Perry 1
4Q/2008 Plant Inspection Findings

Initiating Events

Significance: G Dec 31, 2008
Identified By: NRC
Item Type: NCV NonCited Violation
INSPECTION PROCEDURE FOR RPV HEAD STRONGBACK OMITTED NON-DESTRUCTIVE TESTING OF STRUCTURAL WELDS
The inspectors identified a finding of very low safety significance (Green) and an associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, “Instructions, Procedures and Drawings.” Specifically, the licensee failed to perform nondestructive testing of reactor pressure vessel (RPV) head strongback major load carrying welds and critical areas required by American National Standards Institute (ANSI) N14.6-1978. The issue was entered into the licensee’s corrective action program, and the licensee revised a procedure to perform nondestructive testing of RPV head strongback major load carrying welds and critical areas.
The finding was determined to be more than minor because the finding was associated with the Initiating Events cornerstone objective to limit the likelihood of events that upset plant stability and challenge critical safety functions during shutdown. Specifically, the purpose of the nondestructive testing of RPV head strongback major load carrying welds and critical areas is to limit the likelihood of a RPV head strongback structural component failure, and hence, to ensure safe load handling of heavy loads over the reactor core or over safety-related systems, structures and components. The inspectors determined that the finding was of very low safety significance following a qualitative significance determination process review. The finding has a cross-cutting aspect in the area of human performance as defined in Inspection Manual Chapter 0305 H.2(c), because the licensee did not provide a complete, accurate, and up-to-date procedure to plant personnel.

Inspection Report# : 2008005 *(pdf)*

Significance: G Dec 31, 2008
Identified By: NRC
Item Type: NCV NonCited Violation
CONTAINMENT POLAR CRANE TROLLEY SEISMIC RESTRAINTS DID NOT MEET SEISMIC CATEGORY I REQUIREMENTS
The inspectors identified a finding of very low safety significance (Green) and an associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, “Design Control,” in that, the design basis structural analysis for the containment polar crane trolley did not adequately evaluate the trolley seismic restraints. Specifically, the trolley seismic restraint calculation failed to ensure that design stresses remained below acceptance limits. Also, the as-built configuration of the trolley seismic restraints was not in accordance with the analyzed condition. As a result, the design basis calculation was not sufficient to ensure conformance with Seismic Category I requirements for safe load handling of heavy loads over the reactor core or over safety-related systems, structures and components. The issues were entered into the licensee’s corrective action program. The licensee initiated the revision of the trolley seismic restraint calculation and the restoration of the trolley seismic restraint as-built condition to meet Seismic Category I requirements.

The finding was determined to be more than minor because the finding was associated with the Initiating Events cornerstone attribute of equipment performance and affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown. Specifically, compliance with Seismic Category I design requirements was to ensure safe load handling of heavy loads over the reactor core or over safety-related systems, structures and components. The inspectors determined that the finding was of very low safety significance following a qualitative significance determination process review.
Inspection Report# : 2008005 *(pdf)*

Significance: G Sep 30, 2008
Identified By: Self-Revealing
Item Type: FIN Finding
Failure to Adequately Manage Risk Associated With Working Around a Risk-Significant Underground Vault
A finding of very low safety significance was self-revealed on July 30, 2008. While performing inspection and dewatering of an underground vault area, plant workers inadvertently dropped a man-hole cover into the vault. The 15-foot vault area contained 125 Volts direct current control power conduits that supplied fault protection circuitry for switchyard breakers. The licensee entered the issue into their corrective action program.
This finding was considered more than minor because it was related to maintenance risk assessment and risk management issues. Specifically, the licensee failed to manage risk for maintenance activities associated with the electrical switchyard that could increase the likelihood of initiating events by causing a loss of offsite power. The finding was determined through a SDP analysis to be of very low safety significance as no mitigation equipment or functions were affected. This finding had a cross-cutting aspect in the area of Human Performance as defined in IMC 0305 H.4(a), because the organization failed to ensure the use of human error prevention techniques commensurate with the risk of the assigned task. No violation of NRC requirements occurred.

Inspection Report# : 2008004 *(pdf)*

Significance: G Sep 30, 2008
Identified By: Self-Revealing
Item Type: FIN Finding
Loss of Configuration Control of the Hydrogen Water Chemistry Injection System Resulting in High Radiation Levels.
A finding of very low safety significance was self-revealed on June 28, 2008, when high radiation alarms for all four main steam lines were received in the control room during a plant power maneuver. Specifically, maintenance technicians failed to adhere to procedures and manipulated a hydrogen water chemistry control system while performing a surveillance test associated with the plant off-gas system. The off-gas system surveillance test procedure did not address operation of the hydrogen water chemistry control system and the technicians were not trained to operate the system. As part of their immediate corrective actions, the licensee corrected the system lineup to reduce radiation levels and entered the issue into their corrective action program.

This finding was considered more than minor because the manipulation of plant systems that are different from those specified in the authorized work procedure would become a more significant safety concern if left uncorrected. In this case, the finding led to an unexpected increase in radiation levels in areas accessible to plant personnel and was associated with the operating equipment lineup of the configuration control attribute of the Initiating Events Cornerstone and adversely affected the cornerstone objective of limiting the likelihood of events that upset plant stability. The finding was determined through a SDP analysis to be of very low safety significance as no mitigation equipment or functions were affected and no actual increase in personnel exposure occurred. This finding has a cross-cutting aspect in the area of Human Performance as defined in IMC 0305 H.4(b), because the organization failed to ensure that personnel do not proceed with a task in the face of uncertainty. No violation of NRC requirements occurred.

Inspection Report# : 2008004 *(pdf)*

Significance: G Jun 30, 2008
Identified By: NRC
Item Type: FIN Finding
FAILURE TO IDENTIFY A DEGRADED FLOW CONTROL VALVE CONNECTOR
The inspectors identified a finding of very low safety significance for the failure of licensee personnel to adhere to corrective action program procedures. Specifically, during inspection of the linear velocity transducer connector for the 'A' flow control valve actuator, the connector was found in a degraded state, and personnel applied tape to the connector. Licensee personnel did not initiate a condition report to address this condition or to assess operability, and the connector later failed causing reactor flow and power oscillations. The licensee entered the issue of failure to

adhere to corrective action program procedures into their corrective action program. This finding has a cross-cutting aspect in the area of Problem Identification and Resolution because the organization failed to properly identify issues related to nuclear safety P.1(a).

This finding was considered more than minor 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. The finding was determined through a Significance Determination Process analysis to be of very low safety significance because no mitigation equipment or functions were affected. No violation of NRC requirements occurred.

Inspection Report# : 2008003 *(pdf)*

Significance: G Mar 31, 2008
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
FAILURE TO IMPLEMENT ADEQUATE CONFIGURATION CONTROL AFFECTING 'A' REACTOR WATER CLEANUP SYSTEM
A finding of very low safety significance and a non-cited violation of Technical Specification (TS) 5.4, “Procedures,” was self-revealed on January 4, 2008, when reactor steam was observed coming from the from the 'A' reactor water cleanup (RWCU) system as operators opened the pump suction shutoff valve. A system isolation valve that was danger-tagged as shut to provide double-boundary protection from the reactor coolant system was found in the open position. At the time of the event, licensee personnel were in the process of restoring the 'A' RWCU pump to service following maintenance and the reactor was at rated power and pressure. As part of their immediate corrective actions, licensee personnel isolated the leak, performed a system alignment, and entered this issue into their corrective action program.

The finding was considered more than minor because it was associated with the Human 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 shutdown as well as power functions. Specifically, the finding resulted in a reactor coolant leak to the safety-related auxiliary building. The finding was determined to be of very low safety significance because the reactor water leak was readily isolable. The primary cause of this finding was related to the cross-cutting area of Human Performance as defined by IMC 0305 H.1(b) because licensee personnel failed to use conservative assumptions in decision making associated with the valve tagging procedure.

Inspection Report# : 2008002 *(pdf)*

Significance: SL-IV Mar 31, 2008
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO MAKE 10 CFR 50.72 REPORT
The inspectors identified a non-cited violation of 10 CFR Part 50.72(b)(2)(iv)(B), "Four Hour Reports." The inspectors determined that the licensee failed to report a manual actuation of the reactor protection system when it was not part of a preplanned sequence. Specifically, on June 22, 2007, the 'B' reactor recirculation pump failed during a plant shutdown sequence and the licensee inserted a manual scram above preplanned power levels and not in accordance with the preplanned sequence. Licensee operators decided to insert the manual scram earlier than planned due to the unexpected loss of flow in the 'B' reactor recirculation system loop.
Inspection Report# : 2008002 *(pdf)*

Significance: G Mar 31, 2008
Identified By: NRC
Item Type: FIN Finding
FAILURE TO REPORT TIMELY PERFORMANCE INDICATOR INFORMATION
The inspectors identified a finding associated with the licensee’s reporting of Unplanned Scram Performance Indicator

(PI) data for the second quarter 2007. On July 23, 2007, Perry plant personnel submitted PI data to the NRC that included one unplanned scram for the second quarter of 2007. In August 2007, the inspectors informed the licensee that the NRC disagreed with the reported number of unplanned scrams. The inspectors determined that the licensee failed to pursue resolution of the discrepancy in a timely manner in accordance with established industry standards.

The finding was considered more than minor because it was related to a PI and would have caused the PI to exceed a threshold. Had all three unplanned scrams been reported in July 2007, the Unplanned Scram PI would have crossed the Green to White threshold. The finding was determined to be of very low safety significance after management review.

Inspection Report# : 2008002 *(pdf)*

Mitigating Systems

Significance: SL-IV Dec 31, 2008
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO REPORT ALL 10 CFR 50.73 REPORTABLE EVENTS ASSOCIATED WITH THE DISCOVERY OF LOOSE CONTAINMENT GRATING
The inspectors identified a non-cited violation of 10 CFR 50.73(a)(1), "Licensee Event Reports." The inspectors determined that the licensee failed to submit a required Licensee Event Report (LER) within 60 days after discovery of conditions requiring a report. On August 26, 2007, the licensee identified improperly installed containment floor grating that affected safety system operability. The licensee failed to report conditions of operations prohibited by Technical Specification, operations in an unanalyzed condition, and loss of safety function from August 6 to August 9, 2007, that were associated with inoperability of low pressure core injection ‘A.’ The licensee entered this issue into their corrective action program.

The primary cause of this non-cited violation was related to the cross-cutting area of problem identification and resolution as defined in Inspection Manual Chapter 0305 P.1(c) because the licensee failed to thoroughly evaluate problems for reportability conditions.
Inspection Report# : 2008005 *(pdf)*

Significance:  Sep 30, 2008
Identified By: NRC
Item Type: NCV NonCited Violation
Impaired Fire Barrier for Safety-Related Building
The inspectors identified a finding of very low safety significance and an associated NCV of the Perry Nuclear Power Plant Operating License Condition C(6). During a maintenance activity, licensee personnel degraded a fire barrier in a manner that was contrary to the procedural requirements of the Perry Plant Fire Protection Program. As part of their immediate corrective action, the licensee restored the fire barrier and entered the issue into their corrective action program.

The inspectors determined that the performance deficiency was more than minor in accordance with IMC 0612, Appendix B, “Issue Disposition Screening,” because the finding was associated with protection against external factors 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. Specifically, by the inappropriate use of fixed impairments on the fire doors between the diesel fire pump room and the emergency service water pumphouse, the licensee removed a fire barrier which could impact safety-related equipment. The finding was determined to be of very low safety significance during a Phase 2 SDP review. This finding has a cross-cutting aspect in the area of Human Performance as defined by IMC 0305 H.4(a), because the licensee did not ensure that appropriate human error prevention techniques were used.

Inspection Report# : 2008004 *(pdf)*

Significance: G Sep 30, 2008
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Implement Compenatory Measures for a Risk-Management Activity
The inspectors identified a finding of very low safety significance and an associated NCV of 10 CFR 50.65(a)(4) for failure to assess and manage the risk associated with maintenance activity affecting the low pressure core spray system. Specifically, the licensee removed floor plugs in the auxiliary building and failed to implement risk control measures to assure operability of low pressure core spray. As part of their immediate corrective actions, the licensee personnel re-installed building floor plugs and returned low pressure core spray to an operable status.

The finding was considered more than minor because the licensee failed to prescribe significant compensatory measures for external conditions; and if the practice were left uncorrected, the issue would become a more significant safety concern. The finding was of very low safety significance because the incremental core damage frequency associated with the activity was less than 1 X 10-6. This finding has a cross-cutting aspect in the area of Human Performance as defined in IMC 0305 H.3(a), because the organization failed to adequately plan work activities that are associated with risk.
Inspection Report# : 2008004 *(pdf)*

Significance: G Sep 30, 2008
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Implement a Procedurally-Required Risk management Activity for a Protected Train
The inspectors identified a finding of very low safety significance and a NCV of 10 CFR 50.65(a)(4) for failure to implement a procedurally-required risk management activity for a safety system protected train. The licensee failed to provide required management oversight of work on emergency closed cooling 'A' while the plant was in Yellow Risk. The licensee entered the issue into their corrective action program.

The finding was considered more than minor because the licensee failed to effectively manage significant compensatory measures for an elevated risk condition; and if the practice were left uncorrected, the issue would become a more significant safety concern. The finding was of very low safety significance, because the incremental core damage frequency associated with the activity was less than 1 X 10-6. This finding has a cross-cutting aspect in the area of Human Performance as defined by IMC 0305 H.3(a), because the organization failed to adequately plan work activities that are associated with risk.

Inspection Report# : 2008004 *(pdf)*

Significance: G Sep 30, 2008
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Failure to Use procedures for Work Affecting Safety
A finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion V, “Instructions, Procedures, and Drawings,” was self-revealed on August 4, 2008, when contract workers bored a hole into a safety-related structure in an inappropriate location. The workers did not use documented instructions, procedures, or drawings when performing the work. As part of their immediate corrective actions, the licensee conducted worker training and entered the issue into their corrective action program.
The finding was determined to be more than minor because the finding was associated with the design control attribute of 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. Specifically, the licensee initiated work on a seismically qualified structure in the absence of an approved work package and degraded the structure. The finding was determined to be of very low safety significance because it did not result in safety system inoperability. This finding had a cross-cutting aspect in the area of Human Performance as defined by IMC 0305 H.4.(a), because the licensee failed to communicate human error prevention techniques through a pre-job brief and personnel proceeded in the face of unexpected circumstances.

Inspection Report# : 2008004 *(pdf)*

Significance: G Jun 06, 2008
Identified By: NRC
Item Type: NCV NonCited Violation
FAILED TO PERFORM AN ADEQUATE DESIGN REVIEW FOR EXPECTED CONDITIONS OF THE OFFSITE POWER SUPPLY IN DETERMINING DESIGN INPUTS FOR EVALUATING THE EFFECTS OF OFFSITE VOLTAGE
• Green. A finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," was identified by the inspectors for the failure to ensure that the design limits in electrical calculations bound expected operational values. Specifically, the licensee failed to perform an adequate design review for expected conditions of the offsite power supply in determining design inputs for evaluating the effects of offsite voltage on plant equipment and to ensure that proper design control was maintained. During the inspection, the licensee evaluated the conditions and determined that the higher than analyzed offsite power system voltage did not have an impact on the operability of plant equipment. The cause of the finding is related to the cross-cutting area of Problem Identification and Resolution, specifically with respect to Corrective Action Program, because the licensee failed to evaluate and determine the extent of condition of the voltage in the offsite power supply. P.1(c) (Section 1R21.3.b(1))
Inspection Report# : 2008006 *(pdf)*

Significance: G Jun 06, 2008
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO ENSURE THAT EQUIPMENT INSTALLED IN THE PLANT WAS IN ACCORDANCE WITH THE DESIGN DOCUMENTATION
A finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," was identified by the inspectors for the failure to ensure that equipment installed in the plant was in accordance with the design documentation. The inspectors identified several examples of equipment installed in the plant with electrical characteristics that varied from the design documentation. These conditions were subsequently evaluated and determined not to affect the operability of the equipment. This finding has a cross-cutting aspect in the area of Human Performance, Resources because the licensee did not ensure that personnel, equipment, procedures, and other resources are available and adequate to assure nuclear safety. H.2(c) (Section 1R21.3.b(2))
Inspection Report# : 2008006 *(pdf)*

Significance: G Jun 06, 2008
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO IDENTIFY AND CORRECT ERRORS AND DISCREPANCIES IN SEISMIC QUALIFICATION DOCUMENTS FOR THE STANDBY LIQUID CONTROL (SLC) STORAGE TANK
A finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," was identified by the inspectors for the failure to identify and correct errors and discrepancies in seismic qualification documents for the Standby Liquid Control (SLC) storage tank. Subsequent licensee evaluation indicated that stresses in the critical SLC tank components will remain within the acceptance limits. This finding does not have a cross-cutting aspect because it is not indicative of current performance. (Section 1R21.3.b(3))
Inspection Report# : 2008006 *(pdf)*

Significance: G Jun 06, 2008
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO TEST REACTOR PROTECTION SYSTEM KEY LOCKED BYPASS SWITCHES
A finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion XI, "Test

Control," was identified by the inspectors for the failure to test reactor protection system key locked bypass switches. The licensee entered this issue into its corrective action program and initiated procedural changes to require periodic testing of the RPS bypass switches. This finding does not have a cross-cutting aspect because it is not indicative of current performance. (Section 1R21.5.b(1))
Inspection Report# : 2008006 *(pdf)*

Significance: G Mar 31, 2008
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
ADEQUACY OF MAINTENANCE ASSOCIATED WITH EMERGENCY SERVICE WATER STRAINER FAILURE
A finding of very low safety significance and a non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Procedures," was self-revealed when the 'B' emergency service water (ESW) system pump discharge strainer failed on December 27, 2007. A strainer inspection cover, about 6 inches wide and 9 inches tall, became dislodged due to a loose fastener, and water discharged into the ESW pump house when the 'B' ESW pump was started. The strainer was last worked during a refueling outage in April 2007. The maintenance procedures associated with the strainer were determined to be inappropriate because they resulted in the unexpected failure of the strainer cover. As part of their immediate corrective actions, licensee personnel revised strainer cover installation procedures, repaired the strainer, and restored availability of the 'B' ESW system.

The finding was considered more than minor because it was associated with the Procedure Quality 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 in order to prevent undesirable consequences. Specifically, the finding resulted in the unavailability of the 'B' ESW system train. The finding was determined to be of very low safety significance because it did not represent an actual loss of safety function of a single train for greater than the TS-allowed outage time.

Inspection Report# : 2008002 *(pdf)*

Significance: G Mar 31, 2008
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO ADEQUATELY CORRECT AND EVALUATE A CONDITION AFFECTING THE ESW PUMP AND ITS ASSOCIATED DISCHARGE VALVES
The inspectors identified a finding having very low safety significance and an associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for the licensee's failure to adequately evaluate and take appropriate corrective actions for a condition adverse to quality affecting the Emergency Service Water (ESW) Pump 'A' and its associated discharge valve. Specifically, the licensee did not implement adequate actions to ensure that the ESW Pump 'A' discharge valve (1P45F0130A) would remain open and would not be damaged during the loss of direct current (DC) Bus ED-1-A while the pump was in operation. In addition, the licensee did not identify and evaluate the impact of this condition on the plant=s safe shutdown equipment in the event of an Appendix R fire in the control room. The licensee entered the issue into their corrective action program.

This finding was more than minor because the failure to assure that the ESW Pump 'A' discharge valve would remain open and would not be damaged affected the mitigating system corner stone objective of ensuring the availability, reliability and capability of the safety-related components to respond to initiating events to prevent undesirable consequences. The finding was of very low safety significance based on a Phase 1 screening in accordance with IMC 0609, Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations," because the specific condition/scenario only affected the ESW Pump 'A' and its associated discharge valve and it did not exist for the redundant ESW Pump 'B'. In addition, safe shutdown components for the Division 2 and/or Division 3 systems would remain available, free of fire damage, to safely shut down the plant in the event of a fire in the control room. The finding has a cross-cutting aspect in the area of problem identification and resolution as defined in Inspection Manual Chapter 0305 P.1(c), because the licensee failed to thoroughly evaluate the problem when it was first identified in 2006.

Inspection Report# : 2008002 *(pdf)*

Significance: G Mar 31, 2008
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
ADEQUACY OF REACTOR CORE ISOLATION COOLING SYSTEM FLOW CONTROLLER TUNING PROCEDURES
A finding of very low safety significance and a non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Procedures," was self-revealed during the reactor scram and plant response on November 28, 2007, when reactor core isolation cooling (RCIC) failed to perform its design function. The RCIC system started automatically on low reactor water level, began to inject into the reactor pressure vessel, and then tripped on low suction pressure. The RCIC pump flow controller was found to have been incorrectly tuned in January 2006. As part of their immediate corrective actions, licensee personnel tuned the RCIC controller prior to the December 6, 2007, plant startup.

The finding was considered more than minor because it was associated with Equipment Reliability 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 in order to prevent undesirable consequences. The finding was determined, through Phase 3 analysis, to be of very low safety significance. The primary cause of this finding was related to the cross-cutting area of Problem Identification and Resolution as defined in IMC 0305 P.2(b) because the licensee failed to institutionalize operating experience through changes to procedures regarding flow controller settings.

Inspection Report# : 2008002 *(pdf)*

Significance: N/A Mar 31, 2008
Identified By: NRC
Item Type: NCV NonCited Violation
INADEQUATE TEST CONTROL PROGRAM TO ENSURE REACTOR CORE ISOLATION COOLING SYSTEM OPERABILITY
The inspectors identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion XI, “Test Control,” associated with testing of the reactor core isolation cooling (RCIC) system between January 20, 2006, and November 28, 2007, a period when RCIC was determined to have been inoperable. Specifically, the program failed to incorporate the requirements and acceptance limits contained in applicable design documents to assure that RCIC flow controller configuration and performance met design requirements during testing.
Inspection Report# : 2008002 *(pdf)*

Significance: G Mar 31, 2008
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO IMPLEMENT TESTING OF THE REACTOR CORE ISOLATION COOLING INSTRUMENT LINES WITH APPROPRIATE PROCEDURES
The inspectors identified a finding of very low safety significance and an associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Procedures," while observing a periodic test associated with the reactor core isolation cooling (RCIC) system on February 14, 2008. The inspectors determined that the licensee’s procedure was inappropriate for the circumstances of the test. Specifically, the purpose of the test was to detect and quantify gas formation in RCIC system piping and the procedure did not provide an adequate method to determine whether acceptance criteria were met. The repeated performance of the test resulted in the unnecessary inoperability of the RCIC system.

This finding was greater than minor because it adversely affected the Mitigating Systems Cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events in order to prevent undesirable consequences. Specifically, the performance of the test affected the capability of the RCIC system to respond to events. The finding was of very low safety significance because the time RCIC was inoperable was less

than TS-allowed inoperability time. The primary cause of this finding was related to the cross-cutting area of Human Performance as defined by Inspection Manual Chapter 0305 H.2(c), because the licensee failed to provide complete and accurate procedures related to nuclear safety. As part of their immediate corrective action, the licensee revised the test procedure.

Inspection Report# : 2008002 *(pdf)*

Significance: G Mar 31, 2008
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO ENSURE (NON)-RECURRENCE OF REACTOR CORE ISOLATION COOLING INOPERABILITY DUE TO IMPROPER CONTROLLER SETTINGS
The inspectors identified a finding of very low safety significance and a non-cited violation of 10 CFR Part 50 Appendix B, Criterion XVI, “Corrective Action,” when the reactor core isolation cooling (RCIC) system was declared inoperable on December 12, 2007, due to improper flow controller settings. The inspectors noted that the cause of RCIC inoperability on December 12, 2007, was the same cause of RCIC inoperability from January 21, 2006, to November 28, 2007. The licensee failed to perform adequate corrective actions to preclude repetition of a significant condition adverse to quality. As part of their immediate corrective actions, the licensee entered the issue into the corrective action program and adjusted flow controller settings to 1987 pre-startup settings when RCIC successfully injected into the reactor pressure vessel.
The finding was more than minor because it was associated with the Equipment Performance attribute of the reactor safety 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. Specifically, the controller settings affected the capability of the RCIC system to respond to initiating events as designed. The finding was determined to be of very low safety significance because it was determined that the period of inoperability was less than the TS-allowed outage time. The primary cause of this finding was related to the cross cutting area of Problem Identification and Resolution as defined in Inspection Manual Chapter 0305 P.2(a) because the licensee failed to communicate relevant external operating experience in a timely manner.

Inspection Report# : 2008002 *(pdf)*

Significance: G Mar 31, 2008
Identified By: NRC
Item Type: NCV NonCited Violation
INADEQUATE CLASSIFICATION OF CONDITION REPORT FOR REACTOR CORE ISOLATION COOLING
The inspectors identified a finding of very low safety significance and an associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Procedures," during a review of the licensee’s treatment of the safety-related reactor core isolation cooling (RCIC) system’s failure to perform its safety function when called upon during an event. On November 28, 2007, the licensee experienced an unplanned scram with complications that included a failure of the feedwater system affecting all feed pumps. During the event, RCIC failed to function as designed when aligned to the suppression pool and when re-aligned to the condensate storage tank. Licensee personnel failed to identify the RCIC failures as a significant condition adverse to quality within their corrective action program. As part of their immediate corrective actions, licensee personnel reclassified the condition as a significant condition adverse to quality.

The finding was considered more than minor because the failure to identify significant conditions adverse to quality would become a more significant safety concern if left uncorrected. The finding was determined to be of very low safety significance after management review. The primary cause of this finding was related to the cross-cutting area of Problem Identification and Resolution as defined in Inspection Manual Chapter IMC 0305 P.1(a), because the licensee failed to identify the issue completely, accurately, and in a timely manner commensurate with its safety significance.

Inspection Report# : 2008002 *(pdf)*

Barrier Integrity

Significance: G Sep 30, 2008
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Adequacy of Airlock Ball Valve Maintenance
A self-revealed finding of very low safety significance and an associated NCV of 10 CFR Part 50 Appendix B, Criterion 5 ," Procedures," was identified on June 1, 2008, when a containment airlock door seal failed during routine operations. On March 26, 2008, the licensee failed to implement airlock maintenance procedures appropriate to the circumstances and this led to a failure of the containment upper airlock outer door seal. As part of their corrective actions, the licensee conducted training and reveised procedures.

The finding was determined to be more than minor because it was associated with the Procedure Quality attribute of the Barrier Integrity Cornerstone 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 inspectors determined that the finding was of very low safety significance because the upper airlock inner door remained closed and the finding did not represent an actual open pathway in the physical integrity of reactor containment.
Inspection Report# : 2008004 *(pdf)*

Significance: G Mar 31, 2008
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
LOSS OF SAFETY FUNCTION OF THE ANNULUS EXHAUST GAS TREATMENT SYSTEM
A finding of very low safety significance and a non cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Procedures," was self-revealed when a loss of the annulus exhaust gas treatment system (AEGTS) safety function occurred on December 21, 2007. Maintenance procedures failed to include adequate instructions and acceptance criteria related for a hydramotor assembly and this resulted in the inoperability of the 'B' AEGTS train while the 'A' train was inoperable for charcoal sampling. As part of their immediate corrective actions, licensee personnel restored 'A' train to operable status and entered the issue into the corrective action program.
The finding was more than minor because it was associated with the Procedure Quality attribute related to maintenance of containment function of the Barrier Integrity cornerstone and affected the cornerstone objective of reasonable assurance that physical design barriers (fuel cladding, reactor coolant system, and containment) protect the public from radionuclide releases caused by accidents or events. Specifically, the finding was determined to have resulted in a degraded condition of secondary containment. The finding was of very low safety significance because the finding only represented a degradation of the radiological barrier function. The primary cause of this finding was related to the cross-cutting area of Human Performance per Inspection Manual Chapter 0305 H.2(c), because the licensee failed to provide complete and accurate procedures related to nuclear safety.

Inspection Report# : 2008002 *(pdf)*

Emergency Preparedness

Significance: G Dec 31, 2008
Identified By: Self-Revealing
Item Type: FIN Finding
LOSS OF THE V-1F AND V-2F NON-VITAL BUSES RESULTING THE THE LOSS OF TECHNICAL SUPPORT CENTER COMPUTERS
A finding of very low safety significance was self-revealed on October 30, 2008, when licensee personnel failed to appropriately respond to a Technical Support Center (TSC) computer room high temperature alarm. As a result, electrical power supply to plant emergency response equipment and control systems was interrupted. Affected

systems included the Integrated Computer System (ICS), Emergency Response Data System (ERDS), one train of power to the Digital Feedwater Control System (DFWCS), and the chemistry computer. As part of their immediate corrective actions, licensee personnel restored the affected systems entered the issue into their corrective action program.

This finding is considered more than minor because it was associated with the Facilities and Equipment attribute of the Emergency Preparedness Cornerstone and affected the objective of ensuring the licensee is capable of implementing adequate measures to protect the health and safety of the public in the event of a radiological emergency. The finding was determined to be of very low safety significance because the equipment was restored to a functional status in less than seven days. This finding had a cross-cutting aspect in the area of Problem Identification and Resolution because the organization failed to ensure that issues were identified accurately and in a timely manner commensurate with their significance as defined in Inspection Manual Chapter 0305 P.1(a).
Inspection Report# : 2008005 *(pdf)*

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

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

Miscellaneous

Last modified : April 07, 2009