

Cooper

2Q/2009 Plant Inspection Findings

Initiating Events

Significance:  Jun 23, 2009

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Inadequate Tagout Results in Draining of Turbine Equipment Cooling System

A self-revealing noncited violation of Technical Specification 5.4.1.a was reviewed when the licensee failed to follow the requirements of Administrative Procedure 0.9, "Tagout." This procedure violation resulted in an inadequate tagout for the station safety-related service water system and a subsequent partial draindown of the turbine equipment cooling system, causing receipt of the turbine equipment cooling surge tank low level alarm. The licensee entered this issue into their corrective action program as Condition Report CR-CNS-2009-00232.

This finding is more than minor because it could reasonably be viewed as a precursor to a more significant event in that a sustained loss of turbine equipment cooling would result in a reactor scram. Using Manual Chapter 0609.04, "Phase 1 Initial Screening and Characterization of Findings," the finding was determined to have very low safety significance because it did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment would not be available. Additionally, the cause of the finding was related to the human performance crosscutting component of work practices because the tagout originator and verifier failed to use adequate self and peer checking error prevention techniques when generating the tagout [H.4(a)].

Inspection Report# : [2009003](#) (*pdf*)

Significance:  Mar 24, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Procedure Violation Results in Exceeding Allowed Injection Pressure

The inspectors identified a noncited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," when maintenance personnel exceeded the specified leak injection pressure by 900 psig. Specifically, on March 7, 2009, contract maintenance personnel failed to follow Temporary Configuration Change 4686707, "Leak Repair of RF-V-747 with Sealant," instructions by using an injection pressure of 4000 psig, instead of the specified injection pressure of 3100 psig for the leak injection repair of RF-V-747, the Reactor Feed Line B drywell vent shutoff valve. The licensee entered this issue into the corrective action program as Condition Report CR CNS 2009 01874.

The finding was more than minor because if left uncorrected the performance deficiency could have the potential to lead to a more significant safety concern. In accordance with NRC Inspection Manual Chapter 0609, Appendix G, Attachment 1, "Shutdown Operations Significance Determination Process Phase 1 Operational Checklists for Both PWRs [Pressurized Water Reactors] and BWRs [Boiling Water Reactors]," the inspectors evaluated the significance of this finding. The inspectors determined that Checklist 7, "BWR Refueling Operation with Reactor Coolant System Level > 23 Feet," was applicable. The finding was determined to have very low safety significance (Green) because it did not increase the likelihood of a loss of reactor coolant system inventory, did not affect the licensee's ability to terminate a leak path or add inventory to the reactor coolant system, or degrade the licensee's ability to recover decay heat removal in the event it was lost. The cause of this finding was related to the human performance aspect of work practices because the licensee failed to ensure adequate supervisory oversight of contractors such that nuclear safety was supported [H.4(c)] (Section 1R18).

Inspection Report# : [2009002](#) (*pdf*)

Significance:  Sep 21, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Operator Error Results in Uncontrolled Reactivity Addition

A self-revealing Green NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified regarding the licensee's failure to follow the requirements of Administrative Procedure 0-CNS-61, "CNS Reactivity Management Program." Specifically, control room operators failed to maintain positive control over reactivity during a plant startup, resulting in an inadvertent increase in reactor power. The licensee entered this issue into their corrective action program as Condition Report CR-CNS-2008-06149.

The finding is more than minor because it could be reasonably viewed as a precursor to a more significant event. Using the Manual Chapter 0609, "Significance Determination Process," Phase 1 Worksheet, the finding is determined to have very low safety significance because the resulting transient did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available. The cause of this finding is related to the human performance cross cutting component of Work Practices because licensee personnel failed to perform an adequate prejob brief and the operators failed to utilize appropriate self or peer checking prior to opening the reactor feed pump discharge valve at low power [H.4(a)]

Inspection Report# : [2008004](#) (*pdf*)

Mitigating Systems

Significance:  Jun 23, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Adequately Monitor the Performance of the Diesel Generator Fuel Oil Transfer System

The inspectors identified a Green noncited violation of 10 CFR 50.65(a)(2) for the failure by the licensee to demonstrate that the Train A diesel generator fuel oil transfer system performance was being effectively controlled through preventive maintenance and not placing the system in a(1) status. The licensee maintained the function in a Maintenance Rule a(2) status despite the fact that the function had exceeded its performance criteria and that the functional failures were maintenance preventable. The licensee entered this issue in their corrective action program as Condition Report CR-CNS-2009-04895.

The finding was more than minor because it involved degraded safety system performance which, if left uncorrected, could become a more significant safety concern. The inspectors determined that this performance deficiency was an additional, but separate consequence of the degraded performance of the diesel generator fuel oil transfer system. Following the guidance of Inspection Procedure 71111.12, this issue was determined to be a maintenance rule Category II finding and is of very low safety significance. The cause of this finding is related to the human performance crosscutting component of decision making in that engineering personnel failed to use conservative assumptions in the decision to characterize the October 30, 2008 failure of diesel generator 1 as not being maintenance preventable [H.1(b)].

Inspection Report# : [2009003](#) (*pdf*)

Significance:  Jun 23, 2009

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Inadequate Freeze Protection Procedure Results in Loss of Condensate Storage Tank Vent Path

A self-revealing noncited violation of very low safety significance (Green) of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was reviewed involving the licensee's failure to develop an adequate procedure for freeze protection of the condensate storage tank vent and overflow paths. Specifically, the licensee failed to ensure that the high efficiency particulate air vent filter and the overflow catch barrel were protected from

severe freezing weather conditions which led to an overpressure condition of the condensate storage tank on February 3, 2009. The licensee documented the condensate storage tank vent paths freezing in Condition Report CR-CNS-2009-05246.

The finding is more than minor because the inadequate freeze protection procedure had the potential to lead to a more significant safety concern if left uncorrected. Frozen condensate storage tank vents would prevent its use as an alternate emergency core cooling systems suction source when shutdown. This finding affects the Mitigating Systems Cornerstone attribute of procedure quality and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Using the Manual Chapter 0609 Phase 1 screening worksheet, the inspectors determined that the finding had very low safety significance because it did not result in the loss of any system safety function. The finding had a crosscutting aspect in the area of problem identification and resolution associated with the corrective action program because the licensee did not thoroughly evaluate condensate storage Tank A vent icing concerns in 2007 resulting in icing of the tank vent paths during severe cold winter conditions [P.1(c)].

Inspection Report# : [2009003](#) (*pdf*)

Significance:  May 12, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate corrective actions to repair a lubricating oil pipe

The team identified a noncited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for inadequate corrective actions to prevent recurrence of a significant condition adverse to quality. The licensee inappropriately changed the root cause for the Emergency Diesel Generator 2 lubricating oil discharge S pipe failure on February 13, 2008, from high cycle fatigue to four piping overstress events. Consequently, the licensee implemented corrective actions that resulted in a high cycle fatigue failure of the Emergency Diesel Generator 1 lubricating oil discharge S pipe on January 27, 2009. The licensee entered this deficiency in their corrective action program as Condition Report 2009 00098.

The performance deficiency involved the failure of the licensee to take adequate corrective actions to prevent recurrence of a significant condition adverse to quality. The finding was determined to be more than minor because it is associated with the mitigating systems cornerstone attribute of equipment performance 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 Manual Chapter 0609.04, "Phase 1 Initial Screening and Characterization of Findings," the finding was found to have very low safety significance (Green) because it was not a qualification deficiency; did not represent loss of a safety function, loss of a single train for greater than its allowed outage time, or loss of a non technical specification train of equipment; and did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. The finding has a cross cutting aspect in the area of problem identification and resolution associated with the corrective action program because the licensee did not thoroughly evaluate the Emergency Diesel Generator 2 failure such that the specified corrective actions addressed the causes of the failure.

Inspection Report# : [2009008](#) (*pdf*)

Significance:  May 12, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to perform effective common mode failure evaluation

The team identified a noncited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, Drawings," regarding failure to follow the requirements of Procedure ENN OP 104, "Operability Determinations," Revision 2. Specifically, the team determined that operations personnel did not obtain necessary information to determine with reasonable assurance that Emergency Diesel Generator 2 remained operable and not subject to a common mode failure mechanism. The Emergency Diesel Generator 1 lubricating oil discharge S pipe cracked as a result of vibrations in the X direction and the common mode failure evaluation did not account for vibrations in the X

direction for Emergency Diesel Generator 2. Subsequent measurements confirmed that the vibrations remained within the normal operating range. The licensee documented this deficiency in Condition Report 2009 00655.

The performance deficiency associated with this finding involved the failure of operations personnel to perform an adequate operability assessment. The finding was determined to be more than minor because it would become a more significant event if left uncorrected in that the failure of Emergency Diesel Generator 2 by the same high cycle fatigue mechanism increased the likelihood that both emergency diesel generators could be inoperable concurrently. The finding affected the mitigating systems cornerstone. Using Manual Chapter 0609.04, "Phase 1 Initial Screening and Characterization of Findings," the finding was found to have very low safety significance (Green) because it was not a qualification deficiency; did not represent loss of a safety function, loss of a single train for greater than its allowed outage time, or loss of a non technical specification train of equipment; and did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. The finding has a cross cutting aspect in the area of human performance associated with decision making because the licensee failed to use conservative assumptions when determining operability.

Inspection Report# : [2009008](#) (*pdf*)

Significance:  May 12, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to identify a condition adverse to quality

The team identified a noncited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, Drawings," for the failure of maintenance personnel to initiate a condition report, as required by Procedure 0.5, "Conduct of The Condition Report Process," Revision 63, Section 7.1.3. Specifically, maintenance personnel failed to initiate a condition report for an adverse condition related to a significant change in vibration levels on Emergency Diesel Generator 1 between readings. The licensee documented this deficiency in Condition Report 2009 00694.

The performance deficiency associated with this finding involved the failure of maintenance personnel to initiate condition reports for adverse conditions as required by Procedure 0.5. The team determined that the performance deficiency was more than minor in accordance with Manual Chapter 0612, Appendix B, because the finding was associated with the human performance attribute of the mitigating systems cornerstone and affected the cornerstone's objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding affected the mitigating systems cornerstone. Using Manual Chapter 0609.04, "Phase 1 Initial Screening and Characterization of Findings," the finding was found to have very low safety significance (Green) because it was not a qualification deficiency; did not represent loss of a safety function, loss of a single train for greater than its allowed outage time, or loss of a non technical specification train of equipment; and did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. The finding has a cross cutting aspect in the area of human performance associated with work practices because the licensee did not effectively communicate expectations regarding following procedures for initiating condition reports for adverse conditions

Inspection Report# : [2009008](#) (*pdf*)

Significance:  May 12, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to provide adequate work instructions to perform maintenance

The team identified two examples of a noncited violation of Technical Specification 5.4.1.a for the failure of the licensee to provide work instructions appropriate to the circumstances. In the first example, the work orders generated to monitor vibrations on the emergency diesel generator lubricating oil discharge S pipe did not have adequate quantitative acceptance criteria. The second example involved four instances of inadequate maintenance instructions, which resulted in deficiencies in emergency diesel generator Amphenol connectors. The licensee documented these deficiencies in Condition Reports 2009 01513 and 2009 02684.

The performance deficiency associated with this finding involved the failure to ensure maintenance personnel took the appropriate actions when performing maintenance. The team determined that the performance deficiency was more than minor in accordance with Manual Chapter 0612, Appendix B, because it is associated with the mitigating systems cornerstone attribute of equipment performance and it affects the cornerstone objective of ensuring availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Using Manual Chapter 0609.04, "Phase 1 Initial Screening and Characterization of Findings," the finding was found to have very low safety significance (Green) because it was not a qualification deficiency; did not represent loss of a safety function, loss of a single train for greater than its allowed outage time, or loss of a non technical specification train of equipment; and did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. The finding has a cross cutting aspect in the area of human performance associated with decision making because incorrect assumptions by the licensee regarding the skills and knowledge level of the craft resulted in maintenance procedures that had insufficient instructions.

Inspection Report# : [2009008](#) (pdf)

Significance:  May 12, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Failures to identify nonconforming design characteristics

The team identified a Green noncited violation of 10 CFR Part 50, Appendix B, Criterion XV, "Nonconforming Materials, Parts, or Components," for the failure of engineering personnel to review and accept a nonconforming pipe configuration. Specifically, when replacing the lubricating oil discharge S pipe on Emergency Diesel Generator 1 for an extent of condition evaluation, engineers failed to evaluate critical characteristics and determine why the replacement characteristics did not match the installed configuration or why this configuration did not match the existing drawings. The licensee documented this deficiency in Condition Report 2009 00613.

The performance deficiency associated with this finding involved the failure to thoroughly evaluate and control configuration changes on the emergency diesel generator lubricating oil piping. The team determined that the performance deficiency was more than minor in accordance with Manual Chapter 0612, Appendix B, because the finding was associated with the design control attribute of the mitigating systems cornerstone and affected the cornerstone's objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Using Manual Chapter 0609.04, "Phase 1 Initial Screening and Characterization of Findings," the finding was found to have very low safety significance (Green) because it was not a qualification deficiency; did not represent loss of a safety function, loss of a single train for greater than its allowed outage time, or loss of a non technical specification train of equipment; and did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. The finding has a cross cutting aspect in the area of human performance associated with decision making because licensee personnel did not verify the critical characteristics of the replacement lubricating oil discharge S pipe section, which had a different configuration than the pipe being removed for analysis.

Inspection Report# : [2009008](#) (pdf)

Significance:  May 12, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to identify root cause of a significant condition adverse to quality

The team identified a noncited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for the failure to identify the root cause of a significant condition adverse to quality as required by Procedure 0.5.Root Cause, "Root Cause Analysis Procedure," Revision 8. Specifically, following an Emergency Diesel Generator 2 governor magnetic pickup unit Amphenol connector failure on April 21, 2008, the licensee incorrectly attributed the failure to a speed gear striking the magnetic probe without identifying that a faulty Amphenol connector caused voltage spikes. Consequently, the same defective Amphenol connector caused voltage fluctuations during testing on Emergency Diesel Generator 2 on November 10, 2008. In addition, the corresponding governor magnetic pickup unit Amphenol connector on Emergency Diesel Generator 1 caused a breaker trip on January 31, 2009, similar to the April 21, 2008,

event. The licensee documented this deficiency in their corrective action program as Condition Report 2009 00778.

The team determined that the failure to identify the correct root cause for the emergency diesel generator Amphenol connector failures was a performance deficiency. The team determined that the performance deficiency was more than minor in accordance with Manual Chapter 0612, Appendix B, because the finding was associated with the design control attribute of the mitigating systems cornerstone and affected the cornerstone's objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Using Manual Chapter 0609.04, "Phase 1 Initial Screening and Characterization of Findings," the finding was found to have very low safety significance (Green) because it was not a qualification deficiency; did not represent loss of a safety function, loss of a single train for greater than its allowed outage time, or loss of a non technical specification train of equipment; and did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. The finding has a cross cutting aspect in the area of human performance associated with decision making because the licensee did not use conservative assumptions to ensure that they performed an effective root cause evaluation for failures of the emergency diesel generator Amphenol connectors.

Inspection Report# : [2009008](#) (*pdf*)

Significance:  Apr 10, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Follow Procedure Results in Inadequate Operability Determinations of Degraded Agastat Timer Relays

The team identified a noncited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the licensee's failure to follow the requirements of Procedure ENN OP 104, "Operability Determinations." Specifically, between 2005 and 2009 operations personnel failed to perform adequate operability determinations of degraded and potentially degraded conditions associated with essential Agastat time delay relays with internal foreign material contamination that either needed an immediate operability determination or needed more information to reasonable assurance of operability. This included a potential degraded condition of the installed essential Relay 27X15-1G that the inspection team noted had a trend similar to relays that had previously failed with internal foreign material contamination. The licensee documented this condition with CR-CNS-2009-02844 and replaced the potentially degraded relay ten days later.

This finding is more than minor because it affected the reliability objective of the equipment performance attribute of the Mitigating Systems Cornerstone to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The finding was determined to have a very low safety significance because the finding did not result in a loss of system safety function, an actual loss of safety function of a single train for greater than its Technical Specification allowed outage time, or screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. The cause of this finding is related to the problem identification and resolution crosscutting aspect associated with the corrective action program because licensee personnel failed to thoroughly evaluate conditions adverse to quality and perform meaningful operability determinations.

Inspection Report# : [2009007](#) (*pdf*)

Significance:  Mar 24, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Repeat Failure to Assess and Manage the Risk of Heavy Equipment Operations.

The inspectors identified a noncited violation of 10 CFR 50.65.a(4) for the licensee's failure to assess and manage the risk of planned maintenance activities. Specifically, the licensee failed to include planned heavy equipment operations in the vicinity of the 345 kV transmission lines from the main power transformers in their risk assessment on January 29, 2009. The licensee entered this issue into their corrective action program as Condition Report CR CNS 2009 00734.

The finding was more than minor because licensee's risk assessment failed to consider maintenance activities that could increase the likelihood of initiating events. The inspectors determined that Manual Chapter 0609, Appendix K, "Maintenance Risk Assessment and Risk Management Significance Determination Process," could not be used due to the inability to quantify the increase in risk associated with the heavy equipment activity. The inspectors utilized Manual Chapter 0609, Appendix M, "Significance Determination Process Using Qualitative Criteria," to determine that the finding was of very low safety significance because the both qualified sources of offsite power were unaffected by this performance deficiency and provided sufficient remaining defense in depth in the event of a unit trip. The cause of this finding was related to the problem identification and resolution crosscutting component of corrective action program because the immediate corrective actions for a similar occurrence on November 26, 2008 were not effective in addressing the safety issue in a timely manner [P.1(d)] (Section 1R13).

Inspection Report# : [2009002](#) (pdf)

Significance:  Mar 24, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Incompatible Materials Installed in Diesel Fuel Oil System

The inspectors identified a noncited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," regarding the licensee's failure to assure that appropriate quality standards are specified and included in design documents and that deviations from such standards are controlled. Specifically, the licensee failed to ensure that parts associated with the diesel fuel oil flow transmitter were compatible with the fuel oil system, leading to the failure of Diesel Generator 1 on October 30, 2008. The licensee documented the inspectors' observations in Condition Report CR CNS 2009 02237.

The finding was more than minor because it is associated with the mitigating systems cornerstone attribute of design control and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e. core damage). Using Manual Chapter 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," the inspectors determined that the finding has very low safety significance because it did not result in the loss of any system safety function. The inspectors determined that identification of a crosscutting aspect was not appropriate for this finding as the cause of the finding was not indicative of current performance (Section 1R18).

Inspection Report# : [2009002](#) (pdf)

Significance:  Mar 24, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Implement Procedural Requirements for Tracking Control Room Deficiencies

The NRC identified a noncited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," regarding the licensee's failure to follow procedural requirements for tracking operator work arounds, operator burdens, or control room deficiencies. On January 14, 2009 during a review of control room deficiencies, the inspectors identified that many deficiencies tagged in the control room were not being tracked as required by Conduct of Operations Procedure 2.0.12, "Operator Challenges." This failure to maintain the database of current deficiencies in the plant prevents the licensee from accurately monitoring the aggregate impact on the operators' ability to operate plant equipment. The licensee entered this issue into the corrective action program as Condition Report CR CNS 2009 00527.

The finding was greater than minor because it is associated with the mitigating systems cornerstone attribute of equipment performance and affects the associated cornerstone objective to ensure the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Using Manual Chapter 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," the finding is determined to have very low safety significance because it did not represent the loss of a safety function of a single train for greater than its Technical Specification allowed outage time. This finding had a crosscutting aspect in the area of human performance in that the licensee did not ensure maintenance backlogs were low enough to support safety. Specifically,

the licensee did not provide adequate resources for identifying and screening the backlog of control room deficiencies and the resultant aggregate impact to the plant operators' ability to operate plant equipment [H.2(a)] (Section 40A2).

Inspection Report# : [2009002](#) (*pdf*)

Significance:  Dec 31, 2008

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Misaligned Lubricating Oil Piping Causes Diesel Generator 2 Failure

A Green self-revealing noncited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified for the licensee's failure to establish measures to assure that long standing diesel generator 2 lube oil discharge piping misalignments leading to diesel generator oil leakage were promptly identified and corrected. Previous apparent cause investigations performed in 2002 and 2004 failed to correct the improper piping alignment that subsequently resulted in a fatigue failure crack of the diesel generator 2 main lube oil discharge piping February 13, 2008, requiring diesel generator 2 to be secured due to lubricating oil leakage during a surveillance test. This issue was entered into the licensee's corrective action program as Condition Report CR-CNS-2008 00968. The licensee has corrected the misalignment issues.

This finding is more than minor because it is associated with the equipment performance attribute of the Mitigating Systems cornerstone, and affected the cornerstone objective of ensuring the availability, and reliability of systems required to respond to initiating events. Using Manual Chapter 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," the finding was determined to have very low safety significance (Green) because it was not a qualification deficiency, did not represent a loss of safety function, did not represent an actual loss of a single train for greater than its technical specification allowed outage time, did not represent a loss of a non-technical specification train of equipment for greater than 24 hours, and did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. The cause of the finding is related to the human performance crosscutting component of resources in that the licensee failed to provide complete, accurate and up-to-date procedures and work packages to ensure proper alignment of the diesel generator flexible hose replacements up to the February 13, 2008, lube oil leak [H.2(c)] (Section 1R12).

Inspection Report# : [2008005](#) (*pdf*)

Significance:  Dec 31, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Assess and Manage the Risk of Heavy Equipment Operations

The inspectors identified a Green noncited violation of 10 CFR 50.65.a(4) for the licensee's failure to assess and manage the risk of planned maintenance activities. Specifically, the licensee failed to include planned heavy equipment operations in the vicinity of the startup transformer transmission lines in their risk assessment on November 26, 2008. The licensee entered this issue into their corrective action program as Condition Report CR CNS 2008 08987.

This finding is more than minor because licensee's risk assessment failed to consider maintenance activities that could increase the likelihood of initiating events. The inspectors determined that Manual Chapter 0609, Appendix K, "Maintenance Risk Assessment and Risk Management Significance Determination Process," could not be used due to the licensee's inability to quantify the increase in risk associated with the heavy equipment activity. The inspectors utilized Manual Chapter 0609, Appendix M, "Significance Determination Process Using Qualitative Criteria," to determine that the finding was of very low safety significance because the other qualified source of offsite power (the emergency transformer) was unaffected by this performance deficiency and provided sufficient remaining defense in depth in the event of a loss of offsite power. The cause of this finding is related to the human performance crosscutting component of resources because procedures for control of switchyard and transformer yard activities failed to include precautions for heavy equipment operations in the immediate vicinity of the transmission lines in the protected area [H.2(c)] (Section 1R13).

Inspection Report# : [2008005](#) (pdf)

Significance:  Dec 31, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Follow Procedure Results in Inadequate Operability Determinations

The inspectors identified four examples of a Green noncited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," regarding the licensee's failure to follow the requirements of Procedure ENN OP 104, "Operability Determinations." Specifically, the inspectors identified four examples in which the shift manager failed to document an adequate basis for operability when a degraded or nonconforming condition had been identified. The licensee entered this issue into their corrective action program as Condition Report CR CNS 2008 09514.

The finding is more than minor because the condition of performing inadequate operability determinations could become more significant if left uncorrected. Using Manual Chapter 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," the finding is determined to have very low safety significance because it did not result in the loss of safety function of any technical specification required equipment. The cause of this finding is related to the problem identification and resolution crosscutting component of the corrective action program because licensee personnel failed to thoroughly evaluate conditions adverse to quality and perform meaningful operability determinations [P.1(c)] (Section 1R15).

Inspection Report# : [2008005](#) (pdf)

Significance:  Dec 31, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Follow Procedure for Initiating Condition Reports

The inspectors identified three examples of a Green noncited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," regarding the licensee's failure to follow the requirements of Administrative Procedure 0.5, "Conduct of the Condition Report Process." Specifically, licensee personnel failed to initiate condition reports for adverse conditions including multiple emergency response procedures that could not be implemented as written, a metallic noise emanating from a service water pump motor, and multiple examples of chemical storage procedure violations. The licensee entered this issue into their corrective action program as Condition Report CR CNS 2008 08780.

The finding is more than minor because the behavior of not initiating condition reports for adverse conditions could become more significant if left uncorrected. Using Manual Chapter 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," the finding is determined to have very low safety significance because it did not result in the loss of safety function of any Technical Specification required equipment. The cause of this finding is related to the problem identification and resolution crosscutting component of the corrective action program because licensee personnel failed to implement a corrective action program with a low threshold for identifying issues [P.1(a)] (Section 4OA2).

Inspection Report# : [2008005](#) (pdf)

Significance:  Dec 31, 2008

Identified By: NRC

Item Type: FIN Finding

Improper Storage of Hazardous Chemicals

The inspectors identified a finding regarding the licensee's failure to comply with the requirements of the Material Safety Data Sheets for two hazardous chemicals stored in the protected area. Specifically, licensee personnel stored a 55 gallon barrel of hydrogen peroxide in the same location as a 140 pound barrel of muriatic acid. The licensee entered this issue into their corrective action program as Condition Report CR CNS 2008 08823.

The finding is more than minor because if left uncorrected, it could become a more significant safety concern in that improperly stored hazardous chemicals could put personnel at significant risk of injury and could have inhibited operators' ability to access safety-related equipment to mitigate the consequences of an accident. Using Inspection Manual Chapter 0609, Appendix A, "Determining the Significance of Reactor Inspection Findings for At-Power Situations," the finding was determined to be of very low safety significance because it did not result in a loss of safety function for any mitigating system. The cause of this finding is related to the human performance crosscutting component of work practices because licensee personnel failed to supervise the activities of contractors storing hazardous chemicals in the turbine building [H.4(c)] (Section 40A5).

Inspection Report# : [2008005](#) (*pdf*)

Significance:  Sep 21, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Assess Potential Adverse Effects on Internal Flooding Analysis

The inspectors identified two examples of a Green NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," regarding the licensee's failure to comply with the requirements of Engineering Procedure 3.3 SAFE, "Safety Assessment." Specifically, licensee personnel failed to identify the potential adverse impact to the station internal flooding analysis of the installation of a temporary air conditioning unit and a crane test load in the reactor building. The licensee entered this issue into their corrective action program as Condition Report CR-CNS-2008-07534.

The finding is more than minor because it is associated with the design control attribute of the Mitigating Systems Cornerstone, and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events. Using the Manual Chapter 0609 Phase 1 screening worksheet, the inspectors determined that the finding has very low safety significance because it did not result in the loss of any system safety function. The cause of this finding is related to the human performance cross cutting component of decision making because licensee personnel failed to use conservative assumptions in the decision to make configuration changes on the reactor building floor [H.1(b)]

Inspection Report# : [2008004](#) (*pdf*)

Significance: SL-IV Sep 21, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Report Safety Relief Valve Test Results Above Technical Specification Allowed Setpoint

The inspectors identified a Severity Level IV noncited violation of 10 CFR 50.73 (a)(1) regarding the licensee's failure to submit a licensee event report within 60 days after the discovery of an event. Specifically, the inspectors determined that the licensee had failed to report the discovery that one safety relief valve pilot valve had exceeded its Technical Specification allowable lift setpoint for a time greater than allowed by Technical Specifications. The licensee entered this issue into their corrective action program as Condition Report CR-CNS-2008-07535.

This finding was evaluated using the traditional enforcement process because the failure to accurately report events has the potential to impact the NRC's ability to perform its regulatory function. Consistent with the guidance in Section IV.A.3 and Supplement I, Paragraph D.4, of the NRC Enforcement Policy, this finding was determined to be a Severity Level IV noncited violation

Inspection Report# : [2008004](#) (*pdf*)

Significance:  Sep 21, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Restore Standby Gas System to Standby Lineup

A self-revealing Green NCV of TS 5.4.1.a was identified regarding the licensee's failure to follow the requirements of

General Operating Procedure 2.1.22, "Recovering from a Group Isolation." Specifically, control room operators failed to restore Train B of the standby gas treatment (SGT) system to its standby lineup following a planned group isolation. This error rendered one train of the SGT system inoperable for approximately 12 hours. The licensee entered this issue into their corrective action program as Condition Report CR-CNS-2008-04956.

The finding is more than minor because it is associated with the configuration control attribute of the Mitigating Systems Cornerstone, and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events. Using the Manual Chapter 0609 Phase 1 Screening Worksheet, the inspectors determined that the finding has very low safety significance because it did not result in the loss of Train B of SGT for longer than its technical specification allowed outage time. The cause of this finding is related to the human performance cross cutting component of Work Practices because control room operators failed to utilize appropriate self checking techniques when implementing Procedure 2.1.22 [H.4(a)]
Inspection Report# : [2008004](#) (pdf)

Barrier Integrity

Significance:  Mar 24, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Control Room Envelope Door Left Open Results in Loss of Safety Function

A self-revealing noncited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," occurred regarding the licensee's failure to follow the requirements of Administrative Procedure 0.16, "Control of Doors," when Door H200, both a fire door and a control room emergency filter system boundary door, was found open. The door had been left ajar when a security officer passed through the door and failed to self-check that it closed behind him. A plant operator found the door open when passing through 29 minutes later. Failure of the door to close resulted in the inoperability of the control room emergency filter system and a loss of safety function. The licensee entered this issue into their corrective action program as Condition Report CR CNS 2008 08695.

The finding was more than minor because it affected the configuration control attribute of the barrier integrity cornerstone to maintain radiological barrier functionality of the control room, and affected the cornerstone objective to ensure adequate protection of public health and safety from exposure to radioactive materials. This control room emergency filter system failure raised the possibility of control room personnel exceeding federal dose limits outlined in 10 CFR 50.67 or 10 CFR Part 50, Appendix A, General Design Criteria 19, if a release had occurred. Using Manual Chapter 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," the finding is determined to have very low safety significance because it only represented a degradation of the radiological barrier function provided for the control room and no release or exposure occurred during the loss of the control room envelope. The cause of this finding was related to the human performance crosscutting component of work practices because licensee failed to adequately communicate human error prevention techniques such as self checking door closure when passing through [H.4(a)] (Section 4OA3).

Inspection Report# : [2009002](#) (pdf)

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Significance:  Dec 31, 2008

Identified By: Self-Revealing

Item Type: FIN Finding

Procedure Violation Causes Augmented Off-gas System Isolation

A self-revealing finding was identified regarding the licensee's failure to follow procedural requirements during system maintenance. Specifically, licensee personnel failed to heed a cautionary note in a maintenance procedure, resulting in an inadvertent isolation of the augmented off-gas system. The licensee entered this issue into their corrective action program as Condition Report CR CNS 2008 08405.

The finding is more than minor because it affected the plant equipment attribute of the public radiation safety cornerstone, and affected the cornerstone objective to ensure adequate protection of public health and safety from exposure to radioactive materials release into the public domain as a result of routine civilian nuclear reactor operation, in that the release rate through the elevated release point increased over five hundred percent as a result of the system isolation. Using Inspection Manual Chapter 0609, Appendix D, "Public Radiation Safety Significance Determination Process," the finding was determined to be of very low safety significance because it did not represent a failure to implement an effluent program or result in public dose greater than 10 CFR 50 Appendix I criterion. The cause of this finding is related to the human performance crosscutting component of work practices because licensee personnel failed to stop in the face of uncertainty when unexpected labeling was discovered [H.4(a)] (Section 40A5).

Inspection Report# : [2008005](#) (*pdf*)

Physical Protection

Although the NRC is actively overseeing the Security cornerstone, the Commission has decided that certain findings pertaining to security cornerstone will not be publicly available to ensure that potentially useful information is not provided to a possible adversary. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Last modified : August 31, 2009