# D.C. Cook 1 4Q/2005 Plant Inspection Findings

# **Initiating Events**

# **Mitigating Systems**

Significance: Sep 30, 2005 Identified By: Self-Revealing

Item Type: NCV NonCited Violation

#### Emergency Diesel Generator 1CD Rendered Unavailable for 43 Hours Longer Than Planned

A self-revealing NCV was identified on July 6, 2005, while preparing for a post maintenance test. Foreign material, a 33-foot steel-tape dipstick, was unexpectedly drawn into the 1CD emergency diesel generator before/after lube oil pump while operators were measuring the lube oil sump level. The primary cause of this finding was related to the cross-cutting area of human performance (resources) because the procedure that was used was not complete. A NCV of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was associated with this finding. Corrective actions included retrieving the foreign material, revising emergency diesel generator operating procedures to eliminate the option of using a steel-tape dipstick to measure the lube oil sump level, and increased training for operators regarding foreign material hazards.

This finding was more than minor because it was related to the procedure adequacy attribute of the mitigating systems cornerstone, and adversely affected the cornerstone objective to ensure the availability of systems that will respond to initiating events to prevent undesirable consequences. However, because the finding (1) was not a design or qualification deficiency that had been confirmed to result in a loss of function per Generic Letter 91-18; (2) did not represent an actual loss of a safety function; and (3) did not screen as potentially risk significant due to a seismic, flooding, or severe weather event, the finding was of very low safety significance.

Inspection Report# : 2005005(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# : <u>2005007</u>(*pdf*)

Significance: G

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)



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)



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)

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# : 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 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# : 2005012(pdf)
Inspection Report# : 2005014(pdf)
Inspection Report# : 2005006(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# : 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 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# : 2005006(pdf)
Inspection Report# : 2005012(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# : 2005006(pdf)
Inspection Report# : 2005014(pdf)
Inspection Report# : 2005012(pdf)

Significance: Jun 30, 2005 Identified By: Self-Revealing Item Type: NCV NonCited Violation

### Inadequate Maintenance Procedure Led to Extended Time to Complete Unit 1 West Charging Pump Repair

The inspectors identified a finding of very low safety significance and an associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," when licensee personnel failed to perform maintenance on the Unit 1 west centrifugal charging pump with a procedure that was appropriate to the circumstances. The cumulative effect of several delays, including a need to disassemble and reassemble the outboard bearing mechanical seal due to improper installation and the lack of an appropriate fit check, resulted in the unavailability of the pump beyond the originally planned 58-hour maintenance window. The licensee was granted an emergency license amendment to extend the Technical Specification 72-hour allowed outage time to preclude a plant shutdown. The licensee implemented appropriate changes to the maintenance procedure to prevent recurrence. This finding affected the cross-cutting area of human performance.

The inspectors determined that this finding was more than minor 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 Unit 1 west charging pump was rendered unavailable for an extended period of time. The inspectors performed a Phase 1 SDP review of this finding using the guidance provided in IMC 0609, Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations." 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 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 screened as Green and was considered to be of only very low safety significance.

Inspection Report#: 2005004(pdf)



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 licensees 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 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)

# **Barrier Integrity**

Significance: 6

Jun 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Use a Code Qualified Weld Procedure for a Weld Overlay Repair Completed on a Pressurizer Nozzle-to-Safe End Weld The inspectors identified a finding of very low safety significance and an associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion IX, "Control of Special Processes," when licensee personnel failed to use a Code qualified weld procedure for a weld overlay repair completed on a pressurizer nozzle-to-safe end weld. Specifically, the licensee staff failed to perform Charpy V-notch impact tests to support weld procedure qualification and failed to incorporate a supplemental essential welding variable into the weld procedure as required by the American Society of Mechanical Engineers (ASME) Code.

This finding was more than minor because if left uncorrected, the issue could have become a more significant safety concern since unqualified weld process could have reduced the impact toughness of the pressurizer weldment such that it would be susceptible to brittle fracture. The finding was of low safety significance because subsequent Charpy V-notch impact tests that were conducted as part of the licensee's immediate corrective actions, demonstrated adequate impact toughness.

Inspection Report# : 2005004(pdf)

## **Emergency Preparedness**

# **Occupational Radiation Safety**

Significance: Sep 30, 2005 Identified By: Self-Revealing Item Type: NCV NonCited Violation

### Failure to Obtain a Pre-Job Briefing Prior to Entry Into a High Radiation Area

A self-revealing NCV was identified for the failure to follow plant procedures for ensuring workers are adequately briefed on radiological conditions and are equipped with required dosimetry, prior to entering a high radiation area. As a result of this failure, two workers entered a high radiation area without knowledge of the radiological conditions. The electronic dosimetry worn by one of the workers alarmed when elevated dose rates were encountered. A NCV of Technical Specification 6.8.1 was identified for the failure to comply with the radiation protection procedure that governs the control of access into high radiation areas. Corrective actions taken by the licensee included performance management (coaching) of the involved personnel. The licensee was also considering enhanced administrative measures to ensure workers understand high radiation area access controls and additional physical controls to reduce the potential for future unauthorized high radiation area entries.

The issue was more than minor because it was associated with the Program/Process attribute of the Occupational Radiation Safety Cornerstone and affected the cornerstone objective to ensure adequate protection of worker health and safety from exposure to radiation. The issue represents a finding of very low safety significance because it did not involve ALARA planning or work controls, there was no overexposure or substantial potential for an overexposure given the radiological conditions in the area, nor was the licensee's ability to assess worker dose compromised.

Inspection Report# : 2005005(pdf)

Significance: Jun 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

#### Physical Barrier for a Locked High Radiation Area Was Not Adequate to Prevent Unauthorized Entry

The inspectors identified a finding of very low safety significance and an associated Non-Cited Violation of Technical Specification 6.12.2 when licensee personnel failed to provide an adequate physical barrier to prevent unauthorized entry into a locked high radiation area. The barrier for a locked high radiation area did not extend fully across an accessible area and allowed passage by an individual around the barrier.

The issue was more than minor because it was associated with the plant facilities/equipment attribute of the Occupational Radiation Safety cornerstone and affected the cornerstone objective of ensuring adequate protection of worker health and safety from exposure to radiation. The issue represented a finding of very low safety significance because it did not involve As Low As Is Reasonably Achievable (ALARA) Planning or work controls, and there was no overexposure or substantial potential for an overexposure, nor was the licensee's ability to assess worker dose compromised. Corrective actions included the installation of a flashing light and temporary physical barrier pending plans to construct a permanent extension to the barrier. Since the issue was initially licensee-identified, but was not characterized correctly, the licensee's initial corrective actions were not adequate. Consequently, the finding was also related to the cross-cutting area of problem identification and resolution.

Inspection Report# : 2005004(pdf)

### **Public Radiation Safety**

Significance: Sep 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Develop an Adequate Procedure to Ensure Proper ODCM Implementation During Venting of a Volume Control Tank
The inspectors identified a NCV for the failure to establish adequate written procedure(s) for Offsite Dose Calculation Manual (ODCM)
implementation to ensure that the radiological impact from venting the Volume Control Tank (VCT) to the environment was properly assessed
prior to the release, and that the release was properly quantified and reported. A NCV of Technical Specification 6.8.1 was identified for the
failure to establish adequate procedures for implementation of the ODCM for venting the VCT to the atmosphere. Corrective actions planned
by the licensee include the derivation of an offsite dose based bounding condition for determining that the reactor coolant system has been
adequately degassed, along with procedural enhancements and instructions. Since a similar VCT venting issue was identified by the licensee in
2003 but not fully evaluated to allow all aspects of the issue to be corrected, the finding also relates to the cross-cutting area of problem
identification and resolution (corrective actions).

The issue was more than minor because it was associated with the Program/Process attribute of the Public Radiation Safety Cornerstone and potentially affected the cornerstone objective to ensure adequate protection of the public from exposure to radioactive materials from the release of gaseous effluents. The issue represents a finding of very low safety significance because a dose assessment performed by the licensee subsequent to the VCT venting determined that 10 CFR 50, Appendix I guidelines and ODCM limits were met and therefore there was minimal actual risk to the public.

Inspection Report#: 2005005(pdf)

# **Physical Protection**

Physical Protection information not publicly available.

# Miscellaneous

Last modified: March 03, 2006