Perry 1
2Q/2006 Plant Inspection Findings

Initiating Events

Significance: G Jun 30, 2006
Identified By: NRC
Item Type: FIN Finding
FAILURE TO PROMPTLY COMPLETE HOT WEATHER PREPARATIONS
The inspectors identified a finding of very low significance when licensee personnel failed to complete tasks designed to prepare equipment for operation during high temperature conditions by March 30, 2006. The finding also affected the cross-cutting area of Human Performance because the licensee organization failed to effectively coordinate, plan, and schedule completion of summer preparation activities prior to the onset of hot weather.

This finding was more than minor because it was associated with the protection against external factors 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 of very low safety significance because the finding did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available. No violation of NRC requirements occurred.
Inspection Report# : 2006003*(pdf)*

Significance: G Sep 30, 2005
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
AUTOMATIC ESF ACTUATION DUE TO UNTIMELY CORRECTIVE ACTIONS AND INEFFECTIVE INTERIM ACTIONS
A finding of very low safety significance and a non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was self-revealed on August 12, 2005, when licensee personnel failed to promptly correct a condition adverse to quality. Specifically, on July 2, 2005, licensee personnel identified that the reactor water cleanup system valve nest room had elevated temperatures. Shortly thereafter, the licensee's problem solving team identified that a leak detection thermocouple was not providing an indication representative of actual room temperature due to its location. The improper placement of the thermocouple was not promptly corrected. The licensee failed to resolve the issue in a timely manner in that a reactor water cleanup system automatic isolation, an engineered safety feature actuation, occurred on August 12, 2005. Additionally, interim licensee actions to reduce room temperature, such as through securing a reactor water cleanup pump, had an adverse impact on plant performance in that the licensee concluded that the system manipulations induced a reactor water cleanup system leak on a non-regenerative heat exchanger vessel flange. The reactor water cleanup system was placed back in service on August 12, 2005, the thermocouple was relocated on August 14, 2005, and the heat exchanger vessel flange leak was stopped on September 6, 2005.

The inspectors determined that the issue was more than minor because it could reasonably be viewed as a precursor to a more significant event. The inspectors determined that the finding was of very low safety significance because the finding: (1) did not contribute to the likelihood of a loss-of-coolant-accident initiator; (2) did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available; and (3) did not increase the likelihood of a fire or internal/external flooding. The primary cause of this finding was related to the cross-cutting area of Problem Identification and Resolution, subcategory corrective action, in that the condition adverse to quality was not promptly corrected.

Inspection Report# : 2005009*(pdf)*

Mitigating Systems

Significance: G Jun 30, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO PROMPTLY CORRECT A TESTING DEFICIENCY AFFECTING A REACTOR CORE ISOLATION COOLING REMOTE SHUTDOWN SYSTEM FUNCTION
The inspectors identified a finding of very low safety significance and an associated non-cited violation of 10 CFR 50, Appendix B, Criterion XVI, “Corrective Action,” following a review of Licensee Event Report 05000440/2006-001-00, “Incorrect Wiring in the Remote Shutdown Panel Results in a Fire Protection Program Violation,” which identified that licensee personnel failed to correct a test deficiency associated with the remote shutdown circuit in a timely manner. The test deficiency was identified on September 9, 2003. The licensee corrected a wiring error and adequately tested the circuit on January 17, 2006. As part of their corrective actions, in addition to correcting the wiring error, licensee personnel

performed an extent of condition review, which did not identify any additional wiring errors. The primary cause of this finding was related to the cross-cutting area of Problem Identification and Resolution because licensee personnel failed to appropriately evaluate the significance of the issue when the test deficiency was identified and therefore failed to appropriately prioritize and implement corrective actions in a timely manner.

This finding was more than minor because it 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 finding affected the reliability of the reactor core isolation cooling system during a control room fire scenario. The finding was determined through a Significance Determination Process Phase 3 analysis to be of very low safety significance due, in large part, to the low initiating event frequency of fires in the main control room as well as the availability of other mitigating systems.
Inspection Report# : 2006003*(pdf)*

Significance: G Apr 01, 2006
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
FAILURE TO FOLLOW MAINTENACE PROCEDURES FOR ELECTRICAL EQUIPMENT VENTILATION FAN MOTOR WHEN VIBRATION LEVELS EXCEEDED ALERT CRITERIA
A finding of very low safety significance and a non-cited violation of Technical Specification 5.4, “Procedures,” was self-revealed on February 11, 2006, when licensee personnel failed to adhere to predictive maintenance program procedures after “B” Motor Control Center Switchgear and Miscellaneous Electrical Equipment Ventilation system return fan vibration levels exceeded predictive maintenance program alert criteria on September 29, 2005. As part of their immediate corrective actions, licensee personnel completed repairs to the “B” Motor Control Center Switchgear and Miscellaneous Electrical Equipment Ventilation system on March 3, 2006. The finding affected the cross-cutting area of Human Performance because licensee personnel failed to adhere to predictive maintenance program procedures after a degraded condition was identified.

The finding was more than minor because the failure to adhere to procedures associated with the maintenance of safety-related equipment, if left uncorrected, could become a more significant safety concern. In this case, the failure to adhere to predictive maintenance program procedures on September 29, 2005, resulted in an unaddressed and unmonitored degraded fan motor condition, led to the fan motor failure, and resulted in a small fire and an Alert emergency declaration on February 11, 2006. Because the Motor Control Center Switchgear and Miscellaneous Electrical Equipment Ventilation system was a support system, the finding was not suitable for Significance Determination Process review. Following management review, the finding was determined to be of very low safety significance because only one train of the Motor Control Center Switchgear and Miscellaneous Electrical Equipment Ventilation system was affected and the fire did not result in any personnel injuries or damage to other equipment.
Inspection Report# : 2006002*(pdf)*

Significance: G Apr 01, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO FOLLOW BELT TENSIONING MAINTENANCE PROCEDURES FOR ELECTRICAL EQUIPMENT VENTILATION FAN MOTOR
The inspectors identified a finding of very low safety significance and a non-cited violation of Technical Specification 5.4, “Procedures,” when licensee personnel failed to adhere to maintenance procedures during “B” Motor Control Center Switchgear and Miscellaneous Electrical Equipment Ventilation train maintenance and did not establish the required drive belt tension between the return fan and motor prior to returning the train to service. As part of their immediate corrective actions, the licensee counseled involved personnel regarding procedure adherence expectations. The finding affected the cross-cutting area of Human Performance because licensee personnel failed to adhere to maintenance procedures affecting safety-related equipment.

The finding was more than minor because the failure to adhere to procedures associated with the maintenance of safety-related equipment, if left uncorrected, could become a more significant safety concern. In this case, a previous failure to adhere to procedures associated with this fan motor contributed to the failure of the “B” Motor Control Center Switchgear and Miscellaneous Electrical Equipment Ventilation train that resulted in a fire and an Alert emergency declaration on February 11, 2006. Because the Motor Control Center Switchgear and Miscellaneous Electrical Equipment Ventilation system was a support system, the finding was not suitable for Significance Determination Process review. Following management review, the finding was determined to be of very low safety significance because only one train of the Motor Control Center Switchgear and Miscellaneous Electrical Equipment Ventilation system was affected.
Inspection Report# : 2006002*(pdf)*

Significance: G Mar 23, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
ADS and MSIV Air Accumulators Stress Analysis Deficiencies
The inspectors identified a Non-Cited Violation (NCV) of 10 CFR Part 50, Appendix B, Criterion III, “Design Control,” having very low safety significance (Green) involving an inadequate stress analysis performed for the automatic depressurization system (ADS) air accumulators. Specifically, the licensee failed to account for all the related stresses in the ADS accumulator stress analysis calculation. Inclusion of these additional stresses resulted in a higher stress than allowed by the American Society of Mechanical Engineers Code. Additionally, the accumulators’ certification of design, as required by the Code, Section III, did not include the maximum design pressure, which resulted in the accumulators being non-conforming.

The finding was more than minor because the failure to adequately evaluate the design requirements of the accumulators could have led to structural failure of the tanks, which would have prevented the ADS valves from functioning as designed and could have affected the mitigating systems cornerstone objective of design control. The finding was of very low safety significance based on the results of the licensee's analysis and screened as Green using the SDP Phase 1 screening worksheet.
Inspection Report# : 2006009*(pdf)*

Significance: G Mar 23, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
Non-conservative Safety-Related Air Storage Tank Sizing Calculation
The inspectors identified a Non-Cited Violation (NCV) of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," having very low safety significance (Green) involving the sizing of the main steam isolation valve and automatic depressurization system (ADS) air storage tank. The inspectors identified that the licensee failed to correctly specify in a design calculation the required minimum differential air pressure required to actuate the ADS valves when manually operated. This resulted in a safety-related air system calculation that was non-conservative when determining the long-term air volume requirements in the air storage tank. The licensee's corrective actions included verifying that adequate design margin existed for the air tank capacity and entered this performance deficiency into their corrective action program for resolution.

The finding was more than minor because the failure to adequately evaluate air storage tank sizing could result in over-predicting the tank's capacity as verified by the surveillance test's acceptance criteria (i.e., creating design margin capability that would not exist) and could have affected the mitigating systems cornerstone objective of design control. The finding was of very low safety significance based on the results of the licensee's analysis and screened as Green using the SDP Phase 1 screening worksheet.
Inspection Report# : 2006009*(pdf)*

Significance: G Mar 23, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Procedures for Controlling Flow into Reactor Vessel
The inspectors identified a Non-Cited Violation of Technical Specification Requirement 5.4.1, which requires, in part, that written procedures/instructions be established, implemented, and maintained covering the emergency operating procedures required to implement the requirements of NUREG-0737 and NUREG-0737, Supplement 1. The anticipated transient without scram (ATWS) special plant instructions issued to provide for injection outside the shroud were inadequate because the procedures inappropriately limited the ability to control reactor water level (or reactor pressure if reactor water level is unknown). The licensee entered this performance deficiency into their corrective action program for resolution.

This finding was more than minor because the procedure deficiency affected the ability of the licensee to use the low pressure coolant injection sub-systems to prevent undesirable consequences of large power excursions associated with an ATWS, and was associated with the mitigating systems procedure quality attribute of the mitigating systems cornerstone objective. The finding was of very low safety significance because no actual initiating event or transient occurred and screened as Green using the SDP Phase 1 screening worksheet.
Inspection Report# : 2006009*(pdf)*

Significance: G Mar 17, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO PERFORM REQUIRED STEPS PRESCRIBED BY PROCEDURE GEI-0009
A finding of very low safety significance and an associated non-cited violation of Technical Specification 5.4,"Procedures," was identified on January 19, 2006, when the inspectors identified during a safety-related breaker maintenance activity, that licensee personnel failed to perform required steps in procedure GEI-0009, "ABB Low Voltage Power Circuit Breaker Types K-600 & K-600S Through K-3000 & K-3000S Maintenance." Specifically, licensee personnel failed to perform required minimum operating voltage testing on the safety-related EF1A05 breaker that provided power to Division 1 Motor Control Center (MCC), Switchgear (SWGR), and Battery Room Supply Fan A. The primary cause of this finding was related to the cross-cutting area of Human Performance because licensee personnel failed to adhere to a step-by-step procedure associated with safety-related equipment. As part of the licensee's corrective actions, an extent of condition review was conducted, which determined that no additional safety-related breakers were affected.

The inspectors concluded that the finding was more than minor in accordance with example 4.l in IMC 0612, Appendix E, "Examples of Minor Issues," since the subject breaker was subsequently determined to be out of specification. This issue was also 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 of very low safety significance because: (1) it did not represent an actual loss of safety function of a system; (2) it did not represent an actual loss of safety function of a single train for greater than its Technical Specification allowed outage time; (3) it did not represent an actual loss of safety function of one or more non-Technical Specification trains of equipment designated as risk-significant per 10 CFR 50.65 for greater than 24 hours; and (4) it did not screen as potentially risk significant due to a seismic, fire, flooding, or severe weather initiating event.
Inspection Report# : 2006007*(pdf)*

Significance: G Mar 17, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO PERFORM REQUIRED STEPS PRESCRIBED BY PROCEDURE ICI-B12-0001
A finding of very low safety significance and an associated non-cited violation of Technical Specification 5.4, "Procedures," was identified on January 10, 2006, when the inspectors observed during a calibration check of a Division III Emergency Diesel Generator (EDG) Exhaust Air Damper, that licensee personnel failed to perform required steps prescribed by procedure ICI-B12-0001, "ITT NH90 Series Milliampere Proportional/On-Off Hydramotor Actuator Calibration." The primary cause of this finding was related to the cross-cutting area of Human Performance because licensee personnel failed to adhere to a step-by-step procedure associated with safety-related equipment. As part of their corrective actions, licensee personnel revised ICI-B12-0001 to clarify the requirements of the procedure.

This finding was 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 was of very low safety significance because: (1) it did not represent an actual loss of safety function of a system; (2) it did not represent an actual loss of safety function of a single train for greater than its Technical Specification allowed outage time; (3) it did not represent an actual loss of safety function of one or more non-Technical Specification trains of equipment designated as risk-significant per 10 CFR 50.65 for greater than 24 hours; and (4) it did not screen as potentially risk significant due to a seismic, fire, flooding, or severe weather initiating event.
Inspection Report# : 2006007*(pdf)*

Significance: G Dec 30, 2005
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
INADEQUATE FUEL OIL PUMP PROCEDURES RESULTED IN DIVISION 2 EDG UNABAILABILITY
A finding of very low safety significance and an associated non-cited violation of Technical Specification 5.4, "Procedures," was self-revealed during Division 2 Emergency Diesel Generator (EDG) post-maintenance testing on September 15, 2005, when the engine-driven fuel oil pump was discovered air bound after licensee personnel failed to implement appropriate procedures for the fill and vent of the pump suction and discharge lines following pump maintenance activities. As a result of operating the pump for about 40 minutes without proper fuel oil flow, the engine-driven fuel oil pump required replacement, which extended the Division 2 EDG maintenance outage by about 24 hours and incurred about 15 hours of unnecessary unavailability. As part of their corrective actions, the licensee removed the EDG from service, replaced the engine-driven fuel oil pump, and successfully re-tested the EDG on September 16, 2005. The primary cause of this finding was related to the cross-cutting area of Human Performance since licensee personnel failed to develop an appropriate fill and vent procedure for the engine-driven fuel oil pump.

This finding was more than minor because it was associated with the Mitigating Systems 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 was of very low safety significance because: (1) it did not represent an actual loss of safety function of a system; (2) it did not represent an actual loss of safety function of a single train for greater than its Technical Specification allowed outage time; (3) it did not represent an actual loss of safety function of one or more non-Technical Specification trains of equipment designated as risk-significant per 10 CFR 50.65 for greater than 24 hours; and (4) it did not screen as potentially risk significant due to a seismic, fire, flooding, or severe weather initiating event.

Inspection Report# : 2005010*(pdf)*

Significance: G Dec 30, 2005
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
INADEQUATE OIL RESERVOIR MAINTENANCE PROCEDURE IMPLEMENTATION FOR ECC 'B' PUMP RESULTED IN OIL LEAK
A finding of very low safety significance and an associated non-cited violation of Technical Specification 5.4, "Procedures," was self-revealed on October 30, 2005, when licensee personnel failed to develop an appropriate procedure for the replacement of the 'B' Emergency Closed Cooling (ECC) pump oil bearing reservoir, which resulted in an oil leak and unnecessary pump unavailability. As part of their corrective actions, licensee personnel completed repairs to the pump on November 1, 2005, which included establishing a correct reservoir height and performing post-maintenance testing with satisfactory results. The primary cause of this finding was related to the cross-cutting area of Human Performance because licensee personnel failed to develop appropriate oil reservoir maintenance procedures.

This finding was more than minor because it was associated with the Mitigating Systems 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 was of very low safety significance because: (1) it did not represent an actual loss of safety function of a system; (2) it did not represent an actual loss of safety function of a single train for greater than its Technical Specification allowed outage time; (3) it did not represent an actual loss of safety function of one or more non-Technical Specification trains of equipment designated as risk-significant per 10 CFR 50.65 for greater than 24 hours; and (4) it did not screen as potentially risk significant due to a seismic, fire, flooding, or severe weather initiating event.

Inspection Report# : 2005010*(pdf)*

Significance: G Dec 30, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO CORRECT AN OIL RESERVOIR MAINTENANCE PROCEDURE ISSUE RESULTED IN ECC 'A' OIL LEAK
A finding of very low safety significance and an associated non-cited violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," was self-revealed on November 19, 2005, when licensee personnel failed to promptly correct a condition adverse to quality associated with the development of appropriate procedures for oil reservoir replacement, which resulted in an oil leak on the 'A' ECC pump, incurring unnecessary pump unavailability. As part of their corrective actions, licensee personnel completed repairs to the pump on November 29, 2005, which included establishing a correct reservoir height and performing post-maintenance testing with satisfactory results. The primary cause of this finding was related to the cross-cutting area of Problem Identification and Resolution because licensee personnel failed to correct an inadequate oil reservoir maintenance procedure in a timely manner.

This finding was more than minor because it was associated with the Mitigating Systems 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 was of very low safety significance because: (1) it did not represent an actual loss of safety function of a system; (2) it did not represent an actual loss of safety function of a single train for greater than its Technical Specification allowed outage time; (3) it did not represent an actual loss of safety function of one or more non-Technical Specification trains of equipment designated as risk-significant per 10 CFR 50.65 for greater than 24 hours; and (4) it did not screen as potentially risk significant due to a seismic, fire, flooding, or severe weather initiating event.

Inspection Report# : 2005010*(pdf)*

Significance: G Oct 28, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO PROMPTLY CORRECT ONLINE WORK MANAGEMENT PRACTICES THAT RESULTED IN UNNECESSARILY HIGH SAFETY SYSTEM UNAVAILABILITY
The inspector 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 licensee personnel failed to correct a condition adverse to quality. Specifically, the licensee failed to correct a condition of inadequate online maintenance management that adversely affected safety system availability. In the second quarter of 2000, the heat removal system unavailability performance indicator crossed the Green-to-White threshold due to inadequate online work management, which led to high safety system unavailability. Between the years 2000 and 2004, the licensee identified on several occasions that safety system unavailability was higher than the industry average and that the station lacked an adequate process to balance online maintenance with safety system unavailability. Additionally, poor work management processes were noted to unnecessarily extend maintenance activities and adversely affect safety system availability. In the second quarter of 2004, the residual heat removal safety system unavailability performance indicator crossed the Green-to-White threshold. The licensee again identified that inadequate online maintenance management and generally higher than industry average safety system unavailability were primary contributing causes. Licensee corrective actions included management of safety system unavailability to 50 percent of the NRC Green-to-White threshold and work management improvements. The primary cause of this finding was related to the cross-cutting area of Problem Identification and Resolution, subcategory corrective action, since a condition adverse to quality was not corrected in a timely manner.

The finding was more than minor because it was associated with the equipment performance attribute of the reactor safety 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. Specifically, from 2000 to 2004, the failure to promptly correct the condition of inadequate management of online work adversely affected safety system availability. The inspector determined that the finding was of very low safety significance because: (1) it did not represent an actual loss of safety function of a system; (2) it did not represent an actual loss of safety function of a single train for greater than its Technical Specification allowed outage time; (3) it did not represent an actual loss of safety function of one or more non-Technical Specification trains of equipment designated as risk significant per 10 CFR 50.65 for greater than 24 hours; and (4) it did not screen as potentially risk significant due to a seismic, fire, flooding, or severe weather initiating event.

Inspection Report# : 2005012*(pdf)*

Significance: G Sep 30, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO CORRECT BORON LEAKAGE FROM THE STANDBY LIQUID CONTROL STORAGE TANK HEATER FLANGE
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 licensee personnel failed to correct a condition adverse to quality in a timely manner. Specifically, licensee personnel identified and documented on seven occasions from June 2002 through February 2005, boron accumulation on the standby liquid control system storage tank heater flange. In each instance the issue was identified as a "condition adverse to quality." The inspectors identified additional documentation of leakage and boron accumulation in the flange area dating back to April 28, 1997. As of July 29, 2005, the condition adverse to quality had not been corrected. The licensee entered the "untimely resolution of a condition adverse to quality" into their corrective action program and confirmed for the inspectors that the issue was included in the next planned refueling outage for resolution.

The finding was more than minor because, if left uncorrected, the finding would become a more significant safety concern. Specifically, the failure to repair the degraded flange connection allowed a condition to exist that could lead to increased leakage or premature failure of the connection. Further, as noted on multiple licensee condition reports, the leakage had on occasion migrated to other levels of containment which if left uncorrected could result in other adverse consequences. The inspectors determined that the finding (1) did not involve a loss of safety function and (2) did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. The inspectors therefore concluded that the finding was of very low safety significance. The primary cause of this finding was related to the cross-cutting area of Problem Identification and Resolution, subcategory corrective action, in that the condition adverse to quality was not corrected in a timely manner.

Inspection Report# : 2005009*(pdf)*

Significance: G Sep 30, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO EVALUATE INTERFERENCE WITH THE DESIGN RATTLE SPACE BETWEEN SAFETY CLASS BUILDINGS
The inspectors identified a finding of very low safety significance and a non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," when licensee personnel failed to control deviations from design standards. On July 22, 2005, while performing a fire protection inspection in the intermediate building, the inspectors noted that a large storage cage (approximately 900 square feet in area and 10 feet high) was constructed in such a way that it interfered with the design rattle space between the containment shield building and the intermediate building column supports at several locations. The steel used to brace the cage directly communicated the containment shield building to the columns that supported the intermediate building. The inspectors reported the observation to the licensee and the licensee corrected the condition the same day. The primary cause of this finding was the failure to properly control deviations from design standards. The design seismic analysis of the building structures credited the rattle space in lieu of further analysis of the interaction between building structures; therefore, the interference of this space was not consistent with the design basis.

The finding was more than minor because it was associated with the mitigating system cornerstone attribute of design control and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences in that it placed safety-related building structures in an unanalyzed condition. The inspectors determined that the safety functions of the buildings were maintained and therefore concluded that the finding was of very low safety significance.

Inspection Report# : 2005009*(pdf)*

Significance: G Sep 30, 2005
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
FAILURE TO IMPLEMENT PROCEDURES TO ENSURE SATISFACTORY MAINTENANCE ON THE RHR CONTAINMENT SPRAY ISOLATION VALVE
A finding of very low safety significance and a non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was self-revealed when residual heat removal containment spray isolation valve 1E12F028B failed to indicate open in the control room as expected during quarterly surveillance testing on June 25, 2005 due to inadequate maintenance. Operators declared the valve inoperable and isolated the associated penetration flow path for the valve in accordance with Technical Specification 3.6.1.3. This resulted in the unavailability of residual heat removal 'B' low pressure core injection and containment spray modes of operation. Subsequent visual inspection and electrical checks by licensee technicians revealed inadequate electrical connections in the electrical panel associated with the valve. The connections were repaired and the availability of residual heat removal 'B' low pressure core injection and containment spray was restored. The primary cause of this finding was the failure to promptly identify and correct conditions adverse to quality during maintenance associated with the valve actuator motor replacement that was performed in March 2005.

The finding was more than minor because it was associated with the reactor safety mitigating systems cornerstone attribute of equipment performance, and it affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable events. Specifically, the failure to identify the inadequate electrical connections following maintenance in the panel subsequently resulted in a failed control room indication on June 25, 2005, which caused operators to isolate the associated penetration flow path for the valve. This resulted in the unavailability of the residual heat removal 'B' low pressure core injection and containment spray modes of operation for about nine hours. The inspectors determined that the finding was of very low safety significance because the equipment safety function was not lost for greater than the Technical Specification allowed outage time. The primary cause of this finding was associated with the cross-cutting area of Problem Identification and Resolution, subcategory identification, in that improperly fastened electrical connections affecting a safety-related valve were not promptly identified.
Inspection Report# : 2005009*(pdf)*

Significance: G Sep 30, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO IMPLEMENT PROCEDURES TO ENSURE PROPER REASSEMBLY OF DIVISION 1 ESW PUMP
A finding of very low safety significance and a non-cited violation of Technical Specification 5.4, "Procedures," was self-revealed on March 2, 2005, during disassembly of the Division 1 emergency service water pump. Specifically, the licensee failed to provide adequate guidance in General Maintenance Instruction 0039, "Disassembly/Assembly of the Emergency Service Water Pumps," Revision 8, to ensure that the lineshaft sleeve

spirol pins were adequately staked during pump assembly in May 2004. Due to the improper assembly, the pump's lineshaft sleeve spirol pins were found, in March 2005, to be extruded and sheared. Fortuitously, the pins galled to the shaft and the lineshaft sleeve remained in place. As a result, no actual loss of safety function occurred. The licensee's corrective actions included a procedure revision and subsequent pump repair.

The finding was more than minor because, if left uncorrected, the failure to implement appropriate procedures for safety-related pump maintenance activities could reasonably be viewed as a precursor for a more significant event as evidenced by two previous Division I emergency service water pump failures in September 2003 and May 2004. The inspectors determined that the finding was of very low safety significance because there was no loss of safety function. The finding affected the cross-cutting area of Human Performance, subcategory organization, because licensee personnel failed to establish appropriate procedures.
Inspection Report# : 2005009*(pdf)*

Significance: W Dec 31, 2003
Identified By: NRC
Item Type: VIO Violation
INADEQUATE LPCS/RHR 'A' FILL AND VENT PROCEDURES RESULTS IN SYSTEM INOPERABILITY AFTER LOSS OF OFFSITE POWER
An apparent self-revealed violation of Technical Specification 5.4 occurred when the waterleg pump for low pressure core spray (LPCS) and residual heat removal (RHR) 'A' became air bound following a loss of offsite power. Subsequent investigation revealed that the procedures for venting these systems did not include the high point vent valve on the discharge of the pump, thus allowing gas to accumulate in a vertical section of system piping. When the waterleg pump lost power on August 14, 2003, the accumulated gas expanded and caused voiding of the pump. As a result, both LPCS and RHR 'A' were rendered inoperable.

The NRC assessed this finding through Phase 3 of the Significance Determination Process and made a preliminary determination that it is an issue with low to moderate safety significance.

After considering the information developed during the inspection, the NRC has concluded that the inspection finding is appropriately characterized as White (i.e., an issue with low to moderate increased importance to safety) and a final Significance Determination Process letter was issued on March 12, 2004, and will be inspected within the scope of a supplemental 95002 inspection in May 2004.

Inspection Report# : 2004006*(pdf)*
Inspection Report# : 2005003*(pdf)*

Significance: W Sep 30, 2003
Identified By: NRC
Item Type: VIO Violation
IMPROPER MAINTENANCE CAUSES EMERGENCY SERVICE WATER PUMP FAILURE
A self-revealed apparent violation of Technical Specification (TS) 5.4 occurred when the Division 1 emergency service water (ESW) pump failed during routine pump operation. The licensee rebuilt the pump in 1997 and during this reassembly, failed to properly reassemble the pump shaft connections. The improper reassembly led to pump failure on September 1, 2003.

The NRC assessed this finding through Phase 3 of the Significance Determination Process and made a preliminary determination that it is an issue with low to moderate safety significance. On January 28, 2004, a final significance determination letter was issued which characterized this issue as white.
Inspection Report# : 2004005*(pdf)*
Inspection Report# : 2005003*(pdf)*

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Significance: G Sep 30, 2005

Identified By: Self-Revealing
Item Type: NCV NonCited Violation
CONTRACTORS IN HIGH RADIATION AREA WITHOUT REQUIRED PERMIT
A finding of very low safety significance and a non-cited violation of Technical Specification 5.7.1 was self-revealed when, in two separate instances, contractor radiation workers were found inside posted high radiation areas without being signed on the appropriate radiation work permits for these areas. Specifically, in the first instance, on January 10, 2005, a contractor supervisor was observed inside a posted high radiation area/contaminated area without the required protective clothing. The individual was determined to be signed on a low risk radiation work permit for heater bay work. The individual did not receive the required high radiation area briefing for the turbine condenser bay area (a posted high radiation area) and was not signed on the required higher risk radiation work permit. In the second instance, on March 8, 2005, a radiation protection technician discovered two contractor radiation workers, that were signed on a low risk radiation work permit for work in the turbine heater bay, in a high radiation area and had not received the required high radiation area briefing for the residual heat removal heat exchanger room. The workers failed to sign off of the low risk radiation work permit and to sign on to the medium risk radiation work permit and did not obtain a radiation protection brief prior to entry into this room. Corrective actions taken by the licensee included restricting the individuals from the radiologically restricted area.

The finding was more than minor because the finding was associated with the human performance 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 finding was of very low safety significance because it did not involve: (1) as low as is reasonably achievable planning or controls, (2) an overexposure, (3) a substantial potential for an overexposure, or (4) an impaired ability to assess dose. The primary cause of this finding was related to the cross-cutting area of Human Performance, subcategory personnel, in that the individuals failed to follow licensee procedures.

Inspection Report# : 2005009*(pdf)*

Significance:  Sep 30, 2005
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
ENTRY INTO A LOCKED HIGH RADIATION AREA WITHOUT REQUIRED RADIATION PROTECTION BRIEFING
A finding of very low safety significance and a non-cited violation of Technical Specification 5.7.2 was self-revealed on March 31, 2005, when an operator working on a radiation work permit that did not permit entry into a locked high radiation area entered a posted locked high radiation area without having received the required radiation protection brief. The individual was tasked with performing a valve lineup on the N71 valve system in the turbine building catacombs. The N71 valve was located above a permanent valve platform that was posted and controlled as a locked high radiation area. Adjacent to the platform was scaffolding which provided access to a condenser man-way. The proximity of the scaffolding made it possible to access the permanent platform from the scaffolding platform. The individual ascended the scaffold to its platform, and while crossing to the permanent platform, was able to perform the required valve observation. After completing the task he stepped onto the permanent valve platform and noted a locked high radiation area posting. He exited the permanent platform via the temporary scaffolding that he originally used to access the area. Corrective actions taken by the licensee included restricting the individual from the radiologically restricted area for several days, counseling and coaching by radiation protection and operations management, and the individual prepared a job briefing sheet for co-workers.

The finding was more than minor because the finding was associated with the human performance 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 finding was of very low safety significance because it did not involve: (1) as low as is reasonably achievable planning or controls, (2) an overexposure, (3) a substantial potential for an overexposure, or (4) an impaired ability to assess dose. The primary cause of this finding was related to the cross-cutting area of Human Performance, subcategory personnel, in that the individual failed to follow licensee procedures.

Inspection Report# : 2005009*(pdf)*

Public Radiation Safety

Physical Protection

Physical Protection information not publicly available.

Miscellaneous

Last modified : August 25, 2006