confirmed not to result in the loss of operability or functionality. The violation of 10 CFR 50.59 impacted the ability of the NRC to perform its regulatory oversight function and was determined to be Severity Level IV because the resulting changes were evaluated by the significance determination process as having very low safety significance, in accordance with the NRC Enforcement Policy. The NRC concluded that the finding did not reflect current licensee performance.

Inspection Report# : 2013008 *(pdf)*

Significance: G Jun 10, 2013
Identified By: NRC
Item Type: NCV NonCited Violation

Multiple Examples of Operability Determinations that Lacked Adequate Technical Justification
The team identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings," involving multiple examples of the licensee's failure to perform an adequate operability determination as required by Procedure NOD-QP-31, "Operability Determination Process." In each example, the team identified that the operability determination lacked adequate technical justification for why the structure, system, or component was operable with the degraded or nonconforming condition. Specifically, on January 24, 2012, June 6, 2012, December 27, 2012, January 22, 2013, and February 5, 2013, the operability determinations for Condition Reports CRs 2012-00580, 2012-04973, 2012-20806, 2013-00907, and 2013-02260 were not performed in accordance with Procedure NOD-QP-31, Revision 51-52, Step 4.1.3 J. This issue has been entered into the corrective action program as Condition Reports CRs 2013-08343, 2013-05596, 2013-08590, 2013-04163, and 2013-05353.
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 RCS inventory, the finding did not degrade the licensee's ability to terminate a leak path or add RCS 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 problem identification and resolution associated with corrective action program component. Specifically, the team identified that the licensee failed provide an adequate technical discussion such that a reasonable expectation of operability was demonstrated for several degraded or nonconforming conditions.
Inspection Report# : 2013008 *(pdf)*

Significance: G Jun 10, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Multiple Examples of Inadequate Risk-Based Operability Determinations
The team identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings," involving multiple examples of the licensee's use of probability or probabilistic risk assessment when performing operability determinations. The use of probability or probabilistic risk assessment when determining operability is contrary to Procedure NOD-QP-31, "Operability Determination Process," Revision 51-53. Specifically, on January 26, 2012 and twice on February 21, 2013, the operability determinations performed for Condition Reports CRs 2012-00626, 2013-03839, and 2013-03842 used probability and/or probabilistic risk assessment to justify the operability of structures, systems, and components. This issue has been entered into the corrective action program as Condition Reports CRs 2013-05590, 2013-05466, 2013-05597.
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 involved inadequate operability determinations that occurred while in a shutdown condition and involved plant equipment needed during shutdown conditions, 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 RCS inventory, the finding did not degrade the licensee's ability to terminate a leak path or add RCS 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. Specifically, the licensee proposed that a degraded/nonconforming condition was safe by relying on a non-conservative assumption that an event such as a tornado generated missile or external flooding at the site were not likely to occur.

Inspection Report# : 2013008 *(pdf)*

Significance: N/A Jun 10, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Prevent Failures of the Sluice Gates to Close
The team identified a violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," associated with the licensee's failure to take adequate corrective actions in a timely manner to correct sluice gate preventive maintenance failures. Specifically, prior to February 24, 2013, the licensee failed to prevent repetitive failures of the sluice gates to close upon demand. The licensee implemented corrective actions to remove the silt on the sluice gate ledge which allowed the gates to completely close and has entered the issue into their corrective action program as Condition Report CR 2013-04318. This finding is related to the Yellow finding issued in October 2010 that dealt with issues related to mitigating a significant external flooding event.
This performance deficiency is more than minor, and therefore a finding, because it is associated with the configuration 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 finding was determined to be potentially greater than Green but does not exceed the final significance of the Yellow finding regarding the ability to mitigate an external flooding event (NRC Inspection Report 05000285/2010008). Since the identified degraded condition is similar in both findings and a full significance determination process was previously conducted, a final significance color is not assigned to this finding. 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 did not thoroughly evaluate problems such that the resolutions address causes and extent of conditions [P.1(c)]
Inspection Report# : 2013008 *(pdf)*

Significance: G Jun 10, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Establish Adequate Instructions for Restoring Temporary Modifications
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 establish adequate instructions for restoring temporary modifications. Specifically, from January 17, 2013, to the present, the licensee's temporary modification control procedure did not include appropriate criteria for determining that control room and operations control center references reflect current plant configuration and were updated in a timely manner. The licensee initiated Condition Report CR 2013-04286, which stated that the licensee's transition to a new procedure will help ensure that control room and operations control center documents were updated in a timely manner and that the licensee is determining whether any near-term action is necessary to address the issue until then.
This performance deficiency is more than minor, and therefore a finding, because it is associated with the procedure quality 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. Additionally, if left uncorrected, the procedure inadequacy could become a more significant issue because it could allow operators to continue to reference material that does not reflect current plant configuration. Using Inspection Manual Chapter 0609, Appendix G, "Shutdown Operations Significance Determination Process," Attachment 1, Checklist 4, "PWR Refueling Operation: RCS level > 23' OR PWR Shutdown Operation with Time to Boil > 2 hours And Inventory in the Pressurizer," the team determined that because this finding did not increase the likelihood of a loss of reactor coolant system inventory; did not degrade the licensee's ability to terminate a leak path or add reactor coolant system inventory; and did not degrade the licensee's ability to recover decay heat removal, this finding did not require a Phase 2 or 3 analysis as stated in Checklist 4. Therefore, the finding is determined to have very low safety significance (Green). This finding has a cross-cutting aspect in the area of human performance associated with the work control component because the licensee failed to appropriately coordinate work activities by

incorporating actions to address the need to keep personnel apprised of work status, the operational impact of work activities, and plant conditions that may affect work activities. Specifically, the licensee did not incorporate actions into the procedure that would address the impact of out-of-date control room references on operator performance [H.3 (b)]
Inspection Report# : 2013008 *(pdf)*

Significance: G May 29, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Correct Multiple Alarm Response Procedures Related to SIT Operation
The NRC identified a non-cited violation of 10 CFR 50 Appendix B, Criterion XVI, Corrective Action, for failure to correct a condition adverse to quality. Specifically, the licensee failed to identify and correct 18 alarm response procedures (ARPs) associated with a previously issued non-cited violation (NCV) for failing to comply with Technical Specification 2.3(1)(i) in that multiple safety injection tanks (SITs) were simultaneously connected for filling or sluicing operations (Condition Report 2012-01956 and 2012-04815). After identification, the licensee entered this into their corrective action program as Condition Report 2013-09711.

Failure to identify and correct a condition adverse to quality in accordance with 10 CFR 50 Appendix B, Criterion XVI is a performance deficiency. The finding is more than minor because it adversely affects the Procedure Quality 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. Using the Mitigating Systems Screening Questions in Manual Chapter 0609 Appendix A, Exhibit 2, the finding is not a deficiency that resulted in a loss of operability or functionality of a safety significant component. Therefore, the finding is of very low safety significance.

This finding was determined to have a cross-cutting aspect in the area of problem identification and resolution, associated with the corrective action program, because the licensee failed to thoroughly evaluate problems such that the resolutions address the extent of conditions. Specifically, the licensee did not perform an adequate extent of condition to identify other procedures that were affected by a known operation (simultaneously filling or sluicing SITs) that received an NRC-identified violation documented in NRC Report 05000285/2012301.

Inspection Report# : 2013010 *(pdf)*

Significance: G May 29, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Maintain Emergency Operating Procedures
The NRC identified a non-cited violation of Technical Specification 5.8.1.a. for failure to maintain written procedures identified in Regulatory Guide 1.33, Revision 2, Appendix A. Specifically, the licensee failed to maintain Emergency Operating Procedure (EOP) –6, “Loss of All Feedwater,” and EOP-20, “Functional Recovery Procedure,” with regards to starting the Main Feedwater Pump Lube Oil Pump prior to starting the Main Feedwater Pump. This issue was previously identified in an NRC-identified NCV against an Alarm Response Procedure that did not provide guidance that the auxiliary lube oil pump must be started prior to starting the main feedwater pump (Condition Report 2012-03140). After identification, the licensee entered this into their corrective action program as Condition Report 2013-08412.

Failure to comply with technical specifications is a performance deficiency.
The finding is more than minor because it adversely affects the Procedure Quality 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. Using the Mitigating Systems Screening Questions in Manual Chapter 0609, Appendix A, Exhibit 2, the finding is not a deficiency that resulted in a loss of operability or functionality of a safety significant component. Therefore, the finding is of very low safety significance.

This finding was determined to have a cross-cutting aspect in the area of problem identification and resolution, associated with the corrective action program, because the licensee failed to thoroughly evaluate problems such that the resolutions address the extent of conditions. Specifically, the licensee did not perform an adequate extent of condition to identify other procedures that were affected by a known deficient procedure (ARP-CB-10, 11/A12) that received an NRC-identified violation documented in report 05000285/2012301.
Inspection Report# : 2013010 *(pdf)*

Significance: G May 29, 2013
Identified By: NRC
Item Type: FIN Finding
Failure to Perform Extent of Condition Evaluation
The inspectors identified a finding for the licensee's failure to follow their corrective action program procedures and perform an extent of condition evaluation. Specifically, the licensee failed to perform an extent of condition evaluation on emergency operating and abnormal operating procedures as required by procedure FCSG-24-5, "Cause Evaluation Manual" to identify other procedural deficiencies similar to those identified in non-cited violations NCV 05000285/2012301-01, NCV 05000285/2012301-04, and NCV 05000285/2012301-06.
The licensee's failure to perform an extent of condition review in accordance with FCSG-24-5 was a performance deficiency. The finding is more than minor because the failure to adequately implement corrective actions associated with identified procedural deficiencies affects the procedural quality attribute of the Mitigating Systems Cornerstone and affects the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Using the Mitigating Systems Screening Questions in Manual Chapter 0609, Appendix A, Exhibit 2, the finding is not a deficiency that resulted in a loss of operability or functionality of a safety significant component. Therefore, the finding is of very low safety significance.

The finding has a cross-cutting aspect in the area of the problem identification and resolution associated with the corrective action program because the licensee failed to take appropriate corrective actions to address safety issues and adverse trends in a timely manner, commensurate with their safety significance and complexity.

Inspection Report# : 2013010 *(pdf)*

Significance: G May 01, 2013
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Failure to translate raw water pump anchor bolt specifications into calculations and drawings
The inspection team reviewed a self-revealing finding of very low safety significance (Green) and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control", for the failure to translate the design basis into instructions, procedures, and drawings. The raw water pump anchor bolt design specifications and calculations incorrectly assumed headed stud cast-in-place anchor bolts instead of the as-built J-style anchor bolts. The finding was determined to be more than minor because it was associated with the design control attribute of the Mitigating Systems Cornerstone and adversely affected the cornerstone objective of ensuring the reliability, availability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding screened as very low safety significance (Green) because the finding did not ultimately affect the operability or functionality of the raw water pumps.
Inspection Report# : 2013012 *(pdf)*

Significance: G May 01, 2013
Identified By: NRC
Item Type: FIN Finding
Inadequate functionality evaluation of the raw water pump anchor bolts
The inspection team identified a finding of very low safety significance involving the licensee's failure to meet the requirements of the American Concrete Institute (ACI) 349-01. Specifically, the licensee's past functionality calculation failed to ensure the raw water pump anchorage met ACI 349-01 requirements. This finding was entered into the licensee's corrective action program. No violation of NRC requirements was identified.
The performance deficiency was determined to be more than minor because it was associated with the design control attribute of the Mitigating Systems Cornerstone and adversely affected the cornerstone objective of ensuring the reliability, availability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding screened as very low safety significance (Green) because the finding did not ultimately affect the operability or functionality of the anchorage. This finding had a cross-cutting aspect in the Decision-Making component of the Human Performance cross-cutting area because the licensee used non-conservative assumptions in a functionality evaluation of raw water pump anchorage. Specifically, the licensee failed to use strength reduction factors as required by ACI 349-01 in the evaluation of raw water pump anchorage [H.1(b)].
Inspection Report# : 2013012 *(pdf)*

Significance: G May 01, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to correct thermal stress acceptance limits in raw water piping and piping support calculations
The inspection team identified a finding of very low safety significance (Green) and an associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for the failure to correct a condition adverse to quality involving raw water system piping stresses that exceeded the allowable stresses. Specifically, since 1995 the licensee was using interim acceptance criteria that placed the piping and pipe supports in a non-conforming/degraded condition for an extended period of time because corrective actions were not implemented or planned. This finding was entered into the licensee's corrective action program.
The performance deficiency was determined to be more than minor because it was associated with Mitigating System cornerstone attribute of design control and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the use of interim acceptance criteria placed the RW-111A piping and pipe supports in a nonconforming and degraded condition. The finding screened as of very low safety significance (Green) because it did not ultimately affect the operability or functionality of RW-111A.
Inspection Report# : 2013012 *(pdf)*

Significance: G May 01, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to adequately design containment air coolers structural bracing
The inspection team identified a finding of very low safety significance (Green) and an associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control" for the for the failure to ensure the adequacy of the design for the containment air coolers VA-16A and VA-16B. Specifically, the structural columns of the containment air coolers were subjected to greater than allowable stresses, and were not conservative or in compliance with Class I requirements as defined in Updated Safety Analysis Report (USAR) Section 5.11 and referenced codes.
The performance deficiency was determined to be more than minor because it was associated with Mitigating System cornerstone attribute of design control and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding screened

as of very low safety significance (Green) because the containment air cooler system was subsequently determined to be operable but degraded.
Inspection Report# : 2013012 *(pdf)*

Significance: G May 01, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to adequately implement design requirements for U-bolt support
The inspection team identified a finding of very low safety significance (Green) and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the failure to ensure the adequacy of the design for Raw Water Pipe Support RWS-117. Specifically, the licensee failed to demonstrate compliance with vendor requirements for the U-bolt of pipe support RWS-117. This finding was entered into the licensee's corrective action program.
The performance deficiency was determined to be more than minor because it was associated with Mitigating System cornerstone attribute of design control and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e. core damage). Specifically, the applied stresses exceeded the allowable stress for the U-bolt of pipe support RWS-117. The finding screened as of very low safety significance (Green) because it did not ultimately affect the operability or functionality of pipe support RWS-117.
Inspection Report# : 2013012 *(pdf)*

Significance: G May 01, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to translate design requirements for embedded unistrut supports into calculations
The inspection team identified several examples of very low safety significance (Green) non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the failure to ensure the design basis for pipe supports SIH-17, SIH-94 and SIH-12 was correctly translated into specifications, drawings, procedures, and instructions. Specifically the design calculations were non-conservative with respect to requirements defined by the unistrut concrete insert vendor manual and the calculations did not match the as-built condition.
The finding was determined to be more than minor because it was associated with the design control attribute of the Mitigating Systems Cornerstone and adversely affected the cornerstone objective of ensuring the reliability, availability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding screened as very low safety significance (Green) because the finding did not ultimately affect the operability or functionality of the pipe supports.
Inspection Report# : 2013012 *(pdf)*

Significance: G May 01, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to translate electrical switchgear cabinet anchor bolt design specifications into drawings
The inspection team identified several examples of a Green non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the failure to ensure the design basis for all the 480V and 4160V buss switchgear cabinets were correctly translated into specifications, drawings, procedures, and instructions. Specifically, each of the respective switchgear cabinet drawings depicted the equipment secured with concrete anchor bolts, however the cabinets were found secured with welds to an embedded steel plate.
The finding was determined to be more than minor because it was associated with the design control attribute of the Mitigating Systems Cornerstone and adversely affected the cornerstone objective of ensuring the reliability,

availability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding screened as very low safety significance (Green) because the finding did not ultimately affect the operability or functionality of the electrical switchgear.
Inspection Report# : 2013012 *(pdf)*

Significance: N/A Apr 15, 2013
Identified By: NRC
Item Type: VIO Violation
Failure to Promptly Identify and Correct a Condition Adverse to Quality
The team identified a violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Actions," associated with the licensee's failure to promptly identify and correct a condition adverse to quality. Specifically, from 1991 to present, the licensee failed to properly evaluate a 4160 Vac/480 Vac transformer fault or a 480 Vac load center bus fault and the potential effect on system operability. This issue has been entered into the corrective action program as Condition Report CR 2013-05631. This finding is related to the Red finding issued on April 10, 2012, regarding a significant internal fire event in the 480 Vac safety-related switchgear.
The performance deficiency is more than minor, and therefore a finding, because it was associated with both the design control and protection against external factors 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 significance of this finding is bounded by the significance of a related Red finding regarding a fire in the 480 Vac safety-related switchgear in June 2011 (NRC Inspection Report 05000285/2012010). The team determined that although the performance deficiency occurred in 1991, this finding is indicative of current plant performance because the performance characteristic has not been corrected or eliminated. Specifically, the licensee continued to display the same behaviors with regard to decision-making. Therefore, 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# : 2013008 *(pdf)*

Significance: G Apr 15, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Properly Inspect, Maintain, and Test Emergency Feedwater Tank Equipment
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 ensure proper inspection, maintenance, and testing of equipment associated with emergency feedwater tank FW-19. Specifically, from initial construction until February 27, 2013, the licensee failed to ensure proper inspection, maintenance, and testing was performed on the emergency feedwater storage tank's sight glass ball check isolation valves, to prevent draining of the tank following failure of the sight glass. The licensee performed an analysis and concluded that operators have adequate time to respond to such a loss of tank FW-19 inventory. This issue has been entered into the corrective action program as Condition Reports CRs 2012-15687, CR 2013-03974, and CR 2013-06170.
This performance deficiency is 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 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 is 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. This 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 [P.1(c)]
Inspection Report# : 2013008 *(pdf)*

Significance: G Apr 15, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Operability Determination due to Failure to Establish Component Cooling Water System Leakage Criteria
The team identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings," involving the licensee's failure to follow procedures when evaluating the impact of component cooling water system leakage on the containment air coolers. Specifically, on October 6, 2010, and December 29, 2010, the operability determinations for Condition Reports CRs 2010-04955 and 2010-06905 were not performed in accordance with Procedure NOD-QP-31, "Operability Determination Process," Revision 43-44, Step 4.1.3 J, and consequently, failed to evaluate the impact of component cooling water system leakage on containment air coolers operability. This issue has been entered into the corrective action program as Condition Report CR 2013-05630.
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. Using Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process for Findings At-Power," the finding is 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. This finding has a cross-cutting aspect in the area of problem identification and resolution associated with corrective action program component. Specifically, the team identified that the licensee failed provide an adequate technical discussion such that a reasonable expectation of operability was demonstrated for containment air coolers with known leakage in the component cooling water system.

Inspection Report# : 2013008 *(pdf)*

Significance: G Apr 15, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Follow ASME Code Requirements when Establishing New Pump Reference Values as Corrective Actions (#35)
The team identified a non-cited violation of 10 CFR 50.55a, "Codes and Standards," for the failure of the licensee to follow the ASME Code when establishing new reference curves as corrective action to address the performance of component cooling water pump AC-3A within the "low required action" range of the inservice testing program. Specifically, on July 29, 2011, the licensee failed to follow ASME Code, Subsection ISTB 6200(c), in that, the new reference curves were established without performing an analysis which included verification of the pump's

operational readiness at a pump level and a system level, without determining the cause of the change in pump performance, and without an evaluation of all trends indicated by available data. The team confirmed that while the pump was inoperable from an inservice testing perspective during this period, required surveillance testing showed that pump flows and differential pressures were still sufficient to meet the assumptions used in the FCS safety analysis. This issue has been entered into the corrective action program as Condition Report CR 2013-04010.
This performance deficiency is more than minor, and therefore a finding, because it is associated with the human 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 this finding was discovered during plant shutdown and involved plant equipment needed during shutdown conditions, 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 RCS inventory, the finding did not degrade the licensee's ability to terminate a leak path or add RCS 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 problem identification and resolution associated with the corrective action program component because the licensee failed to fully evaluate the degraded performance of component cooling water pump AC-3A to ensure that resolutions correctly addressed causes of the degraded performance and the cumulative impact on system operational readiness.

Inspection Report# : 2013008 *(pdf)*

Significance: G Apr 15, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Correct Condition Adverse to Quality Associated with Corrective Action Program Procedures and the Operability Process
The team identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Actions," for the failure to implement corrective actions to address significant flaws identified in procedures involving the degraded/nonconforming condition evaluation and operability determination process. Specifically, prior to March 1, 2013, the licensee failed to correct the procedural inadequacies associated with Procedure FCSG-24-3, "Condition Report Screening," Revision 3, as identified in the root cause analysis for Condition Report CR 2012-09494. This issue has been entered into the corrective action program as Condition Report CR 2013-04380.
This performance deficiency is more than minor, and therefore a finding, because if left uncorrected, inadequate corrective action program procedures could become a more significant safety concern. This finding is associated with the Mitigating Systems Cornerstone. Since the finding was discovered 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 RCS inventory, the finding did not degrade the licensee's ability to terminate a leak path or add RCS 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 problem identification and resolution associated with the corrective action program component because the licensee failed to implement a corrective action program with a sufficiently low threshold. Specifically, although the licensee identified significant flaws in FCS procedures while performing the RCA for Condition Report CR 2012-09494, the licensee failed to initiate the appropriate corrective action documents to drive the necessary procedure changes.
Inspection Report# : 2013008 *(pdf)*

Significance: G Apr 15, 2013
Identified By: NRC
Item Type: NCV NonCited 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
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 properly evaluate NRC Bulletin 88-04, "Potential Safety-Related Pump Loss," regarding the auxiliary feedwater pumps. Specifically, from November 28, 2010, through February 2013, the licensee failed to properly evaluate NRC Bulletin 88-04, 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. This issue has been entered into the corrective action program as Condition Reports CRs 2013-04680 and 2013-04806.
This performance deficiency is 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 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 is 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. This 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 appropriate corrective actions were promptly implemented.

Inspection Report# : 2013008 *(pdf)*

Significance: G Apr 15, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Improper Storage of the Raw Water to Auxiliary Feedwater Emergency Tank Fill Hose
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 properly store the raw water to emergency feedwater storage tank fill hose. Specifically, from July 1996 to February 27, 2013, the licensee failed to provide adequate instructions or procedures to ensure proper storage and temperature qualification of the auxiliary feedwater emergency fill hose. This issue has been entered into the corrective action program as Condition Report CR 2013 52276.
This performance deficiency is 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. Using Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process for Findings At-Power," the finding is 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. This 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# : 2013008 *(pdf)*

Significance: G Apr 15, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Deficient Evaluation for Known Degraded Conditions – AFW Pumps Discharge Check Valve Leakage and Potential Overpressure of AFW Pump Suction Piping
The team identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," associated with the licensee's failure to properly evaluate a known degraded condition regarding the auxiliary feedwater pump discharge check valve leakage and potential over-pressurization of the pumps suction piping. Specifically, from October 10, 2012, to March 15, 2013, the licensee failed to properly evaluate concerns regarding the auxiliary feedwater pump discharge check valves which resulted in the failure to implement adequate corrective actions to verify leak tightness of the check valves and prevent potential over pressurization of the pump's suction piping. This issue has been entered into the corrective action program as Condition Reports CRs 2013-04806 and 2013-05018.
This performance deficiency is 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 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 is 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. 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# : 2013008 *(pdf)*

Significance: G Apr 15, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Properly Implement Applicable ASME OM Code Requirements
The team identified two examples of a non-cited violation of 10 CFR 50.55a.(f)(4)(ii), "Codes and Standards," associated with the licensee's failure to properly implement applicable code requirements for in-service testing of safety-related pumps and check valves. Specifically, prior to March 11, 2013, the licensee failed to ensure that the testing of safety-related pumps and valves met the requirements of the American Society of Mechanical Engineers Operation and Maintenance Code. The applicable Code for the current in-service test program is the 1998 Edition through the 2000 Addenda. This issue has been entered into the corrective action program as Condition Reports CRs 2013-04680, 2013-05018, 2013-05514, and 2013-05569.
This performance deficiency is 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. Using Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process for Findings At-Power," the finding is 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. This 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 addressed the causes.

Inspection Report# : 2013008 *(pdf)*

Significance: G Apr 15, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Inappropriate Modification of Turbine Driven Auxiliary Feedwater Pump Back Pressure Protection Trip
The team identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," associated with an inappropriate modification of the auxiliary feedwater system. Specifically, from April 2011 through February 2013, measures established by the licensee did not assure that the modification to remove the turbine driven auxiliary feedwater pumps exhaust back pressure trip, properly considered and addressed the open configuration of the pumps exhaust piping to prevent blockage of the exhaust piping. This issue has been entered into the corrective action program as Condition Report CR 2013-05026, and an immediate operability determination was performed.
This performance deficiency is more than minor, and therefore a finding, because if left uncorrected, the continued practice of modifying the facility without evaluating for adverse impacts had the potential to lead to a more significant safety concern. Specifically, unevaluated modifications to the facility could introduce adverse changes that result in systems not able to perform their intended safety function which would not be recognized. This finding was associated with the Mitigating Systems Cornerstone. Using Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process for Findings At-Power," the finding is 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. This 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 [P.1(c)]
Inspection Report# : 2013008 *(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 May 29, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Follow Work Control Procedures
The inspectors reviewed a self-revealing, non-cited violation of Technical Specification 5.8.1.a, which resulted from workers failing to follow maintenance work control procedures. On April 1, 2012, the facility experienced a raw water pump trip and subsequent automatic start of a standby pump during a post maintenance test on a safety related bus load shed relay. This event resulted from violations of station procedures required by Station Technical Specification 5.8.1.a., which commits the facility to Regulatory Guide 1.33, Revision 2. Specifically, Section 9 requires procedures for performing maintenance that can affect the performance of safety related equipment. The licensee documented this event in the corrective action program as Condition Report 2013-07253.

The failure to follow maintenance work control procedures was a performance deficiency. The performance deficiency is more than minor because it impacted the human performance attribute of the Barrier Integrity Cornerstone and affected the cornerstone objective to provide reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. At the time of the event, the raw water system was the ultimate heat sink connection to the spent fuel pool containing a full core off-load as well as previous core load spent fuel. Using Manual Chapter 0609, Appendix G, "Shutdown Operations Significance Determination Process," this finding was of very low safety significance because the event did not increase the likelihood of reactor coolant system inventory loss, did not degrade the licensee's ability to terminate a leak path or add reactor coolant system inventory when needed, and did not degrade the licensee's ability to recover decay heat removal once it was lost. The finding has a cross-cutting aspect in the area of human performance because the licensee failed to make safety-significant decisions using a systematic process to ensure safety is maintained.

Inspection Report# : 2013010 *(pdf)*

Significance: G Apr 15, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Ensure that Design Requirements Associated with the Containment Electrical Penetration Assemblies Were Correctly Translated Into Installed Plant Equipment

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 translate applicable regulatory requirements and the design basis into specifications, drawings, procedures, and instructions. Specifically, from initial construction to present, the licensee did not perform adequate analysis and/or post-accident condition functional testing of the teflon insulated and teflon sealed Conax electrical penetration assemblies to determine if they were suitable for expected post accident conditions. The licensee has decided to replace or cap all Teflon-insulated containment electrical penetration assemblies prior to returning to power operations. This issue has been entered into the corrective action program as Condition Report CR 2013 03571.

This performance deficiency is more than minor, and therefore a finding, because it is associated with the design control attribute of the Barrier Integrity Cornerstone and affected the associated cornerstone objective to provide reasonable assurance that physical design barriers (fuel cladding, RCS, and containment) protect the public from radionuclide releases caused by accidents or events. Using Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process for Findings At-Power," the finding is determined to have very low safety significance (Green) because it did not represent an actual open pathway in the physical integrity of reactor containment, containment isolation system, and heat removal components. This 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 implement a corrective action program with a low threshold for identifying issues and identify such issues completely, accurately, and in a timely manner commensurate with their safety significance.
Inspection Report# : 2013008 *(pdf)*

Emergency Preparedness

Significance: G Dec 31, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Correct Deficiencies in Operations Support Center Functions
A Green noncited violation was identified for the failure of the licensee to correct deficiencies identified as a result of four exercises conducted between March 27, 2012, and May 7, 2013, as required by 10 CFR 50.47(b)(14). Specifically, the licensee failed to correct deficiencies associated with team briefing and tracking in the Operations Support Center (OSC) identified as a result of exercises conducted March 27, 2012; July 17, 2012; March 5, 2013; and May 7, 2013.

The inspectors determined that the licensee's failure to correct deficiencies identified by licensee evalutors is a performance deficiency within the licensee's control. This finding is more than minor because it affected the emergency preparedness cornerstone objective and the Emergency Response Organization Performance cornerstone attribute. This finding was evaluated using the Emergency Preparedness Significance Determination Process and was determined to be of very low safety significance because it was a failure to comply with NRC requirements, was not a risk significant planning standard function, and was not a loss of planning standard function. The finding was not a loss of planning standard function because the licensee adequately corrected some deficiencies identified in exercises conducted in 2012 and 2013. The finding was entered into the licensee's corrective action system as Condition Report 2013-22495. The finding was assigned a cross-cutting aspect of Problem Identification and Resolution because the finding was reflective of current performance and the licensee did not take appropriate corrective action to address safety issues and adverse trends [P.1(d)]. (Section 1EP1).

Inspection Report# : 2013019 *(pdf)*

Significance: G May 18, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Perform Siren Maintenance as Required by the Alert and Notification System Design Report
The inspectors identified a noncited violation of 10 CFR 50.54(q)(2) for failure to follow an emergency plan meeting the planning standards of 10 CFR 50.47(b). Specifically, the licensee did not meet 50.47(b)(5) because they failed to fully implement preventative maintenance requirements of "Design Report for the Outdoor Public Warning System," Revision 1, as determined by Federal Emergency Management Agency Region VII. The failure to fully implement requirements of the Federal Emergency Management Agency-approved alert and notification system design report was a performance deficiency within the licensee's control.

The finding had a credible impact on the Emergency Preparedness Cornerstone objective because it involved the ability to warn the public using the primary alert and notification system. The finding is more than minor because it affected the equipment and facilities and offsite emergency preparedness cornerstone attributes. The finding was evaluated using the emergency preparedness significance determination process and determined to be of very low safety significance because it was not a loss of the planning standard function. It was not a loss of planning standard function because deficiencies in maintenance of the alert and notification system did not degrade system performance. This finding was assigned a cross-cutting aspect of Documentation [H.2(c)] because the licensee did not incorporate up-to-date design documentation into working procedures.

Inspection Report# : 2013004 *(pdf)*

Significance: G Apr 15, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Non-Conservative Value for Declaring an Alert on Low River Level
The team identified a non-cited violation of 10 CFR 50.54(q)(2) for the licensee's failure to maintain the effectiveness of an emergency plan. Specifically, since May 14, 2009, the licensee failed to maintain a proper value for low river level associated with the declaration of an emergency at the ALERT classification level. the licensee did not maintain a standard emergency action level scheme in accordance with the requirements of 10 CFR 50.47(b)(4), which states in part, that a standard emergency classification and action level scheme is in use by the nuclear facility licensee. The emergency action level scheme was not maintained because emergency action levels HU1 and HA1, "Natural or destructive phenomena affecting the Protected Area," contained an inaccurate river level of 973 feet 9 inches. The river level was inaccurate because the basis document, Procedure EPIP-OSC-1, "Emergency Classification," Revision 46, stated the emergency action level was based on the minimum elevation of the raw water pump suction. Based on available plant data, the minimum elevation of the raw water pump suction was above the Alert declaration point of 973 feet 9 inches. This issue has been entered into the corrective action program as Condition Reports CRs 2013-04198 and 2013-04169.
This performance deficiency is more than minor, and therefore a finding, because it is associated with 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 action 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 Notification of Unusual Event and Alert emergency classifications would have been declared although potentially in a delayed manner. This finding was not assigned a cross-cutting aspect because the performance deficiency is not reflective of current performance.

Inspection Report# : 2013008 *(pdf)*

Occupational Radiation Safety

Significance: G Jun 30, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure To Post 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, which was the result of a radiation protection technician failing to monitor changing radiological conditions and post a high radiation area. As a result, an operator entered a high radiation area with dose rates greater than 100 millirems per hour without knowing the dose rates in the area. In response, licensee representatives immediately surveyed the affected areas, posted the area as a high radiation area, documented the occurrence in the corrective action program as Condition Report 2013-02603, and prepared an Apparent Cause Analysis Report.
The failure to post a high radiation area with dose rates greater than 100 millirems per hour is a performance deficiency. The performance deficiency was more than minor because it was associated with the Occupational Radiation Safety Cornerstone attribute of program and process (exposure control) and adversely affected the cornerstone objective of ensuring adequate protection of worker health and safety from exposure to radiation because the failure exposed workers to higher than anticipated radiation dose rates. The Occupational Radiation Safety Cornerstone was affected; therefore, the inspectors used Manual Chapter 0609, Appendix C, "Occupational Radiation Safety Significance Determination Process," dated August 19, 2008, to determine the significance of the violation. The violation had 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 had a cross-cutting aspect in the human performance area, work practices component, because the licensee failed to hold proper pre-job briefings and follow station procedures requiring monitoring of changing radiological conditions to ensure personnel did not proceed in the face of unexpected circumstances.
Inspection Report# : 2013005 *(pdf)*

Significance: G Jun 30, 2013
Identified By: NRC
Item Type: FIN Finding
Failure to Adequately Plan and Control Work Activities to Maintain Doses ALARA
The inspectors reviewed a self-revealing finding of very low safety significance involving the licensee's failure to adequately plan and control work activities relating to the Chemical Volume Control System piping to maintain doses ALARA. Specifically, the work was "fast-tracked," which caused issues with the understanding of the work scope and led to the mismanagement of foreseeable aspects in the ALARA planning process. In response, the licensee evaluated their ALARA process and entered the issue into their corrective action program as Condition Report 2012-20825.
The failure to maintain doses ALARA due to inadequate planning was a performance deficiency. The performance deficiency is more than minor because it negatively affected the Occupational Radiation Safety Cornerstone, in that inadequate planning led to increased collective radiation dose for occupational workers. This resulted in a finding because no violation of regulatory requirements occurred, but the licensee failed to meet a self-imposed standard. The Occupational Radiation Safety Cornerstone was affected; therefore, the inspectors used Manual Chapter 0609, Appendix C, "Occupational Radiation Safety Significance Determination Process," dated August 19, 2008, to determine the significance of the finding. The finding had very low safety significance because although the finding involved ALARA planning and work controls, the licensee's latest three-year rolling average collective dose was less

than 240 person-rem. This finding had a cross-cutting aspect in the human performance area, associated with the work control component, because the licensee failed to communicate, coordinate, and cooperate with each other during an activity in which interdepartmental communication was necessary.
Inspection Report# : 2013005 *(pdf)*

Significance: G Jun 30, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure To Survey Resulting In Unintended Occupational Dose
The inspectors reviewed a self-revealing non-cited violation of 10 CFR Part 20.1501(a), which was the result of an inadequate survey to evaluate potential hazards from airborne radiation. As a result, a radiation worker received an uptake of 10 millirem in unintended dose. In response, the licensee immediately surveyed the area, performed whole body counts on the affected worker, decontaminated the affected worker, and documented the occurrence in the corrective action program as Condition Report 2012-19508.
The failure to perform a survey to evaluate the radiological conditions and potential hazard from airborne radiation is a performance deficiency. The licensee had the ability to foresee a possible intake if the survey had been properly performed. The performance deficiency was more than minor because it was associated with the Occupational Radiation Safety Cornerstone attribute of program and process (exposure control) and adversely affected the cornerstone objective of ensuring adequate protection of worker health and safety from exposure to radiation from radioactive material during routine civilian nuclear reactor operation. The Occupational Radiation Safety Cornerstone was affected; therefore, the inspectors used Manual Chapter 0609, Appendix C, "Occupational Radiation Safety Significance Determination Process," dated August 19, 2008, to determine the significance of the violation. The violation had 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 had a cross-cutting aspect in the human performance area, work control component,
- 4 -
because the licensee failed to maintain communication during activities in which interdepartmental coordination was necessary to assure plant and human performance, such as the need to keep personnel apprised of changing radiological conditions that affected work activities.
Inspection Report# : 2013005 *(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 Feb 15, 2014
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Make Required 10 CFR 50.46 Report Within Required Time (Section 4OA3.2)
The inspectors identified a SLIV non-cited violation of 10 CFR 50.46, "Acceptance criteria for emergency core cooling systems for light-water nuclear power reactors," for the licensee's 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 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 significantly higher peak cladding temperature, it is within the regulatory requirements of 10 CFR 50.46(b)(1). The licensee initiated CR-2014-00674 on January 16, 2014. The licensee initiated CR 2014-01356 on January 29, 2014 to document the fact that Procedure SO-R-1 refers to the unendorsed NEI guidance.

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 (Section 4OA3.4)
The inspectors identified two examples of a cited Severity Level IV violation of 10 CFR 50.73, "Immediate Notification Requirements for Operating Nuclear Power Reactors," for the licensee's failure to submit a required licensee event report within 60 days following discovery of an event requiring a report. In the first example, LER 2013-010-0 was sent 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 team 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. (Section 4OA3.4).

Inspection Report# : 2014002 *(pdf)*

Significance: G Feb 15, 2014
Identified By: NRC
Item Type: VIO Violation
Failure to Restore Compliance for Containment Spray Runout Conditions (Section 4OA3.8)

The inspectors identified a cited Green violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," for the licensee's failure to take timely corrective action for a condition adverse to quality. Specifically, the inspectors noted that the licensee failed to restore compliance following NRC identification the licensee's failure to correct a runout condition in the containment spray system in NCV 05000285/2008003-05 in August 2008. Corrective actions taken included completion of an analysis of containment spray pump operation in an MSLB event; revision of CS design documentation; analysis of motor performance by electrical vendor; and completion of a temporary modification which throttles the CS pump discharge valves to provide additional system resistance and prevent runout. The action to change the system resistance was completed on November 24, 2013, which put the station back into compliance by correcting the condition adverse to quality originally identified by NRC in NCV 2008003-05. Future corrective actions will 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 SSC and barrier performance attribute of 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 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 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 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 [H.12]. (Section 4OA3.8

Inspection Report# : 2014002 *(pdf)*

Significance: N/A Jul 19, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Evaluate Changes to Ensure They Did Not Require Prior Approval
The team identified a non-cited violation of 10 CFR 50.59, "Changes, Tests, and Experiments," associated with the licensee's failure to adequately evaluate modification EC 33464, "Replace AK 50 480 V Main and Bus-Tie Breakers With Molded Case Type or Equivalent," to determine if it required prior NRC approval. Specifically, the licensee's documented evaluation failed to identify and evaluate new creditable failure modes to determine whether they would have an adverse effect on the 480 Vac electrical distribution system. This issue was entered into the licensee's corrective action program as Condition Reports CR 2013-04474 and 2013-16954.

The licensee's failure to implement the requirements of 10 CFR 50.59 and adequately evaluate changes associated with the electrical distribution system 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 is 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# : 2013013 *(pdf)*

Significance: N/A Jul 19, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Submit Licensee Event Report
The team identified three examples of a Severity Level IV non cited violation of 10 CFR 50.73, "Immediate Notification Requirements for Operating Nuclear Power Reactors," associated with the licensee's failure to submit a licensee event report within 60 days following a discovery of an event meeting the reportability criteria as specified. The licensee entered this deficiency into their corrective action program for resolution as Condition Reports CR 2013-2863 and 2012-03796.

The team determined that the failure to make a required Licensee Event Report was a violation of 10 CFR 50.73. The 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 team 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# : 2013013 *(pdf)*

Significance: N/A Jul 19, 2013
Identified By: NRC
Item Type: VIO Violation
Failure to Provide Complete and Accurate Information to the NRC
The team identified a cited Severity Level IV violation of 10 CFR 50.9, "Complete and Accurate Information," and an associated reactor oversight program finding (NCV 05000285/2013013-19, "Failure to Translate Appendix R License Exemptions into the Plants Fire Protection Program Design"), for the licensee's failure to provide information to the Commission that was complete and accurate in all material respects. Specifically, when responding to a request for additional information, the licensee supplied incorrect information to the NRC and this information was subsequently used by the NRC to support a license amendment for the station. This issue was entered into the station's corrective action program as Condition Report CR 2013-15021.

The failure to provide the NRC with complete and accurate information when responding to a request for additional information was a performance deficiency. Using Inspection Manual Chapter 0612, Appendix B, "Issue Screening," Figure 1, dated September 7, 2012, the team determined that the failure to provide complete and accurate information was a performance deficiency that required evaluation under both traditional enforcement and the reactor oversight program. The performance deficiency was determined to be more than minor because: (1) the information was considered material to the NRC's decision making process; and (2) it affected the equipment performance attribute of the Mitigating Systems Cornerstone with regard to availability, reliability, and capability of the raw water pumps to perform their safety function during a fire in the intake structure. Using Inspection Manual Chapter 0609, Appendix F, "Fire Protection Significance Determination Process," the team determined the finding to have very low safety

significance (Green) because it only affected the ability to reach and maintain cold shutdown conditions. Under the traditional enforcement review, the team determined that in accordance with Section 6.9.c.1 of the NRC Enforcement Policy, this finding represented a Severity Level III violation. Specifically, the team determined that if this information had been completely and accurately provided, it would likely have caused the NRC to undertake a substantial further inquiry. The NRC takes the issue of complete and accurate license submittals very seriously. For this reason, the NRC considered citing this as a Severity Level III violation, as discussed in the Enforcement Policy, as the NRC had approved a licensing action based on the incorrect information. However, after consideration by NRC management, and with the approval of the Director of the Office of Enforcement, it was determined that a Severity Level IV, cited violation was appropriate. This decision was based on the very low safety significance (Green) of the associated reactor oversight program finding (05000285/2013013-19). There was no cross-cutting aspect assigned to this finding because the inaccurate information was provided over three years ago and this issue does not reflect present licensee performance.

Inspection Report# : 2013013 *(pdf)*

Significance: G Apr 15, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Obtain Prior NRC Approval for a Facility Change
The team identified a non-cited violation of 10 CFR 50.59, “Changes, Test, and Experiments,” associated with the licensee’s failure to adequately evaluate changes in order to ensure that they did not require prior NRC approval. Specifically, from March 4, 1995, 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 more than a minimal increase in the likelihood of occurrence of a malfunction of a structure, system, or component important to safety previously evaluated in the updated safety analysis report. This issue has been entered into the corrective action program as Condition Reports CR 2013-04266 and CR 2013-05210. Because this performance deficiency had the potential to impact the NRC’s ability to perform its regulatory function, the team evaluated it using traditional enforcement. In accordance with Section 7.3.E.6 of the NRC Enforcement Manual, the team used Inspection Manual Chapter 0609, Appendix A, “The Significance Determination Process For Findings At-Power,” and determined the finding 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 although this issue occurred more than three years ago, this finding is representative of current plant performance. Therefore, 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 [H.1(b)]
Inspection Report# : 2013008 *(pdf)*

Significance: N/A Apr 15, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Make Timely Event Notifications for Unanalyzed Conditions

The team identified four examples of a non-cited violation of 10 CFR 50.72, “Immediate Notification Requirements for Operating Nuclear Power Reactors,” for the licensee’s failure to make required event notifications within 8 hours following discovery of an event requiring a report. Specifically, on April 12, 2012, February 7, 2013, February 25, 2013, and February 27, 2013, the licensee failed to notify the NRC within 8 hours of the occurrence an event or condition that resulted in the nuclear power plant being in an unanalyzed condition that significantly degraded plant safety. This issue has been entered into the corrective action program as Condition Report CR 2013-05070.
The violation was evaluated using Section 2.2.4 of the NRC Enforcement Policy, because the failure to required 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 team 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 (Section 7.(42)).
Inspection Report# : 2013008 *(pdf)*

Significance: N/A Apr 15, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Repetitive Issues Involving Untimely Submittal of Required Licensee Event Reports
The team identified nine examples of a non-cited violation of 10 CFR 50.73, “Immediate Notification Requirements for Operating Nuclear Power Reactors,” for the licensee’s failure to make required licensee event reports within 60 days following discovery of an event requiring a report. Specifically, on nine occurrences between May 9, 2011, and August 30, 2012, the licensee failed to submit a licensee event report for an event meeting the requirements for reporting specified in 10 CFR 50.73. This issue has been entered into the corrective action program as Condition Report CR 2012-03796.
The 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 team 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# : 2013008 *(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 : May 30, 2014