# D.C. Cook 1 2Q/2013 Plant Inspection Findings

# **Initiating Events**

Significance: **G** Jun 30, 2013 Identified By: NRC Item Type: NCV NonCited Violation Failure to Identify Through Wall Leak

The inspectors identified a finding of very low safety significance with an associated non cited violation of Technical Specification (TS) 5.4.1 for failure to implement procedures listed in Regulatory Guide 1.33. Specifically, the licensee's boric acid control program requires boric acid leakage conditions be identified and documented. However, licensee personnel failed to identify a boric acid deposit indicative of a through wall leak on the reactor coolant system (RCS) 'B' loop flow indicator instrument line, which was identified by the inspectors. Corrective actions included replacing the section of pipe with the leak and entering the condition into the corrective action program (CAP).

The inspectors determined that the failure to identify the boric acid leakage as required by licensee procedures was a performance deficiency that warranted a significance determination. The performance deficiency adversely impacted the initiating events cornerstone objective of limiting the likelihood of events that upset plant stability in that the through wall leak impacted the equipment performance attribute of barrier integrity. Specifically, the through wall leak could further deteriorate and result in higher leakage. The inspectors determined the finding was not of more than very low safety significance (Green) using Exhibit 1 of IMC 0609, Appendix A, because the finding could not reasonably result in exceeding the RCS leak rate for a small break loss of coolant accident (LOCA); and could not have likely affected other systems used to mitigate a loss of coolant. The finding includes a cross cutting aspect of planning of work activities (H.3(a)) in the area of human performance. Specifically, the planning did not account for job site conditions, including systems, structures and components that may impact the ability to identify boric acid residue.

Inspection Report# : 2013003 (pdf)

Significance: Mar 31, 2013

Identified By: Self-Revealing Item Type: NCV NonCited Violation

**Failure to Establish Feed Pump Control Bands** 

One self revealing finding of very low safety significance (Green) with an associated NCV of Technical Specification (TS) 5.4.1 occurred because of a failure to implement plant procedure OHI-4000, Conduct of Operations (COOP). While responding to oscillating levels in steam generator (SG) #4 following a signal position controller failure and resultant power transient, control room operators failed to follow conduct of operations procedure requirements for establishing a control band for controllers placed in manual. This failure contributed to SG levels becoming unstable and rising to within 1 percent of the level for an automatic turbine trip and resultant reactor trip. The licensee stabilized the plant and restored controllers to automatic. Corrective actions included a debrief of personnel in the control room and a lessons learned to all operations personnel. The licensee entered the issue into the corrective action program.

The inspectors determined that the failure to implement the COOP procedure during at power operation was a licensee

performance deficiency that warranted an evaluation in accordance with the Significance Determination Process (SDP). The inspectors concluded that performance deficiency was more than minor because it was associated with the Initiating Event cornerstone attribute of human performance and adversely impacted the cornerstone objective of limiting the likelihood of events that upset plant stability. Since the performance deficiency did not result in a reactor trip, the inspectors concluded that the finding was of very low safety significance. The finding includes the H.4(c) cross cutting aspect in the work practices component of the human performance area because supervisory personnel in the control room did not provide effective oversight to support nuclear safety. Specifically, supervisory command and control was not effective while responding to a SG level transient that approached the turbine trip setpoint.

Inspection Report# : 2013002 (pdf)



Identified By: NRC Item Type: NCV NonCited Violation

Failure to Perform an Evaluation on Essential Service Water Piping

: The inspectors identified a finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings," for the failure to perform an evaluation required to meet 10 CFR Part 50, Appendix B, Criterion XI, on essential service water piping. Specifically, the inspectors identified the licensee failed to perform a required evaluation on a segment of essential service water piping when the results of the pipe wall thickness measurements demonstrated they were below the established minimum wall thickness acceptance criteria. The licensee entered the issue into their corrective action program and based on an engineering evaluation determined the condition did not represent an operability concern and the structural integrity of the piping system was not compromised.

The performance deficiency was determined to be more than minor because if left uncorrected it had the potential to lead to a more significant safety concern. Specifically, by not performing the required evaluation there was a potential to return a system to service that could exceed the design limits prior to the next inspection. The issue impacted the initiating events cornerstone because the degraded wall thickness could lead to a loss of service water and/or internal flooding initiating event; and the issue adversely affected the attribute of equipment reliability. The finding was screened as very low safety significance (Green) because a subsequent evaluation demonstrated that this issue did not result in the complete or partial loss of operability of the essential service water system. The inspectors determined the finding had a cross cutting aspect in the area of human performance because the licensee did not follow their procedure which required them to generate an action request and perform an evaluation when acceptance criteria were not met.

Inspection Report# : 2012005 (pdf)

# **Mitigating Systems**

Significance: G Jun 30, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Implement the Scaffold Guidelines Procedure

The inspectors identified a non-citied violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings," because the licensee failed to properly install seismically qualified scaffolds adjacent to safety related equipment as required by site procedures. Specifically, the licensee's Scaffolding Guidelines procedure requires that

scaffold builds not be erected in contact with plant equipment. Contrary to this requirement, the inspectors identified several instances where erected scaffolds were in contact with safety related equipment. For corrective actions, the licensee completed a walk down of all erected scaffolds installed on site, briefed scaffold crews on equipment clearance requirements, are revising the Scaffolding Guidelines procedure to include increased supervisory oversight and separation gap requirements, and entered the condition into the Corrective Action Program (CAP).

The inspectors determined that failure to properly implement the scaffolding procedure was a licensee performance deficiency that warranted a significance determination. The performance deficiency adversely impacted the Mitigating Systems cornerstone and its objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The issue affected the protection against external factors attribute for this cornerstone. Specifically, several scaffolds were erected in contact with safety related equipment which could challenge the availability, reliability and capability of safety related systems affected during a seismic event. The inspectors determined the finding was not of more than very low safety significance (Green) using Exhibit 2 of IMC 0609, Appendix A, because the finding did not involve the loss or degradation of equipment or function specifically designed to mitigate a seismic event. The inspectors concluded that this finding was associated with a cross cutting aspect in the work practice component of the human performance cross cutting area. Specifically, contractor oversight and operations supervision did not provide effective oversight to prevent scaffold contact with safety related equipment .

Inspection Report# : 2013003 (pdf)



Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Maintain Emergency Operating Procedures for Mitigating the Consequences of a SGTR per TS Section 5.4.1, "Procedures"

The inspectors identified a finding of very low safety significance, with two associated NCVs of Technical Specification (TS), Section 5.4.1, "Procedures," and TS 3.7.4, "Steam Generator (SG) Power Operated Relief Valves (PORVs)," for the failure to implement design measures which were consistent with the licensing bases for a Steam Generator Tube Rupture (SGTR) concurrent with a Loss of Offsite Power (LOOP) to the station. Specifically, the licensee's emergency operating procedures (EOPs) 1(2) OHP-4023-E-3, "Steam Generator Tube Rupture," failed to provide adequate actions to mitigate the consequences of a SGTR, coincident with a LOOP, in sufficient time to prevent overfilling the ruptured steam generator. Additionally, the licensee failed to declare the affected unit's SG PORVs inoperable and complete the required actions when the non-safety-related control air compressor (CAC) was made unavailable and incapable of providing its required support function. With the unit's CAC unavailable, the SG PORVs would not be capable of being remotely operated from the control room during a SGTR concurrent with the LOOP. The licensee entered this issue into their corrective action program and completed modifications to establish Nitrogen as another motive force to support SG PORV operability. Inspection Report# : 2013010 (*pdf*)

Significance: May 31, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Enter the Limiting Condition for Operations and Perform Required Actions per TS 3.7.4, "SG PORVs."

This performance deficiency was more than minor 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. The finding was evaluated using the SDP in accordance with IMC 0609, Appendix A, "The Significance Determination Process for

Findings at Power." Based on the Detailed Risk Evaluation required, the inspectors determined the finding was of very low safety significance (Green) because the resulting change in the Core Damage Frequency (CDF) was equal to 2.4E-8/yr. The inspectors determined the cause of this finding involved the crosscutting area of human performance, the component of decision making, and the aspect of conservative assumptions, H.1(b) in that the licensee did not adopt a requirement to demonstrate that the proposed action is safe in order to proceed rather than a requirement that it is unsafe in order to disapprove the action. Specifically, the licensee incorrectly assumed the unaffected unit's plant air system (not backed by the emergency diesel generators) would be available during the SGTR scenario to supply motive power to the affected unit's SG PORVs. This assumption failed to take into account the licensing basis requirement of considering a SGTR and a loss of offsite power to the station (both units).

Inspection Report# : 2013010 (pdf)



Identified By: NRC Item Type: FIN Finding

**Operability Evaluation Relied on Alternate Methods Not Demonstrated to be Technically Appropriate** The inspectors identified a finding of very low safety significance for the failure to follow operability evaluation procedural guidance. Specifically, an evaluation was conducted for past operability of the residual heat removal and containment spray systems due to the discovery of a void in the containment recirculation sump suction piping. However, the evaluation relied on computer software that has not been benchmarked to demonstrate its applicability to the type of analyses being conducted. This finding was entered into the licensee's Corrective Action Program (CAP) to revise the affected evaluation of past operability. Reanalysis using other appropriate methods determined the piping was operable.

The performance deficiency was more than minor because it was associated with the Mitigating System Cornerstone attribute of equipment performance and adversely affected the cornerstone objective of ensuring the capability of systems that respond to initiating events to prevent undesirable consequences. In addition, the performance deficiency was more than minor because it was associated with the Barrier Integrity cornerstone attribute of structure, system, component, and barrier performance and adversely affected the cornerstone objective of providing reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. The finding screened as of very low safety significance (Green) because it was a design deficiency confirmed not to result in loss of operability. Specifically, the licensee performed an alternate operability determination which reasonably concluded the residual heat removal system was operable. In addition, it did not represent an actual open pathway in the physical integrity of reactor containment or involve an actual reduction in function of hydrogen igniters in the reactor containment. This finding did not involve enforcement action because no violation of regulatory requirements was identified. The inspectors did not identify a cross cutting aspect associated with this finding because it was not confirmed to reflect current performance. Inspection Report# : 2013002 (pdf)

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Significance: G Dec 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

#### Non-conservative Condensate Storage Tank (CST) Cross-Tie NPSH Calculation

The inspectors identified a finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the failure to ensure sufficient water volume in the condensate storage tank when both units' auxiliary feedwater (AFW) pumps are aligned to a single condensate storage tank (CST.) Specifically, the licensee failed to perform a calculation to demonstrate sufficient volume and level to prevent net positive suction head and vortex issues when a single CST is providing water to all six AFW pumps as allowed by procedures. The licensee's corrective action included performing a formal calculation and increasing the available

water volume in the CST when both units' AFW pumps are cross-tied.

The performance deficiency was determined to be more than minor because it was associated with the Mitigating System Cornerstone attribute of equipment performance 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 finding screened as of very low safety significance (Green) because it was a design deficiency confirmed not to result in loss of operability. Specifically, the licensee performed an operability determination which concluded the actual useable tank level during the previous 12 months had been sufficient. The inspectors determined the cause of this finding did not represent current licensee performance and, thus, no cross-cutting aspect was assigned.

Inspection Report# : 2012007 (pdf)



Significance: Dec 31, 2012 Identified By: Self-Revealing Item Type: NCV NonCited Violation

#### Failure to Maintain High Energy Line Break and Fire Barriers

A self-revealed finding of very low safety significance (Green) and associated NCV occurred based on two violations of 10 CFR 50 Appendix B, Criterion V in the fourth quarter of 2012. The violations occurred due to failure of licensee personnel to secure High Energy Line Break (HELB)/Fire barrier doors following use of the door as required by procedure. These examples resulted in inoperability of Auxiliary Feedwater (AFW) pumps during the two periods when the doors were no longer in use for personnel transit. Upon discovery, the licensee restored the doors to an operable condition. The licensee entered the issues into the corrective action program (CAP).

The performance deficiency was determined to be more than minor because it is associated with the mitigating system cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences; and the issue adversely affected the attribute of equipment reliability. The inspectors determined that the finding was of very low safety significance because inoperability of the safety related auxiliary AFW system was less than allowed outage times in technical specifications. However, due to the multiple mitigative functions performed by the doors, the inspectors requested a review by the regional senior risk analyst (SRA). The doors protect the mitigating AFW systems from fire and high energy line breaks. The SRA concurred with the inspectors that the finding was of very low safety significance (Green) based on a bounding Probabilistic Risk Analysis using the Standardized Plant Analysis Risk (SPAR) model. The inspectors determined the finding had a cross cutting aspect in the area of human performance because the licensee did not use human error prevention techniques.

Inspection Report# : 2012005 (pdf)



Item Type: NCV NonCited Violation

#### Failure to Properly Preplan and Perform Maintenance on Safety-related Equipment

The inspectors identified a finding of very low safety significance with an associated NCV of Technical Specification (TS) 5.4.1 for the failure to implement procedures to perform preventative maintenance in vaults containing safety related cabling subject to water intrusion. Specifically, licensee personnel failed to ensure the cables were not wetted as required by PMI 5053, "Cable Management Program." Cables were on the ground in the vaults exposing the cables to periodic wetting, which will degrade the cable insulation. On August 27, 2012, the inspectors noted that cables in one vault were on the ground and the vault showed evidence of periodic wetting of the cables. For corrective action, the licensee is performing an apparent cause evaluation; inspecting all cable vaults that have had safety related cabling elevated since February 2010; and raising and re securing cabling in vaults subject to water intrusion. This issue was entered into the licensee's corrective action program as AR 2012 10680.

This finding affected the Mitigating Events Cornerstone and was more than minor because the issue could become a more significant safety concern if left uncorrected. Specifically, failure to properly perform preventative maintenance in vaults containing safety related cables subjected to water intrusion resulted in periodic wetting of cables. Wetting of cables has led to degradation of cable insulation at nuclear facilities. The inspectors used IMC 0609, "Significance Determination Process," Attachment 4, "Initial Characterization of Findings," which directed the inspectors to Exhibit 2, "Mitigating Systems Screening Questions," of Appendix A, to determine significance. This finding was of very low safety significance (Green) because the finding constituted a design or qualification deficiency but did not result in a loss of system safety function. This finding is associated with a cross cutting aspect in the work control component of the human performance cross cutting area. Specifically, engineering did not appropriately plan for maintenance personnel to assist with lifting the floor grating to ensure visual inspections were adequately performed. Inspection Report# : 2012004 (pdf)



Identified By: NRC Item Type: NCV NonCited Violation

**Vortexing was not evaluated for the volume control, containment spray additive, refueling water storage tanks.** The inspectors identified a finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the failure to evaluate vortexing in the volume control, containment spray additive, and refueling water storage tanks. Consequently, the minimum allowable submergence for the suction piping of these tanks did not consider the potential for air entrainment due to vortices. This finding was entered into the licensee's corrective action program to evaluate the potential for vortexing at these tanks and revise the affected calculations.

The performance deficiency was determined to be more than minor because it was associated with the Mitigating System cornerstone attribute of equipment performance and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. In addition, the finding was associated with the Containment Barrier cornerstone attribute of structure, system, component, and barrier performance and affected the cornerstone objective of providing reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. The finding screened as of very low safety significance (Green) because: (1) the finding examples associated with the volume control and refueling water storage tanks were deficiencies confirmed not to result in loss of operability in that the licensee performed an evaluation that reasonably concluded the current limit setpoints prevent vortexing in these tanks; and (2) the finding example associated with the containment spray (CTA) additive tank was a design deficiency of the physical integrity of the reactor containment that did not affect the barrier function of the control room against smoke or a toxic atmosphere, represent an actual open pathway in the physical integrity of reactor containment, or involve an actual reduction in function of hydrogen ignitiers in the reactor containment. This finding did not have an associated cross-cutting aspect because it was not confirmed to reflect current performance due to the age of the performance deficiency.

Inspection Report# : 2012008 (pdf)



Identified By: NRC Item Type: NCV NonCited Violation

Incomplete methodology for developing acceptance criteria for suction voids

The inspectors identified a finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to correctly incorporate the

interim methodology for developing acceptance criteria for suction voids in Emergency Core Cooling Systems, Decay Heat Removal, and Containment Spray Systems pumps into procedures. Specifically, the licensee did not translate the limitations of the acceptance criteria with respect to rated performance of pump operation. This finding was entered into the licensee's corrective action program to revise the affected procedure.

The performance deficiency was determined to be more than minor because it was associated with the Mitigating System cornerstone attribute of equipment performance and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding screened as of very low safety significance (Green) because it was a design deficiency confirmed not to result in loss of operability. Specifically, a review of recent monitoring results determined that identified voids did not exceed the applicable acceptance criteria. The inspectors did not find an applicable cross-cutting aspect which represented the underlying cause of this performance deficiency; therefore, no cross-cutting aspect was assigned.

Inspection Report# : 2012008 (pdf)



Identified By: NRC Item Type: NCV NonCited Violation

#### Procedures were not developed for performance monitoring of plant parameters.

The inspectors identified a finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to establish appropriate procedures to implement the requirements of performance monitoring of plant parameters for gas accumulation. Specifically, the licensee had not established instructions in procedures to control important aspects such as frequency of monitoring and acceptance criteria. This finding was entered into the licensee's corrective action program to determine the size of the limiting voids at the affected locations and establish appropriate acceptance criteria.

The performance deficiency was determined to be more than minor because, if left uncorrected, it would have the potential to lead to a more significant safety concern. The finding screened as of very low safety significance (Green) because it was a design deficiency confirmed not to result in loss of operability. Specifically, a review of a sample of recent plant parameter trends determined that unacceptable void formation had not occurred. This finding had a cross-cutting aspect in the area of human performance because the licensee did not make safety significant decisions using a systematic process. Specifically, the licensee decided to use informal trending mechanisms to track the critical plant parameters instead of creating a formal and systematic approach to programmatically control the activity. Inspection Report# : 2012008 (pdf)

# Significance: Jul 02, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

#### Minimum flowrates and time requirements for dynamic flushing were not established

The inspectors identified a finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to establish minimum flowrate and time required in procedures used to perform dynamic flushing activities affecting Emergency Core Cooling Systems, Decay Heat Removal, and Containment Spray Systems pumps. This finding was entered into the licensee's corrective action program to revise the affected procedures.

The performance deficiency was determined to be more than minor because, if left uncorrected, it would have the potential to lead to a more significant safety concern. Specifically, the failure to establish an appropriate procedure for flushing would have the potential of not removing voids to ensure system operability. The finding screened as of very low safety significance (Green) because it was a design deficiency confirmed not to result in loss of operability.

Specifically, a historical review of previous dynamic flushing activities determined that sufficient flowrates and time values were achieved at the appropriate sequences. The inspectors did not identify a cross-cutting aspect associated with this finding because the finding was not confirmed to reflect current performance due to the age of the performance deficiency.

Inspection Report# : 2012008 (pdf)



Significance: Jul 02, 2012 Identified By: NRC Item Type: NCV NonCited Violation **Inadequate Procedure for Responding to a MODE 4 LOCA** 

The inspectors identified a finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to include adequate venting instructions in the procedure use to respond to a MODE 4 loss-of-coolant accident. Specifically, the procedure did not include instructions to address all of the affected residual heat removal system high points, including the discharge piping. The finding was entered into the licensee's corrective action program to leave one train of the system idle while the other train cools down the reactor coolant system below 200°F to ensure that the discharge side of one train of residual heat removal system is not vulnerable to steam formation.

The performance deficiency was determined to be more than minor because, if left uncorrected, it would have the potential to lead to a more significant safety concern. The finding screened as of very low safety significance (Green) using a Phase II evaluation. The inspectors determined that this finding had a cross-cutting aspect in the area of problem identification and resolution because the licensee did not thoroughly evaluate relevant external operating experience. Specifically, the licensee's evaluation of Information Notice 2010-11 incorrectly concluded that procedures contained sufficient direction to preclude flashing.

Inspection Report# : 2012008 (pdf)



Significance: <sup>G</sup> Jul 02, 2012

Identified By: NRC Item Type: NCV NonCited Violation

10 CFR 50.59 evaluation for modification of RHR pump casing drain lines was not performed

The inspectors identified a finding of very low safety significance and associated Severity Level IV violation of 10 CFR 50.59, "Changes, Tests, and Experiments," for the failure to perform a written evaluation, which provided the bases for the determination that a change did not require a license amendment. Specifically, the licensee failed to provide a basis for not applying for a license amendment associated with a modification of the residual heat removal pump casing drain lines. The finding was entered into the licensee's corrective action program to: (1) stage a hose and pipe couplings to support venting at the residual heat removal pump casing vent; (2) create a work order request to flush flow through the abandoned drain lines that were cut from the pump casing vent to show the lines could still pass water; (3) develop an alternate means to accomplish this activity; and (4) evaluate the change.

The performance deficiency was determined to be more than minor because it was associated with the Mitigating System cornerstone attribute of equipment performance and affected the cornerstone objective of ensuring the capability and availability of systems that respond to initiating events to prevent undesirable consequences. Violations of 10 CFR 50.59 are dispositioned using the traditional

enforcement process instead of the significance determination process because they are considered to be violations that potentially impede or impact the regulatory process. The finding screened as of very low safety significance (Green) using a Phase II evaluation. The inspectors did not identify a cross-cutting aspect associated with this finding because the finding was not confirmed to reflect current performance due to the age of the performance deficiency.

Inspection Report# : 2012008 (pdf)



Identified By: NRC

Item Type: FIN Finding

#### 10 CFR 50.59 evaluation for modification of RHR pump casing drain lines was not performed

The inspectors identified a finding of very low safety significance and associated Severity Level IV violation of 10 CFR 50.59, "Changes, Tests, and Experiments," for the failure to perform a written evaluation, which provided the bases for the determination that a change did not require a license amendment. Specifically, the licensee failed to provide a basis for not applying for a license amendment associated with a modification of the residual heat removal pump casing drain lines. The finding was entered into the licensee's corrective action program to: (1) stage a hose and pipe couplings to support venting at the residual heat removal pump casing vent; (2) create a work order request to flush flow through the abandoned drain lines that were cut from the pump casing vent to show the lines could still pass water; (3) develop an alternate means to accomplish this activity; and (4) evaluate the change.

The performance deficiency was determined to be more than minor because it was associated with the Mitigating System cornerstone attribute of equipment performance and affected the cornerstone objective of ensuring the capability and availability of systems that respond to initiating events to prevent undesirable consequences. Violations of 10 CFR 50.59 are dispositioned using the traditional

enforcement process instead of the significance determination process because they are considered to be violations that potentially impede or impact the regulatory process. The finding screened as of very low safety significance (Green) using a Phase II evaluation. The inspectors did not identify a cross-cutting aspect associated with this finding because the finding was not confirmed to reflect current performance due to the age of the performance deficiency.

Inspection Report# : 2012008 (pdf)



Significance: Jul 02, 2012 Identified By: NRC Item Type: NCV NonCited Violation

#### **Inadequate Procedure for RCS Vacuum Fill During Reduced Inventory Operations**

The inspectors identified a finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for failure to establish procedures for reduced inventory operations that were appropriate to preclude air entrainment into Residual Heat Removal (RHR) and Reactor Coolant Systems (RCS). Specifically, a procedure allowed operation of RHR while in reduced inventory operations with a minimum RCS level and maximum pump flowrate combination that was determined to result in airentrainment vortices. The finding was entered into the licensee's corrective action program to place an administrative hold to the procedure until proper documentation is revised and updated and to revise the procedure to require stricter use of high accuracy level instrumentation.

The performance deficiency was determined to be more than minor because it was associated with the initiating event cornerstone attribute of procedure quality and affected the cornerstone objective of limiting the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown operations. The finding screened as of very low safety significance (Green) using a Phase II evaluation. The inspectors did not identify a cross-cutting aspect associated with this finding because the finding was not confirmed to reflect current performance due to the age of the performance deficiency.

Inspection Report# : 2012008 (pdf)

### **Barrier Integrity**

### **Emergency Preparedness**

### **Occupational Radiation Safety**

## **Public Radiation Safety**

### Security

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page. Therefore, the <u>cover letters</u> to security inspection reports may be viewed.

## Miscellaneous

Significance: N/A Dec 31, 2012 Identified By: NRC Item Type: NCV NonCited Violation Not Reporting the Use of CPAP Devices by Licensed Operators

An NCV of 10 CFR 50.9, "Completeness and Accuracy of Information," was identified due to the submittal of inaccurate medical information for a licensed operator. The submittal to the NRC was inaccurate because it certified that the operator had been medically examined and had met all medical qualifications, when in fact, a Senior Reactor Operator (SRO) did not disclose that he had been prescribed a therapeutic device to treat sleep apnea. The licensee entered the issues into the corrective action program (CAP). The licensee's corrective actions included amending the SRO licensee to include the restriction related to use of a medical device.

The SRO was unaware that being prescribed a therapeutic device for treatment of sleep apnea in March 2010 was a condition requiring reporting. The licensee submitted medical information associated with relicensing the SRO in March 2012 that was incomplete and incorrect for the SRO. Because violations of 10 CFR 50.9 are considered to be violations that potentially impede or impact the regulatory process, they are dispositioned using the traditional enforcement process. In accordance with the Enforcement Policy, the inspectors concluded that the violation was a Severity Level IV because the SRO met ANSI/ANS 3.4 criteria but failed to report a condition that required an amended license. The licensee's failure to provide complete and accurate information to the NRC impacted the regulatory process because it resulted in an incorrect licensing action and is a performance deficiency. This is a minor

ROP issue since the non disclosure of a medical condition for a licensed operator did not result in an adverse impact on plant operation. Since there is no ROP Finding, there is no cross-cutting aspect associated with this violation.

Inspection Report# : 2012005 (pdf)

Significance: N/A Sep 30, 2012 Identified By: NRC Item Type: NCV NonCited Violation

**Inadequate Procedures for Implementation of Annulus Cooling to Remain in a Analyzed Thermal Condition** A Severity Level IV NCV of very low safety significance of Title 10 of the Code of Federal Regulations (CFR) Part 72.150, "Instructions, Procedures, and Drawings," was identified by the inspectors for the failure of the licensee to have procedures in place to ensure that the design basis peak fuel cladding temperature limit would not be exceeded during dry cask canister processing operations. The licensee took appropriate actions prior to conducting evolutions that may have challenged these limits. This has been documented in the licensee's corrective action program as Action Request (AR) 2012 9676.

Consistent with the guidance in Section 2.2 of the NRC Enforcement Manual, Independent Spent Fuel Storage Installation (ISFSIs) are not subject to the Reactor Oversight Process enforcement and, thus, traditional enforcement will be used for these facilities. Therefore the violation was dispositioned using the traditional enforcement process using Section 2.3 of the Enforcement Policy. The violation was determined to be of more than minor significance using IMC 0612, "Power Reactor Inspection Reports," Appendix E, "Examples of Minor Issues," Example 3i, since the bounding conditions for the analyzed thermal condition was not reflected in the procedures to perform the port cap repair. Specifically, the licensee's lack of evaluation did not ensure spent fuel cladding temperatures during canister processing operations would remain less than Spent Fuel Storage of Spent Fuel," safety limits. The inspectors determined that that the violation could be evaluated using Section 6.5.d.2 of the NRC Enforcement Policy, as a Severity Level IV violation, in that the licensee failed to establish, maintain, or implement adequate controls to ensure that the replacement of the port cap was performed under conditions bounded by a thermal analysis that ensured the integrity of the fuel would be maintained during the repair. Because the finding is associated only with traditional enforcement, there is not an associated cross cutting aspect. Inspection Report# : 2012004 (*pdf*)

Last modified : September 03, 2013