

D.C. Cook 2

4Q/2005 Plant Inspection Findings

Initiating Events

Significance: G Nov 18, 2005

Identified By: Self-Revealing

Item Type: FIN Finding

Inadequate Preventive Maintenance on Main Generator Exciter Resulted in a Reactor Trip

The inspectors identified a finding of very low safety significance associated with a self-revealed event. The licensee failed to perform adequate preventive maintenance on the Unit 2 main generator exciter, which led to brush failures, loss of field excitation, and a reactor trip. No violation of regulatory requirements was identified. Immediate corrective actions to address this finding included the replacement of brushes and brush holders on the Unit 2 main generator exciter, repairs to the Unit 2 main generator exciter slip ring, and verification of proper brush installation on both the Unit 1 and Unit 2 main generators and main generator exciters.

This finding was of more than minor safety significance because it was associated with the Equipment Performance attribute of the Initiating Events cornerstone and adversely affected the cornerstone objective of limiting the likelihood of events that upset plant stability and challenge critical safety functions during power operations since inadequate preventive maintenance led to the main generator exciter brush failures that caused the reactor trip. Although the event contributed to the likelihood of a reactor trip, the finding is of very low significance because all mitigation systems were available. This finding affected the cross-cutting issue of human performance (resources).

Inspection Report# : [2005013\(pdf\)](#)

Mitigating Systems

Significance: G Nov 18, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform Adequate Post Maintenance Testing, Resulting in a TS 3.8.1 Violation

The inspectors identified a performance deficiency that resulted in a Non-Cited Violation of Technical Specification 3.8.1, with two examples. The licensee failed to perform adequate post maintenance testing after installing a design modification, which resulted in one of the two Unit 2 AB emergency diesel generator (EDG) output breakers (breaker T21B4 supply to bus T21B) failure to automatically close on demand. The Unit 2 AB EDG was rendered inoperable due to the T21B4 breaker malfunction and this resulted in two examples of exceeding Technical Specification allowed outage times. Immediate corrective actions to address this finding included replacing an incorrectly installed wire lug on a test switch connection and completing additional wiring inspections.

This finding was of more than a minor safety significance because it was associated with the Equipment Performance 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 to prevent undesirable consequences since the Unit 2 AB EDG was rendered inoperable, in particular breaker T21B4, for an extended period of time. Although this issue affected the capability of the EDG to provide power to bus T21B following a loss of offsite power event, the Regional Senior Reactor Analyst determined that this finding was of very low safety significance during a Phase 3 Significance Determination Process evaluation because the effect of the unavailability of bus T21B on overall plant risk was not significant.

Inspection Report# : [2005013\(pdf\)](#)

Significance: SL-IV Sep 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Introduction of Manual Action in Station Blackout Response Procedure

A finding of very low safety significance was identified by the inspectors associated with a non-cited violation of 10 CFR 50.59(d)(1). The issue involved an inadequate evaluation under 10 CFR 50.59 with respect to introduction of a new manual action in place of a previously automatic action. This issue was entered into the licensee's corrective action system and the licensee prepared a new evaluation in accordance with 10 CFR 50.59.

This finding was assigned a significance level of very low safety significance based on management review. The violation was categorized as Severity Level IV based on the underlying technical issue for the finding having screened out as having very low significance using the Phase 1 worksheet of Inspection Manual Chapter 0609, Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations." (Section 1R21.1.b)

Inspection Report# : [2005007\(pdf\)](#)

G

Significance: Sep 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Hydrometer Not Calibrated for Temperatures Seen During Surveillances

Green. A finding of very low safety significance was identified by the inspectors associated with a non-cited violation of 10 CFR Part 50, Appendix B, Criterion XII, "Measuring and Test Equipment." Specifically, the licensee did not calibrate a digital hydrometer over all the temperature ranges under which the hydrometer was used. This issue was entered into the licensee's corrective action system and the licensee was evaluating the necessary corrective actions.

This finding was more than minor because it could lead to a more serious situation. Specifically, continued reliance on a hydrometer that was not calibrated for the temperatures at which it was being used could reasonably lead to a situation where the actual specific gravity was below the technical specification limits without that being noticed. This finding was of very low safety significance because it screened out using the Phase 1 worksheet of Inspection Manual Chapter 0609, Appendix A.

Inspection Report# : [2005007\(pdf\)](#)

G

Significance: Sep 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Torquing Requirements in 250 Vdc Safety-Related Battery Procedures

Green. A finding of very low safety significance was identified by the inspectors associated with a non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings." Specifically, the licensee failed to ensure that adequate battery terminal connection torque values were specified in the AB, CD and N batteries maintenance and surveillance procedures. The licensee entered the issue into its corrective action system, confirmed that the N-train of safety-related batteries were correctly torqued, revised one procedure and was evaluating the additional corrective actions needed.

This finding was more than minor because the finding was associated with the attribute of equipment performance, which affected the mitigating systems cornerstone objective of ensuring the availability and reliability of the 250 VDC power system to respond to initiating events to prevent undesirable consequences. Specifically, inconsistent torquing requirements specified in maintenance and surveillance procedures used to perform maintenance activities on safety related batteries could potentially result in unacceptable battery terminal connections and render the safety-related battery incapable of performing its required safety function. This finding was of very low safety significance because it screened out using the Phase 1 worksheet of Inspection Manual Chapter 0609, Appendix A.

Inspection Report# : [2005007\(pdf\)](#)

G

Significance: Sep 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Single Cell Non-Class-1E Battery Charger Procedure Deficiencies

Green. A finding of very low safety significance was identified by the inspectors associated with a non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings." Specifically, the licensee failed to ensure that procedure 12-IHP-5021-EMP-009 contained adequate verification such that an independent observer could ensure that adequate electrical isolation had been maintained when a non-Class 1E single cell battery charger was used to charge a single battery cell on safety-related batteries. This issue was entered into the licensee's corrective action system and the licensee was evaluating other corrective actions.

This finding was more than minor in that the finding was associated with the attribute of equipment performance, which affected the mitigating system's cornerstone objective of ensuring the availability and reliability of the DC power system to respond to initiating events to prevent undesirable consequences. Specifically, failure to install a fuse could result in inadequate electrical isolation between the non-Class 1E single cell battery charger and safety-related battery. Without adequate isolation, a fault on the non-Class 1E charger could potentially render the safety-related battery incapable of performing its required safety function. This finding was of very low safety significance because it screened out using the Phase 1 worksheet of Inspection Manual Chapter 0609, Appendix A. (Section 1R21.3.b1)

Inspection Report# : [2005007\(pdf\)](#)

G

Significance: Sep 30, 2005

Identified By: NRC

Item Type: FIN Finding

Electrolytic Capacitors in Battery Chargers Not Energized Annually

Green. A finding of very low safety significance was identified by the inspectors which was not associated with a non-cited violation. Specifically, the licensee failed to ensure that each of the 250 VDC battery chargers was energized for a minimum of eight hours per year. The vendor required this minimum energization in order to ensure the electrolytic capacitors installed in the chargers would meet the qualified replacement life of 10 years. This issue was entered into the licensee's corrective action system and the licensee was evaluating other corrective

actions.

This finding was more than minor because it was associated with the attribute of equipment performance, which affected the mitigating system's cornerstone objective of ensuring the availability and reliability of the DC power system to respond to initiating events to prevent undesirable consequences. Specifically, the failure to energize the electrolytic capacitors for at least 8 hours annually could lead to the degradation of the capacitors with resultant degradation of the voltage going to the batteries. This finding was of very low safety significance because it screened out using the Phase 1 worksheet of Inspection Manual Chapter 0609, Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations."

Inspection Report# : [2005007\(pdf\)](#)

Significance: SL-III Aug 31, 2005

Identified By: NRC

Item Type: VIO Violation

Failure to Accurately Report Completion of Corrective Actions from a Previous Severity Level III Violation

The licensee provided incomplete and inaccurate information in a letter to the NRC dated August 2, 2004. Specifically, the licensee, in its response to an apparent violation, which was subsequently issued as a Severity Level III Notice of Violation issued on September 29, 2004, incorrectly stated that: "a 100 percent review (self-assessment) of all operator medical records was performed in February and March of 2004;" and that full compliance was achieved on April 8, 2004. During an April 2005 followup review of the licensee's corrective actions for the Severity Level III violation, the NRC identified three additional examples of licensed operators with a potentially disqualifying medical condition that existed prior to the licensee's February and March 2004 review of its medical records, that had not been reported to the NRC. The licensee made changes to their administrative procedures to ensure clarity in regard to medical reporting requirements and required an annual medical file review in addition to an annual discussion with their medical review official to ensure a mutual understanding of the appropriate regulatory requirements.

Because the issue affected the NRC's ability to perform its regulatory function, it was evaluated using the traditional enforcement process. The regulatory significance was important because the incorrect information was provided under a signed statement to the NRC and impacted an enforcement decision. The issue was preliminarily determined to be an apparent violation of 10 CFR 50.9.

Notice of Violation Issued November 23, 2005, ML0532902430.

The VIO was opened in NRC Inspection Report 05000315/316/2005012. Apparent violation AV 05000315/316/2005006-01 is updated to VIO 05000315/316/2005006-01 (Failure of the licensee to accurately report the completion of corrective actions from a previous SLIII violation in 2004.); AV 05000315/316/2005006-02, 04, and 06 are updated to VIO 05000315/316/2005006-02 (Failure to provide accurate and complete information about operators' health prior to the NRC performing a licensing action.); and AV 05000315/316/2005006-03, and 05 are updated to VIO 05000315/316/2005006-03 (Failure of the licensee to report the change in operator medical status.).

Inspection Report# : [2005012\(pdf\)](#)

Inspection Report# : [2005006\(pdf\)](#)

Inspection Report# : [2005014\(pdf\)](#)

Significance: SL-III Aug 31, 2005

Identified By: NRC

Item Type: VIO Violation

Failure to Provide Complete and Accurate Information about Operators' Health Status

The NRC identified that on May 5, 2004, a senior licensee representative submitted to the NRC a Form NRC - 396 to support an application for renewal of an SRO license, that was not complete and accurate in all material respects. The Form NRC - 396 certified that the applicant met the medical requirements of ANSI/ANS 3.4-1983 and that the applicant would not require any restrictions to the individual's license. In fact, the applicant had a potentially disqualifying medical condition dating back to October 30, 1998. [Note: The information concerning the individual's specific medical condition is considered medical privacy information under 10 CFR 2.390(2)(6) and is not specifically discussed here.] The medical condition was potentially disqualifying in accordance with ANSI/ANS 3.4, 1983, and required that the individual's license be amended to include an operating restriction. The information is material to the NRC because the NRC relies on this certification to determine whether the applicant meets the requirements to operate the controls of a nuclear power plant pursuant to 10 CFR Part 55. The licensee made changes to their administrative procedures to ensure clarity in regard to medical reporting requirements and required an annual medical file review in addition to an annual discussion with their medical review official to ensure a mutual understanding of the appropriate regulatory requirements.

Because the issue affected the NRC's ability to perform its regulatory function, it was evaluated using the traditional enforcement process. The regulatory significance was important because the incorrect information was provided under a signed statement to the NRC and impacted a licensing decision for the individual. The issue was preliminarily determined to be an apparent violation of 10 CFR 50.9.

Notice of Violation Issued November 23, 2005, ML 0532902430.

The VIO was opened in NRC Inspection Report 05000315/316/2005012. Apparent violation AV 05000315/316/2005006-01 is updated to VIO 05000315/316/2005006-01 (Failure of the licensee to accurately report the completion of corrective actions from a previous SLIII violation in 2004.); AV 05000315/316/2005006-02, 04, and 06 are updated to VIO 05000315/316/2005006-02 (Failure to provide accurate and complete information about operators' health prior to the NRC performing a licensing action.); and AV 05000315/316/2005006-03, and 05 are updated to VIO 05000315/316/2005006-03 (Failure of the licensee to report the change in operator medical status.).

Inspection Report# : [2005006\(pdf\)](#)

Inspection Report# : [2005012\(pdf\)](#)

Inspection Report# : [2005014\(pdf\)](#)

Significance: SL-III Aug 31, 2005

Identified By: NRC

Item Type: VIO Violation

Failure to Report a Change in Operator Medical Status

The NRC identified that from November 29, 1998, until May 18, 2005, the licensee did not report the change in medical status of an SRO that acquired a potentially disqualifying medical condition as required by 10 CFR 55.25. The medical condition was potentially disqualifying in accordance with ANSI/ANS 3.4, 1983, and required that the individual's license be amended when it was finally reported on May 18, 2005, to include an operating restriction. [Note: The information concerning the individual's specific medical condition is considered medical privacy information under 10 CFR 2.390(2)(6) and is not specifically discussed here.] The issue was more than minor because the NRC relies on this certification to determine whether the applicant meets the requirements to operate the controls of a nuclear power plant pursuant to 10 CFR Part 55. The licensee made changes to their administrative procedures to ensure clarity in regard to medical reporting requirements and required an annual medical file review in addition to an annual discussion with their medical review official to ensure a mutual understanding of the appropriate regulatory requirements.

Because the issue affected the NRC's ability to perform its regulatory function, it was evaluated with the traditional enforcement process. The regulatory significance was important because information was not provided that would have resulted in a licensing decision for the individual. The issue was preliminarily determined to be an apparent violation of 10 CFR 55.25.

Notice of Violation Issued November 23, 2005, ML0532902430.

The VIO was opened in NRC Inspection Report 05000315/316/2005012. Apparent violation AV 05000315/316/2005006-01 is updated to VIO 05000315/316/2005006-01 (Failure of the licensee to accurately report the completion of corrective actions from a previous SLIII violation in 2004.); AV 05000315/316/2005006-02, 04, and 06 are updated to VIO 05000315/316/2005006-02 (Failure to provide accurate and complete information about operators' health prior to the NRC performing a licensing action.); and AV 05000315/316/2005006-03, and 05 are updated to VIO 05000315/316/2005006-03 (Failure of the licensee to report the change in operator medical status.).

Inspection Report# : [2005012\(pdf\)](#)

Inspection Report# : [2005014\(pdf\)](#)

Inspection Report# : [2005006\(pdf\)](#)

Significance: SL-III Aug 31, 2005

Identified By: NRC

Item Type: AV Apparent Violation

Failure to Provide Complete and Accurate Information to the NRC Which Impacted A Licensing Decision

On April 26, 2004, a senior licensee representative submitted to the NRC a Form NRC - 396 to support an amendment request of a Senior Reactor Operator (SRO) license, that was not complete and accurate in all material respects. The Form NRC - 396 certified that the applicant met the medical requirements of ANSI/ANS 3.4-1983 and that the applicant would not require any restrictions to the individual's license. In fact, the applicant had a potentially disqualifying medical condition dating back to 2003. The medical condition was potentially disqualifying in accordance with ANSI/ANS 3.4-1983, and required that the individual's license be amended to include an operating restriction. [Note: The information concerning the individual's specific medical condition is considered medical privacy information under 10 CFR 2.390(2)(6) and is not specifically discussed here.] The issue was more than minor because the NRC relies on this certification to determine whether the applicant meets the requirements to operate the controls of a nuclear power plant pursuant to 10 CFR Part 55. The licensee made changes to their administrative procedures to ensure clarity in regard to medical reporting requirements and required an annual medical file review in addition to an annual discussion with their medical review official to ensure a mutual understanding of the appropriate regulatory requirements. Since NRC intervention was required to identify the requirement for the operator to have a license restriction, this issue was considered NRC-identified.

Because the issue affected the NRC's ability to perform its regulatory function, it was evaluated with the traditional enforcement process. The regulatory significance was important because the incorrect information was provided under a signed statement to the NRC and impacted a licensing decision for the individual. The issue was preliminarily determined to be an apparent violation of 10 CFR 50.9.

Apparent violation AV closed in NRC Inspection Report 05000315/316/2005012. Notice of Violation Issued November 23, 2005, ML0532902430.

Apparent violation AV 05000315/316/2005006-01 is updated to VIO 05000315/316/2005006-01 (Failure of the licensee to accurately report the completion of corrective actions from a previous SLIII violation in 2004.); AV 05000315/316/2005006-02, 04, and 06 are updated to VIO 05000315/316/2005006-02 (Failure to provide accurate and complete information about operators' health prior to the NRC performing a licensing action.); and AV 05000315/316/2005006-03, and 05 are updated to VIO 05000315/316/2005006-03 (Failure of the licensee to report the change in operator medical status.).

Inspection Report# : [2005014\(pdf\)](#)

Inspection Report# : [2005006\(pdf\)](#)

Inspection Report# : [2005012\(pdf\)](#)

Significance: SL-III Aug 31, 2005

Identified By: NRC

Item Type: AV Apparent Violation

Failure to Report A Change In A License Operators Medical Condition

The NRC identified that from January 6, 2003, until May 18, 2005, the licensee did not report the change in medical status of an SRO that acquired a potentially disqualifying medical condition as required by 10 CFR 55.25. The medical condition was potentially disqualifying in accordance with ANSI/ANS 3.4, 1983, and required that the individual's license be amended when it was finally reported on May 18, 2005, to include an operating restriction. [Note: The information concerning the individual's specific medical condition is considered medical privacy information under 10 CFR 2.390(2)(6) and is not specifically discussed here.] The issue was more than minor because the NRC relies on this certification to determine whether the applicant meets the requirements to operate the controls of a nuclear power plant pursuant to 10 CFR Part 55. The apparent violation was determined to be of significant regulatory concern because a licensing action was not taken because information was not provided by the licensee. Since NRC intervention was required to identify the requirement for the operator to have a license restriction, this issue was considered NRC identified.

Because the issue affected the NRC's ability to perform its regulatory function, it was evaluated with the traditional enforcement process. The regulatory significance was important because information was not provided that would have affected a licensing decision for the individual. The issue was preliminarily determined to be an apparent violation of 10 CFR 55.25.

Apparent violation AV closed in NRC Inspection Report 05000315/316/2005012. Notice of Violation Issued November 23, 2005, ML0532902430.

Apparent violation AV 05000315/316/2005006-01 is updated to VIO 05000315/316/2005006-01 (Failure of the licensee to accurately report the completion of corrective actions from a previous SLIII violation in 2004.); AV 05000315/316/2005006-02, 04, and 06 are updated to VIO 05000315/316/2005006-02 (Failure to provide accurate and complete information about operators' health prior to the NRC performing a licensing action.); and AV 05000315/316/2005006-03, and 05 are updated to VIO 05000315/316/2005006-03 (Failure of the licensee to report the change in operator medical status.).

Inspection Report# : [2005012\(pdf\)](#)

Inspection Report# : [2005006\(pdf\)](#)

Inspection Report# : [2005014\(pdf\)](#)

Significance: SL-III Aug 31, 2005

Identified By: NRC

Item Type: AV Apparent Violation

Failure to Provide Complete and Accurate Information to the NRC Which Impacted A Licensing Decision

On November 4, 2002, a senior licensee representative submitted to the NRC a Form NRC - 396 to support an application for an SRO license, that was not complete and accurate in all material respects. The Form NRC - 396 certified that the applicant met the medical requirements of ANSI/ANS 3.4-1983 and that the applicant would not require any restrictions to the individual's license. In fact, the applicant had a potentially disqualifying medical condition in accordance with ANSI/ANS 3.4-1983. The medical condition required that the individual's license be amended to include an operating restriction. [Note: The information concerning the individual's specific medical condition is considered medical privacy information under 10 CFR 2.390(2)(6) and is not specifically discussed here.] The issue is more than minor because the NRC relies on this certification to determine whether the applicant meets the requirements to operate the controls of a nuclear power plant pursuant to 10 CFR Part 55. The licensee made changes to their administrative procedures to ensure clarity in regard to medical reporting requirements and required an annual medical file review in addition to an annual discussion with their medical review official to ensure a mutual understanding of the appropriate regulatory requirements. Since NRC intervention was required to identify the requirement for the operator to have a license restriction prior to his initial license being issued, this issue was considered NRC-identified.

Because the issue affected the NRC's ability to perform its regulatory function, it was evaluated with the traditional enforcement process. The regulatory significance was important because the incorrect information was provided under a signed statement to the NRC and impacted a licensing decision for the individual. The issue was preliminarily determined to be an apparent violation of 10 CFR 50.9.

Apparent violation AV closed in NRC Inspection Report 05000315/316/2005012. Notice of Violation Issued November 23 2005, ML0532902430.

Apparent violation AV 05000315/316/2005006-01 is updated to VIO 05000315/316/2005006-01 (Failure of the licensee to accurately report the completion of corrective actions from a previous SLIII violation in 2004.); AV 05000315/316/2005006-02, 04, and 06 are updated to VIO 05000315/316/2005006-02 (Failure to provide accurate and complete information about operators' health prior to the NRC performing a licensing action.); and AV 05000315/316/2005006-03, and 05 are updated to VIO 05000315/316/2005006-03 (Failure of the licensee to report the change in operator medical status.).

Inspection Report# : [2005012\(pdf\)](#)

Inspection Report# : [2005014\(pdf\)](#)

Inspection Report# : [2005006\(pdf\)](#)

Significance:  Jun 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Take Prompt Corrective Actions for Conditions Adverse to Quality

The inspectors identified two examples of a finding of very low safety significance and a Non-Cited Violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," associated with the review of operating experience information. Licensee personnel failed to take prompt

and effective corrective actions to address asbestos-filled spiral wound gaskets subject to limited shelf life, which resulted in a steam leak from the Unit 2 pressurizer manway cover. The licensee also failed to take prompt and effective corrective actions to address tempered 414 stainless steel centrifugal charging pump shafts susceptible to high cycle fatigue cracking, which resulted in the failure of the Unit 1 west charging pump. The licensee subsequently replaced the failed components. The inspectors considered each of the two examples separately when completing the SDP review since each example occurred apart in time and neither one influenced the other.

The failure of the Unit 2 pressurizer manway gasket was associated with the equipment performance attribute of the Initiating Events cornerstone and adversely affected the cornerstone objective of limiting the likelihood of those events that upset plant stability and challenge critical safety functions during power operation. Specifically, the manway gasket failure resulted in reactor coolant system (RCS) leakage that necessitated the reactor be shut down for repair. The inspectors determined that this example was of very low safety significance during a Phase 1 SDP evaluation because it would not likely result in exceeding the Technical Specification limit for identified RCS leakage and would not likely affect other mitigation systems, resulting in a total loss of their safety function. As part of the licensee's immediate corrective actions, the gasket was replaced.

The Unit 1 charging pump failure was associated with the equipment performance attribute of the Mitigating Systems cornerstone and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors performed a Phase 1 SDP review of this finding. The inspectors determined that the additional outage time for the Unit 1 west charging pump was a degradation of the Mitigating System Cornerstone; however, this finding 1) was not a design deficiency or qualification deficiency confirmed to result in a loss of function per Generic Letter 91-18; 2) did not represent an actual loss of safety function of a system; 3) did not represent an actual loss of safety function of a single train for greater than its Technical Specification allowed outage time; 4) did not represent an actual loss of safety function of one or more non-Technical Specification trains of equipment designated as risk significant; and 5) did not screen as potentially risk significant due to seismic, flooding, or a severe weather initiating event. Therefore, the finding was considered to be of very low safety significance. As part of the licensee's immediate corrective actions, the charging pump was replaced.

Inspection Report# : [2005004\(pdf\)](#)

G

Significance: Mar 31, 2005

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Inadequate Test Procedure for Testing the Unit 2 West Centrifugal Charging Pump Discharge Check Valve

The inspectors identified a Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," associated with a self-revealed event. The licensee failed to perform testing of the Unit 2 West centrifugal charging pump discharge check valve with a procedure that was appropriate to the circumstances. This resulted in operators over-pressurizing the low pressure side of the charging pump and a portion of the pump's suction piping up to and including the isolation valve. The licensee replaced the entire pump and the suction piping up to and including the suction valve and implemented appropriate changes to the test procedure to prevent a recurrence. This finding affected the cross-cutting issue of human performance (personnel).

The inspectors determined that this finding was more than a minor safety concern because it was associated with the Procedure Quality 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 to prevent undesirable consequences since the West charging pump was rendered unavailable for an extended period of time to correct the problem. Although this issue affected the availability of the West charging pump, the inspectors concluded that because the East charging pump remained operable and because additional sufficient mitigating capability existed, this issue was of very low safety significance.

Inspection Report# : [2005002\(pdf\)](#)

Barrier Integrity

G

Significance: Mar 31, 2005

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Unit 2 Containment Ventilation Isolation Function Rendered Inoperable During Core Alterations

The inspectors identified a Non-Cited Violation of Technical Specifications (TS) 3.0.4, 3.9.4.c, and 3.9.9 associated with a self-revealed event. The licensee failed to maintain both trains of the Unit 2 containment purge and exhaust isolation valves' automatic isolation function operable during core alterations and commenced core alterations without meeting the applicable TS Limiting Conditions for Operation associated with the automatic isolation function. The licensee restored both trains of the automatic isolation function to an operable status upon discovery and implemented appropriate process controls to prevent a recurrence. This finding affected the cross-cutting issue of human performance (personnel/organization).

The inspectors determined that this issue could become a more significant safety concern if left uncorrected and was therefore more than a minor concern. Specifically, the failure to correctly implement the above TS requirements could reasonably result in a release of radioactivity in the event of a fuel handling accident in the Containment Building prior to identification of the inoperability of the automatic isolation

function and manual closure of the valves. Although this issue affected the integrity of the reactor containment during core alterations, the inspectors concluded that because the Unit 2 containment purge and exhaust isolation valves could have been manually closed by operators in the Control Room and because the Containment Building radiation monitors and high radiation alarm function remained operable during this time, this issue was of very low safety significance.

Inspection Report# : [2005002\(pdf\)](#)

G

Significance: Mar 31, 2005

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Unit 2 Containment Integrity and Automatic Isolation Function for Non-Essential Service Water Supply and Return Lines to Containment Instrument Room East Ventilation Until Rendered Inoperable

The inspectors identified a Non-Cited Violation of TS 3.0.4, 3.6.1.1, 3.6.1.2, and 3.6.3.1 associated with a self-revealed event. The licensee failed to maintain drain valves between redundant containment isolation valves in the non-essential service water supply and return lines for the Unit 2 containment instrument room east ventilation unit closed as required to meet containment integrity, containment leakage, and containment isolation valve requirements. In addition, the licensee changed operational modes without meeting the applicable TS Limiting Conditions for Operation associated with TS 3.6.1.1 and 3.6.3.1. The licensee restored compliance with the above requirements by closing the inboard containment isolation valves and affected drain valves upon discovery and implemented corrective actions to prevent a recurrence, which included procedure changes to assure continuity of configuration control. This finding affected the cross-cutting issue of human performance (personnel/organization).

The inspectors determined that this issue could become a more significant safety concern if left uncorrected and was therefore more than a minor concern. Specifically, the failure to correctly implement the above TS requirements could reasonably result in a release of radioactivity to the environment in the event of an accident in the Containment Building. Although this issue affected the integrity of the reactor containment, the inspectors concluded that the issue was of very low safety significance because the very small diameter holes in the ventilation unit cooling coils and the small diameter drain lines would be a very small leakage path and would not have a significant impact on the Large Early Release Frequency.

Inspection Report# : [2005002\(pdf\)](#)

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

[Physical Protection](#) information not publicly available.

Miscellaneous

Last modified : March 03, 2006