D.C. Cook 2

Initiating Events

Significance: Jun 19, 2002
Identified By: NRC
Item Type: FIN Finding
Failure to Perform Switchyard Current Transformer Preventive Maintenance in Accordance with Vendor Recommendations
The inspectors identified a finding of very low safety significance for the failure to perform preventive maintenance on 345 kV switchyard current transformers in accordance e with vendor recommended schedules without adequate justification for the deviations. Specifically, the licensee tested 345 kV current transformers less frequently than recommended by the vendor and did not perform several recommended tests. The inspectors determined that this finding did not constitute a violation of NRC requirements. The inspectors concluded that testing switchyard equipment less frequently than recommended by the vendor credibly affected the objective of the initiating events cornerstone of reactor safety. Performance of preventive maintenance testing that was less conservative than vendor recommendations could result in the failure to detect and repair component degradation, which could increase the likelihood of component failures. Consequently, the inspectors concluded that this issue could increase the loss of offsite power events and limit the ability of the licensee to mitigate power grid instability events. However, due to the availability of redundant power supplies to safety-related equipment, the inspectors determined that this issue was of very low safety significance.
Inspection Report# : 2002007*(pdf)*

Mitigating Systems

Significance: Jun 30, 2002
Identified By: Self Disclosing
Item Type: NCV NonCited Violation
Failure to Provide Work Instructions Appropriate to the Circumstances for Adjustment of Stem Lock Nut on 2-CS-369
A Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for maintenance procedures inappropriate to the circumstances, was self-revealed following gas binding of the Unit 2 West centrifugal charging pump. On February 16, 2002, the running charging pump became gas bound following attempts to switch the suction source from the volume control tank to the refueling water storage tank. Follow-up investigation revealed that valve 2-CS-369 (reactor coolant pump seal water heat exchanger to volume control tank shutoff valve) was partially open, allowing transfer of volume control tank cover gas directly to the suction of the Unit 2 charging pumps. The licensee later determined that the position of the 2-CS-369 stem stop nut prevented full closure of the valve. Approximately two weeks prior to this event, the licensee replaced the diaphragm in 2-CS-369 using instructions provided in maintenance procedure 12 MHP-5021-001-023. However, the instructions contained in 12 MHP-5021-001-023 were inconsistent with vendor recommendations for stem stop nut adjustment and contributed to the failure to maintain proper positioning of the stem stop nut. The inspectors determined that the failure to provide procedures appropriate to the circumstances for the adjustment of the 2-CS-369 stem stop nut was a violation of NRC

requirements. The inspectors assessed this finding using the Significance Determination Process (SDP). The inspectors concluded that this issue had a credible impact on safety and was therefore more than a minor concern. In particular, the gas intrusion into the suction of the running Unit 2 West centrifugal charging pump while aligned to the refueling water storage tank, a potential common cause failure mechanism for both of the Unit 2 charging pumps, impacted the capability of the high head injection system to provide the inventory and reactivity control safety functions. Therefore, the inspectors determined that this issue was associated with the mitigating systems cornerstone. During the Phase 1 SDP review, the inspectors concluded that this issue degraded the licensee's ability to add inventory to the reactor coolant system and therefore a Phase 2 SDP analysis was required. The Phase 2 shutdown risk SDP analysis, performed with the assistance of the Region III Senior Reactor Analyst and headquarters probabilistic risk assessment staff, determined that the total change in Core Damage Frequency associated with this condition was estimated to be approximately 3E-7 per year. The risk analysts reviewed several shutdown accident scenarios and determined that drain down to mid-loop operation after refueling to support vacuum refill of the reactor coolant system was the most limiting scenario. Based on the overall change in Core Damage Frequency, this issue was determined to be of very low safety significance.
Inspection Report# : 2002003*(pdf)*

Significance: G May 17, 2002
Identified By: NRC
Item Type: NCV NonCited Violation
Human Performance Weakness During the Degraded Essential Service Water Event of August 29, 2001 Associated with Control Board Monitoring and Procedural Adherence
The inspectors identified a Non-Cited Violation of Technical Specification (TS) 6.8.1 associated with operator procedural adherence deficiencies during the degraded essential service water event of August 29, 2001. Specifically, the operators failed to (1) effectively monitor the control boards for changing indications, adverse trends, and abnormal indications, (2) effectively communicate receipt of an abnormal temperature alarm for the component cooling water (CCW) heat exchanger, and (3) enter the CCW abnormal operating procedure as directed by the abnormal temperature alarm response procedure. The inspectors determined that the failure to adequately implement procedures associated with control board monitoring, logkeeping, and annunciator response had a credible impact on safety and therefore were more than a minor concern. Specifically, these issues could reasonably result in the failure to identify and promptly correct degradation of safety related equipment and therefore impact the reliability and availability of a safety system. Because these performance deficiencies contributed to delays in identifying degradation of the ESW and CCW mitigating systems, the inspectors determined that these human performance weaknesses were associated with the mitigating systems cornerstone. Although this issue adversely impacted the licensee's response to the August 29, 2001 event, none of the performance deficiencies directly resulted in the actual loss of safety system function or the loss of a single safety system train for greater than its TS allowed outage time. Consequently, the inspectors concluded that this issue was of very low safety significance.
Inspection Report# : 2001017*(pdf)*

Significance: TBD May 17, 2002
Identified By: NRC
Item Type: AV Apparent Violation
Essential Service Water Strainer Maintenance Instructions Not Appropriate to the Circumstances
Documented instructions for essential service water (ESW) pump discharge strainer maintenance did not contain adequate detail regarding critical parameters for basket installation. Consequently, faulty strainer basket installation practices contributed to the failure of an ESW pump discharge strainer basket and created the potential for debris to bypass the strainer and enter the ESW system. On August 29, 2001, the failed Unit 1 East ESW pump discharge strainer, in conjunction with the ESW system alignment with all normal and alternate diesel generator (D/G) ESW supply valves open, caused significant debris fouling of the D/G heat exchangers. While operator actions prevented the debris fouling from causing a complete loss of the D/Gs ability to perform their emergency AC power safety function,

the potential for a complete loss of all emergency AC power during a loss of offsite power was determined to exist. This finding was assessed using the applicable SDP as a potentially safety significant finding that was preliminarily determined to be of substantial safety significance.
Inspection Report# : 2001017*(pdf)*

Significance: G Apr 23, 2002
Identified By: NRC
Item Type: FIN Finding
Failure to Consistently Identify a Reasonable Apparent Cause for Conditions Adverse to Quality
The inspectors identified a Green finding for the failure to consistently identify reasonable apparent causes for conditions adverse to quality. The inspectors determined that the failure to consistently identify reasonable apparent causes for conditions adverse to quality could have had a credible impact on safety by affecting the availability, reliability, operability or functionality of mitigating equipment. This inspector identified finding was determined to be of very low safety significance because the finding: (1) was not a design or qualification deficiency; (2) did not result in a loss of function of a single train of any mitigating systems for greater than its Technical Specification allowed outage time and did not represent an actual loss of the safety function for any mitigating system; (3) 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; (4) did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event in that the finding did not involve the loss or degradation of equipment or function specifically designed to mitigate a seismic, flooding or severe weather initiating event; and (5) did not involve the loss of a safety function that contributed to external event initiated core damage accident sequences.
Inspection Report# : 2002004*(pdf)*

Significance: G Apr 23, 2002
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Take Prompt Corrective Action to Address Abnormal Degradation of the Safety-Related 250 Vdc Battery 2AB
The inspectors identified a Green finding that is being treated as a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Actions," for the failure to take prompt action to address abnormal deterioration of the safety-related 250 Vdc Battery 2AB. This finding was determined to be of very low safety significance because the finding: (1) was not a design or qualification deficiency; (2) did not result in a loss of function of a single train of a mitigating system for greater than its Technical Specification allowed outage time and did not represent an actual loss of safety function because the cracked cell covers and subsequent replacement activities did not render the 2AB battery incapable of supporting emergency electrical loads; (3) did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event in that the finding did not involve the loss or degradation of equipment or function specifically designed to mitigate a seismic, flooding or severe weather initiating event; and (4) did not involve the loss of a safety function that contributed to external event initiated core damage accident sequences.
Inspection Report# : 2002004*(pdf)*

Significance: W Mar 31, 2002
Identified By: NRC
Item Type: VIO Violation
Failure to Take Prompt Corrective Action to Prevent Repetitive Failure of the Unit 2 Turbine Driven Auxiliary Feedwater Pump
A Violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Actions," was identified for the licensee's failure to take prompt corrective actions to prevent a repetitive failure of the Unit 2 turbine driven auxiliary feedwater pump

(TDAFWP). Specifically, the Unit 2 TDAFWP failed to start on August 10, 2001, due to the failure of the trip throttle valve latch mechanism to remain engaged during pump start. On December 13, 2001, the licensee obtained information from the trip throttle valve vendor identifying critical parameters for the trip hook mechanism geometry and alignment and failed to promptly perform corrective actions to verify that the Unit 2 TDAFWP trip hook conformed to these critical parameters. Consequently, a second failure of the Unit 2 TDAFWP occurred on January 18, 2002, due to the failure of the trip throttle valve latch mechanism to remain engaged during pump start. The inspectors and Region III Senior Reactor Analysts assessed this finding using the Significance Determination Process (SDP). A Phase 3 SDP analysis was performed using insights from the licensee's updated Probabilistic Risk Assessment model. Based on the results of the Phase 3 SDP analysis, the NRC staff determined that this finding has a low to moderate safety significance because the resultant 80 day fault exposure time represented an actual loss of safety function for a single train of auxiliary feedwater for greater than its Technical Specification allowed outage time and the train would have been unavailable if called upon for actual mitigation purposes. Final Significance Determination for a White Finding and Notice of Violation Letter issued on May 6, 2002, EA-02-010. SUPPLEMENTAL INSPECTION SUMMARY - INSPECTION REPORT 200202-05 This supplemental inspection was performed to assess the licensee's evaluation of a White inspection finding that resulted from the licensee's failure to take appropriate corrective actions to prevent the repetitive failure of the Unit 2 TDAFWP. The pump failures were due to the unlatching of the TDAFWP trip throttle valve caused by incorrect machining of the trip throttle valve trip hook. During this supplemental inspection, performed in accordance with NRC Inspection Procedure 95001, the inspector concluded that the licensee performed a thorough root cause evaluation of the pump failures and identified the root cause and contributing cause for the events. The licensee's corrective actions were reasonable and appropriately addressed the causes and the extent of condition of the pump failures. However, the inspector concluded that the licensee's apparent cause evaluation, which was supposed to address the cause for the corrective action violation itself, did not adequately address why the licensee failed to take appropriate corrective actions to prevent a repetitive failure of the Unit 2 TDAFWP in January 2002. In response to the inspector's questions, the licensee re-opened the evaluation and provided reasonable corrective actions. Given the licensee's acceptable performance in addressing the repetitive TDAFWP failures, the White finding associated with this issue will only be considered in assessing plant performance for a total of four quarters in accordance with the guidance in NRC Inspection Manual Chapter 0305, "Operating Reactor Assessment Program."
Inspection Report# : 2002002*(pdf)*
Inspection Report# : 2002005*(pdf)*

Significance: G Mar 31, 2002
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Use Valid Acceptance Criteria for Stroke Time Testing the Unit 2 Pressurizer Power Operated Relief Valves
A Non-Cited Violation of 10 CFR 50, Appendix B, Criterion XI, "Test Control," was identified for the licensee's failure to utilize valid acceptance criteria for stroke time testing the Unit 2 pressurizer power operated relief valves (PORVs). Specifically, the licensee failed to assure that the correct acceptance criteria contained in the applicable design document were incorporated into the surveillance test procedure used for testing the PORVs. The inspectors assessed this finding using the Significance Determination Process (SDP). The inspectors determined that this issue could become a more significant safety concern if left uncorrected and was therefore more than a minor concern. Specifically, the failure to adequately perform surveillance testing with valid acceptance criteria could reasonably result in the failure to identify degraded or inoperable safety related components. The inspectors also concluded that this issue could credibly affect the operability of the pressurizer PORVs, which are mitigating system components under the SDP. The inspectors determined that, because the as-found stroke times were found within the correct acceptance criteria, this issue was of very low safety significance.
Inspection Report# : 2002002*(pdf)*

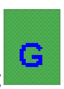
Significance: G Feb 28, 2002
Identified By: Self Disclosing
Item Type: NCV NonCited Violation
Failure to Assess the Risk Associated with Maintenance Activities Affecting both Unit 2 Safety Injection System Pumps
A Non-Cited Violation of 10 CFR 50.65(a)(4) was identified for the licensee's failure to assess the risk associated with maintenance activities affecting both Unit 2 safety injection (SI) system pumps. Operators deviated from the licensee's outage schedule and prematurely vented and drained both Unit 2 SI system pumps without assessing the increase in shutdown risk during a period of reduced reactor coolant system (RCS) inventory. This resulted in the inadvertent entry into a higher shutdown risk configuration, for which the licensee had not implemented additional risk management actions to protect available equipment and to maintain an adequate level of defense as required by the licensee's plant shutdown safety and risk management procedure. The inspectors assessed this finding using the Significance Determination Process. The inspectors concluded that this issue had a credible impact on safety because the SI pumps were made unavailable for core cooling in the event of a loss of RCS inventory. At the time, Unit 2 was in Mode 5 (Cold Shutdown) with the RCS loops not filled and vented, and only one of the two Unit 2 centrifugal charging pumps was available. The inspectors reviewed the guidance in Inspection Manual Chapter 0609, Appendix G, "Shutdown Operations Significance Determination Process," including the checklist for "Pressurized Water Reactor Cold Shutdown and Refueling Operation - Reactor Coolant System Closed and No Inventory in Pressurizer." Although having both SI pumps unavailable degraded the licensee's ability to add inventory to the RCS, the inspectors determined that sufficient plant equipment existed to keep the core covered because the capability existed for operators to cross-tie the Unit 1 and Unit 2 charging systems to make an additional centrifugal charging pump available. The inspectors concluded that this issue was of very low safety significance because there was no challenge to RCS inventory control during the time that the SI pumps were unavailable.
Inspection Report# : 2001020*(pdf)*

Significance: G Dec 29, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Correct a Long Standing Design Deficiency Associated with 4.16 kV Breakers Momentary Unterrupting Rating Capability
The inspectors determined that the licensee failed to address a design deficiency on the Unit 1 and the Unit 2 safety-related 4.16 kV circuit breakers in a timely manner. This design deficiency could result in exceeding the 4.16 kV circuit breaker's momentary interrupting rating capability during a 3-phase bolted fault condition. This concern was initially noted by the licensee in 1988, was identified again by the NRC during a Safety System Functional Inspection in 1990, and during an Electrical Distribution Safety Functional Inspection in 1992. The failure to properly evaluate and correct this degraded condition is a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI. The inspectors evaluated the risk significance of this issue using the Significance Determination Process. Because no actual loss of safety function occurred, the low probability of failure, and system redundancy, this issue screened as Green (very low risk significance) after a Phase 1 Significance Determination Process review.
Inspection Report# : 2001019*(pdf)*

Significance: N/A Dec 29, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Ensure That Breaker Coordination and Selective Tripping was Provided at the 4.16 kV System
No Color. The inspectors identified a Non-Cited Violation for failure to ensure that coordination and selective tripping was provided in accordance with the Safe Shutdown Capability Assessment. The current transformers for protective relaying at the 4.16 kV level were undersized and could reach saturation conditions if a bolted fault were to occur on

the associated cabling. This condition could result in inadvertent tripping of 4.16 kV circuit breakers supplying safe shutdown equipment. The failure to ensure coordination and selective tripping is a violation of the D. C. Cook Operating License Section 2.C.(4) for Unit 1 and Section 2.C.(3)(0) for Unit 2. The finding was determined to be No Color because the finding was not suitable for Significance Determination Process evaluation because it did not involve the impairment or degradation of a fire protection feature.
Inspection Report# : 2001019*(pdf)*

Significance: N/A Aug 18, 2001
Identified By: NRC
Item Type: FIN Finding
Failed to Adequately Identify and Resolve Conditons Adverse to Quality on Unit 1 West AFW and the Unit 2 Safety-Related Ventilation System
The inspectors identified that the licensee failed to adequately identify and resolve conditions adverse to quality on the Unit 1 West auxiliary feedwater system and the Unit 2 safety-related ventilation system which could have a credible impact on safety if left uncorrected. The inspectors determined that licensee performance weaknesses in the problem identification and resolution area do not impact a specific reactor safety cornerstone. However, the inspectors concluded that these additional failures to correct conditions adverse to quality provide substantive information relating to the problem identification and resolution cross-cutting area. Additionally, these issues relate to a previously identified finding regarding the licensee's failure to implement adequate corrective actions for Maintenance Rule violations (FIN 50-315/01-07-02). Because of the historical finding and the cross-cutting aspects of problem identification and resolution, the inspectors concluded that these additional corrective action program weaknesses constituted a NO-COLOR Finding.
Inspection Report# : 2001014*(pdf)*

Significance: 

Aug 18, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Correct Condition Adverse to Quality on the Unit 2 CRID Ventilation System
A Non-Cited Violation was identified for the failure to promptly correct a condition adverse to quality. Specifically, abnormal ductwork vibration on the Unit 2 Control Room Instrument Distribution (CRID) ventilation system was identified in May 1999 and compensatory actions were implemented. However, in April 2001, and on multiple occasions in July 2001, the condition recurred, requiring operator action to temporarily correct the condition. The inspectors concluded that the licensee's failure to properly correct or compensate for the abnormal ductwork vibration on the Unit 2 CRID ventilation system constituted a Non-Cited Violation of 10 CFR 50, Appendix B, Criterion XVI. The inspectors evaluated the risk significance of this issue using the Significance Determination Process. Because the Unit 2 CRID inverter room temperature never exceeded the design temperature no actual loss of safety function occurred. Consequently, this issue was screened as (very low safety significance) after a Phase 1 Significance Determination Process review.
Inspection Report# : 2001014*(pdf)*

Significance: 

May 18, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
Failure To Properly Set Relief Valves Installed In Unit 2 Motor Operated Recirculation Sump Suction Isolation Valves During A Design Change
The improperly set relief valves installed as part of a modification in two Unit 2 motor-operated valves was considered a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control." The licensee was able to show that the motor-operated valves would not have pressure locked since the installation of the modification by

demonstrating that the valve bonnets were not completely filled with water, which would preclude pressure locking. Therefore, this finding was determined to be of very low safety significance. This issue was considered more than minor, because if it was left uncorrected, it could have impacted the function of these valves to provide a source of water for the emergency core cooling pumps during the recirculation phase of a design-basis accident.
Inspection Report# : 2001005*(pdf)*

Significance: G May 12, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
Non-Convservative Acceptance Criteria Used In Seal Injection Line Resistance Surveillance Procedure
A Non-Cited violation was identified for the failure to ensure that the acceptance criteria contained in test procedures associated with the measurement of the reactor coolant seal injection line resistance adequately incorporated limitations associated with steam generator replacement and instrument uncertainty. Specifically, the licensee failed to identify that the requirements of Technical Specification 4.4.6.2.1.c were non-conservatively impacted by installation of replacement steam generators. Additionally, the test acceptance criteria did not adequately consider instrument uncertainty over the range of expected test conditions. The inspectors evaluated the risk significance of this issue using the Significance Determination Process. Based on a review of recent test data, the inspectors determined that the impact of this failure was bounded by existing margin. Therefore, this issue did not result in inoperability of the controlled leakage charging flow path. Consequently, this issue was screened as GREEN (very low risk significance) after a Phase 1 Significance Determination Process review.
Inspection Report# : 2001009*(pdf)*

Significance: N/A Apr 24, 2001
Identified By: NRC
Item Type: FIN Finding
Failure To Evaluate Whether Adjustments Were Necessary Such That There Would Be An Appropriate Balance Between Systems' Availability And Reliability In Accordance With 10 CFR 50.65 (a)(3)
NO COLOR. The inspectors identified a failure to evaluate whether adjustments were necessary such that there would be an appropriate balance between systems' availability and reliability in accordance with 10 CFR 50.65 (a)(3) of the maintenance rule. The safety significance of the specific finding was very low because it did not affect the operability of the systems, and the licensee entered the finding in the corrective action program. However, there was a regulatory concern with the maintenance rule program due to the extend the problems identified in this and previous NRC inspection reports.
Inspection Report# : 2001010*(pdf)*

Significance: G Apr 18, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
Failure To Place Unit 1 W MDAFP and TDAFP Trains In Maintenance Rule Category (a)(1)
A non-cited violation was identified for the failure to demonstrate that the performance of the auxiliary feedwater (AFW) system had been effectively controlled by the preventive maintenance program. The inspectors concluded that this was a violation of 10 CFR 50.65 (a)(2). The licensee failed to identify and properly account for maintenance preventible functional failures (MPFFs) associated with the Unit 1 West motor drive auxiliary feedwater train and one repetitive MPFF associated with the turbine driven AFW pump train. The inspectors concluded that the performance and condition of Unit 1 AFW was not being effectively controlled through the performance of appropriate preventive maintenance. The inspectors evaluated the risk significance of this issue using the Significance Determination Process. The AFW system was relied upon to support secondary heat removal following a loss of normal feedwater and therefore was within the mitigating systems cornerstone. The inspectors determined that the failure to recognize,

monitor and correct ineffective maintenance practices could adversely impact the performance of a risk significant SSC. However, the inspectors concluded that this failure did not result in a total loss of the secondary heat removal safety function due to availability of redundant AFW trains. Additionally, reliability failures that could be attributable to ineffective maintenance activities occurred during conditions not requiring secondary heat removal or were repaired within the TS allowed outage time. Therefore, this issue was screened as GREEN (very low risk significance) after a Phase 1 Significance Determination Process review. Although the risk significance of this issue was very low, the inspectors concluded that this was more than a minor concern because the failure to recognize and correct ineffective maintenance practices could result in decreased reliability and increased unavailability of the AFW system.
Inspection Report# : 2001007*(pdf)*

Significance: G Feb 16, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
Green - Failure to perform a review to verify the impact of tube plugging on the HX design differential pressure limit in a calculation for all safety related HXs
One Non-Cited Violation of 10 CFR Part 50 Appendix B, Criterion III "Design Control" was identified, for failure to perform a review to verify the impact of tube plugging on the heat exchanger design differential pressure limit in a calculation for all safety related heat exchangers. (Green) Failure to assess the impact of tube plugging on the maximum design differential pressure limit is considered more than minor, because heat exchangers could be returned to service with excessive differential pressure. Excessive differential pressure could cause internal structural component failure and loss of heat exchanger function. The safety significance of this finding was very low because only the mitigating systems cornerstone is affected and systems remained operable (1R07.b.4).
Inspection Report# : 2001004*(pdf)*

Significance: G Feb 16, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
2 Green Findings - Failure to implement actions to prevent recurrence of failed CTS HX tubes caused by microbiologically induced corrosion and the CCW HX divider plate weld cracking
One Non-Cited Violation of 10 CFR Part 50 Appendix B, Criterion XVI "Corrective Action" was identified, for failure to implement actions to prevent recurrence of; failed containment spray heat exchanger tubes caused by microbiologically induced corrosion, and cracking of the component cooling water heat exchanger divider plate welds. (Green) Lack of action to preclude continued microbiologically induced corrosion of the containment spray heat exchanger tubes was considered more than minor because it could result in tube failures, which would result in an uncontrolled release of radioactivity and loss of heat exchanger function. (Green) Lack of action to preclude recurrence of divider plate weld cracking was considered more than minor because it could lead to divider plate failure, which would render the component cooling water heat exchangers inoperable. The safety significance of these findings was very low because only the mitigating systems cornerstone is affected and systems remained operable (1R07.b.3).
Inspection Report# : 2001004*(pdf)*

Significance: G Feb 16, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
2 Green Findings - Failure to identify nonconforming conditions associated with operation of the Unit 1 east CTS HX with dented tubes and operation of the Unit 2 east CCW HX with blocked tubes.
One Non-Cited Violation of 10 CFR Part 50 Appendix B, Criterion XVI "Corrective Action" was identified, for failure to identify nonconforming conditions associated with dented tubes in the Unit 1 east containment spray heat exchanger

and blocked tubes in the Unit 2 east component cooling water heat exchanger. (Green) Failure to evaluate dented tubes in the containment spray heat exchanger was considered more than minor because flaw detection was challenged. If flaws were left in service, the flawed tubes could fail, causing an uncontrolled release of radioactivity and loss of heat exchanger function. (Green) Failure to evaluate the remaining component cooling heat exchanger capability due to blocked tubes, was considered more than minor, because blocked tubes degrade the heat exchanger's capability to remove post accident heat loads. The safety significance of these findings was very low because only the mitigating systems cornerstone is affected and systems remained operable (1R07.b.1).
Inspection Report# : 2001004*(pdf)*

Significance: G Feb 16, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
2 Green Findings - Failure to identify nonconforming conditions associated with operation in excess of the maximum design differential pressure for the Unit 2 east CCW HX and the Unit 1 east CTS HX
One Non-Cited Violation of 10 CFR Part 50 Appendix B, Criterion XVI "Corrective Action" was identified, for failure to identify nonconforming conditions associated with operation in excess of the maximum design differential pressure for the Unit 2 east component cooling water heat exchanger and the Unit 1 east containment spray heat exchanger. (Green) Exceeding the maximum design differential pressure limit for the component cooling water heat exchanger was considered more than minor, because it could cause divider plate failure potentially rendering the heat exchanger inoperable. (Green) Exceeding the maximum design differential pressure limit for the containment spray heat exchanger was considered more than minor because it was indicative of heat exchanger fouling, which could degrade the heat removal capability and potentially result in internal tube support structural failures. If the internal support structures fail, they could block flow and render the heat exchanger inoperable. The safety significance of these findings was very low because only the mitigating systems cornerstone is affected and systems remained operable (1R07.b.2).
Inspection Report# : 2001004*(pdf)*

Significance: G Nov 11, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Implement Corrective Actions Required By Maintenance Rule on the Radiation Monitoring System
A non-cited violation was identified for the failure to implement corrective actions for the Radiation Monitoring System (RMS). The RMS had been previously categorized under 10 CFR 50.65 as a Maintenance Rule (a)(1) system with established performance goals. The licensee failed to implement appropriate corrective actions as required by 10 CFR 50.65 (a)(1) after the RMS failed to meet the established performance goals. The failure to implement corrective actions for the RMS was significant in that the simultaneous loss of both control rooms' RMS control terminals resulted in the loss of all RMS indication and alarm functions. This issue was determined to be of very low risk significance because the simultaneous RMS control terminal failures did not result in an actual loss of a safety function equipment for greater than 24 hours.
Inspection Report# : 2000022*(pdf)*

Significance: SL-IV Sep 30, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Monitor the Unavailablity of 46 Systems Required During Shutdown Mode Operation
A non-cited violation was identified for the failure to demonstrate that the preventative maintenance program effectively controlled the performance of systems required to be functional during shutdown conditions. The licensee suspended monitoring of unavailability for structures, systems, and components (SSCs) within the scope of the

Maintenance Rule during the September 1997 through June 2000 dual unit extended outage. The failure to monitor shutdown system unavailability impacted the Maintenance Rule monitoring of 46 systems required during shutdown. Since the licensee failed to monitor the performance of SSCs, the reliability of systems and effectiveness of the licensee's maintenance program could not be demonstrated.
Inspection Report# : 2000020*(pdf)*

Significance: G Sep 30, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
Failure To Place Unit 2 250 VDC In Maintenance Rule Category (a)(1) After Multiple Maintenance Preventible Functional Failures
A non-cited violation was identified for the failure to demonstrate that the performance of the 250 VDC system had been effectively controlled through the performance of appropriate preventive maintenance. Specifically, the licensee failed to identify and properly account for maintenance preventable functional failures of 250 VDC control power fuse blocks. The inspectors identified that the licensee had mis-classified a maintenance related failure of a 250 VDC fuse block on a diesel generator output breaker. The inspectors identified that three additional maintenance preventable functional failures associated with fuse blocks have occurred since May 1999. The performance criteria allowed no maintenance preventable functional failures over a 24-month period. The inspectors determined that these fuse block failures could have had a credible impact on safety and could become a more significant safety concern if left uncorrected.
Inspection Report# : 2000020*(pdf)*

Barrier Integrity

Significance: G Jun 30, 2002
Identified By: Self Disclosing
Item Type: NCV NonCited Violation
Containment Isolation Valve Alignment Error During Local Leak Rate Testing Resulted in Inoperable Containment Penetration During Refueling and Violation of Technical Specification 3.9.4.c
A Non-Cited Violation of Unit 2 Technical Specification (TS) 3.9.4.c was self-revealed for the licensee's failure to have the nitrogen to pressurizer relief tank containment penetration isolated prior to commencing core alterations. An operator incorrectly opened the instrument root shutoff containment isolation valve and removed the "Do Not Operate" tag from the valve without verifying the required position of the valve for local leak rate testing. This resulted in an inoperable containment penetration during refueling and resulted in the plant being in a higher risk configuration than that planned by the licensee. The inspectors determined that this issue had a credible impact on safety because the licensee failed to have the containment penetration isolated as required by the TSs and the valve was not in the correct position to fulfill its design safety function. The inspectors utilized the event information in conjunction with Appendix G, "Shutdown Operations Significance Determination Process," of Manual Chapter 0609, Table T-1, "Pressurized Water Reactor (PWR) Refueling Operation Reactor Coolant System (RCS) Level > 23' OR PWR Shutdown Operation with Time to Boil > 2 hours AND Inventory in the Pressurizer." This self-revealed issue was determined to be of very low significance by the significance determination process because (1) the issue did not increase the likelihood of a loss of primary coolant system inventory; (2) the issue did not degrade the licensee's ability to terminate a leak path or add RCS inventory when needed; and (3) the issue did not degrade the licensee's ability to recover decay heat removal once lost. Although this issue affected the integrity of the reactor containment during core alterations, the inspectors concluded that because the small diameter penetration would be a very small leakage path, this issue was of very low

safety significance.
Inspection Report# : 2002003*(pdf)*

Significance: G Jun 30, 2002
Identified By: Self Disclosing
Item Type: NCV NonCited Violation
Technical Specification 3.9.4.c was Violated During Core Alterations When Containment Isolation Valve (2-XCR-101) was Stroked Open for Testing
A Non-Cited Violation of Unit 2 Technical Specification (TS) 3.9.4.c was self-revealed for the licensee's failure to maintain refueling integrity configuration control of containment penetration CPN-74 during core alterations when containment isolation valve 2-XCR-101 was stroked open for testing. Opening this valve created a direct access path from the containment atmosphere to the outside atmosphere. The inspectors determined that this issue had a credible impact on safety because the licensee failed to have the containment penetration isolated as required by the TSs. The inspectors utilized the event information in conjunction with Appendix G, "Shutdown Operations Significance Determination Process," of Manual Chapter 0609, Table T-1, "Pressurized Water Reactor (PWR) Refueling Operation Reactor Coolant System (RCS) Level > 23' OR PWR Shutdown Operation with Time to Boil > 2 hours AND Inventory in the Pressurizer." This issue was determined to be of very low significance by the significance determination process because (1) the issue did not increase the likelihood of a loss of primary coolant system inventory; (2) the issue did not degrade the licensee's ability to terminate a leak path or add RCS inventory when needed; and (3) the issue did not degrade the licensee's ability to recover decay heat removal once lost. Although this issue affected the integrity of the reactor containment during core alterations, the inspectors concluded that because 2-XCR-101 was open for a short period of time and the small diameter penetration would be a very small leakage path, this issue was of very low safety significance.
Inspection Report# : 2002003*(pdf)*

Significance: G Jun 30, 2002
Identified By: Self Disclosing
Item Type: NCV NonCited Violation
Failure of Lower Containnment Airlock Door Interlock and Failure to Follow Instructions Resulted in Inadvertent Opening of Both Airlock Doors
A Non-Cited Violation of Unit 2 Technical Specification (TS) 3.6.1.3 was self-revealed for the licensee's failure to have at least one containment airlock door closed while the airlock was inoperable with Unit 2 in Mode 3. The mechanical interlock on the lower containment personnel airlock malfunctioned and personnel opening the inner airlock door challenged the interlock by not verifying the outer door was closed prior to opening the inner door. This created a direct access path from the containment atmosphere to the outside atmosphere. The inspectors assessed this event using the Significance Determination Process (SDP). The inspectors determined that this issue had a credible impact on safety because the licensee failed to have at least one airlock door closed while the containment airlock was inoperable as required by the TSs and the resultant rapid containment pressure change also affected the operability of the ice condenser. The inspectors reviewed the guidance in NRC Inspection Manual Chapter 0609, Appendix H, "Containment Integrity SDP," and determined the finding was a Type "B" finding. Type "B" findings have no impact on the determination of Core Damage Frequency (CDF) and therefore they are not processed through the CDF based SDP. These findings, however, are potentially important to Large Early Release Frequency (LERF) determinations. The initial screening of the finding determined that the issue was potentially risk significant based on containment and ice condenser integrity which can be affected by the finding. The issue was therefore referred to the regional Senior Reactor Analyst (SRA) for further review. The analyst evaluated the circumstances of the issue to determine the actual duration of the finding. It was determined that the T/2 approach for fault exposure was not appropriate as the containment airlock doors were not discovered in the open position. In addition, the T/2 approach is generally used to estimate when a condition first occurred. The analyst therefore used the 5 second duration of time that the doors were

actually opened, as each entry through the containment airlock is a deliberate, monitored activity (rather than a random event) and the licensee would be expected to identify the problem (both containment airlock doors opened simultaneously) as soon as it occurs. In determining the actual risk significance the SRA with the assistance of the headquarters containment risk analyst, utilized the LERF methodology identified in Appendix H for Type "B" findings. Utilizing this approach with actual plant specific probabilistic risk assessment values, the issue was determined to be of very low safety significance.
Inspection Report# : 2002003*(pdf)*

Significance: Feb 28, 2002
Identified By: Self Disclosing
Item Type: NCV NonCited Violation
Failure to Properly Evaluate and Correct the Cause for an Inservice Stroke Time Test Failure in April 2001
A Non-Cited Violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," was identified for the licensee's failure to adequately correct a failure of containment isolation valve 2-CCR-440 during routine inservice testing on April 11, 2001. Specifically, the licensee adjusted the 2-CCR-440 position indication limit switch mechanism to obtain indication of valve closure without verifying that 2-CCR-440 was capable of fully closing. Subsequently, on January 20, 2002, 2-CCR-440 failed a 10 CFR 50, Appendix J, leak rate test due to the valve not being fully closed. The inspectors assessed this finding using the Significance Determination Process. The inspectors concluded that this issue represented an actual degradation in the redundancy of a containment penetration barrier and had a credible impact on safety and was more than a minor concern. The inspectors determined that the failure of a containment isolation valve was associated with the containment barrier and was within the barrier integrity cornerstone. As described in Updated Final Safety Analysis Report, Table 5.4-1, "Unit 2 Containment Penetration Isolation Barriers," 2-CCR-440 was a barrier for containment penetration CPN-25. The second barrier for CPN-25 was composed of the closed component cooling water (CCW) system piping loop inside containment. Based on satisfactory Appendix J, Type C, leak rate test results for CPN-25 obtained on January 29, 2002, the inspectors determined that the CCW piping inside containment was intact and that failure of 2-CCR-440 to fully close did not represent an actual open pathway in the physical integrity of the reactor containment. Consequently, the inspectors determined that the failure to properly evaluate and correct the cause for the inservice stroke time test in April 2001, did not result in an open leak path from the Unit 2 containment.
Inspection Report# : 2001020*(pdf)*

Significance: Feb 28, 2002
Identified By: NRC
Item Type: NCV NonCited Violation
Violation of TS 4.0.5.a for Application of Incorrect Acceptance Criteria Applied To Flaws in the Pressurizer Welds
A Non-Cited Violation of Technical Specification 4.0.5.a was identified for application of incorrect acceptance criteria to flaws in the pressurizer vessel welds. This finding had the potential to affect the initiating events and barrier integrity cornerstones and was more than minor because these types of errors, if left uncorrected, could result in acceptance of a flaw size greater than that allowed by the American Society of Mechanical Engineers Code. Because this finding did not result in degradation of the reactor coolant system pressure boundary, the risk significance was very low as determined by the Reactor Safety Significance Determination Process.
Inspection Report# : 2001020*(pdf)*

Significance: Feb 28, 2002
Identified By: NRC
Item Type: NCV NonCited Violation

Violation of 10 CFR Part 50.55a(g)(5)iii for Failure to Obtain NRC Concurrence Associated With Incomplete Nondestructive Weld Examinatons
A Non-Cited Violation of 10 CFR 50.55a(g)(5)(iii) was identified for failure to obtain NRC concurrence (Code relief) associated with incomplete weld examinations. This finding had the potential to affect the barrier integrity and initiating events cornerstones and was more than minor because, the reduced examination of welds was left uncorrected, which could result in operation with undetected flaws affecting the reactor coolant system pressure boundary. Because this finding did not result in degradation of the reactor coolant system pressure boundary, the risk significance was very low as determined by the Reactor Safety Significance Determination Process.
Inspection Report# : 2001020*(pdf)*

Significance: Feb 28, 2002
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Adequately Impement the Requirements of Surveillance Procedure 12-MHP 4030.010.003
A Non-Cited Violation of Technical Specification (TS) 6.8.1 was identified for the licensee's failure to adequately implement the requirements of 12-MHP 4030.010.003, "Ice Condenser Lower Inlet Door Surveillance." Specifically, the licensee failed to adequately perform the following: (1) install a protective end tip on the spring scale to protect the lower ice condenser doors from damage as required by step 4.2.6, (2) ensure that installation of the TE-132 test fixture met the moment arm and degree of opening requirements in accordance with steps 4.2.3 and 4.2.5, and (3) accurately record surveillance test data for lower inlet door limit switch checks as required by steps 4.1.8.d and 4.1.9.d. The inspectors assessed this finding using the Significance Determination Process. The inspectors determined that the failure to correct these procedural implementation inadequacies could become a more significant safety concern if left uncorrected and was therefore more than a minor concern. Specifically, the failure to adequately perform surveillance testing could result in the failure to identify degraded or inoperable safety related equipment. Because the ice condenser was primarily associated with containment heat removal following certain design basis accidents, the inspectors concluded that this issue was associated with the barrier integrity cornerstone. Because the Unit 2 ice condenser was not required to be capable of performing a safety related function immediately following the inadequate surveillance testing on January 24, 2002, the inspectors concluded that this issue did not result in an actual loss or degradation of the heat removal function performed by the ice condenser.
Inspection Report# : 2001020*(pdf)*

Significance: Feb 28, 2002
Identified By: NRC
Item Type: NCV NonCited Violation
Violation of 10 CFR Part 50 Appendix B, Criterion IX for Failure to Correctly Calibrate an Ultrasonic Transducer
A Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion IX was identified for an inadequate calibration of an ultrasonic transducer used to size flaws in the pressurizer girth weld. This finding had the potential to affect the initiating events and barrier integrity cornerstones and was more than minor because it had a credible impact on safety, in that, errors in the ultrasonic testing calibration invalidated the flaw sizes recorded. Because this finding did not result in degradation of the reactor coolant system pressure boundary, the risk significance was very low as determined by the Reactor Safety Significance Determination Process.
Inspection Report# : 2001020*(pdf)*

Significance: Feb 28, 2002
Identified By: NRC
Item Type: NCV NonCited Violation

Failure to Adequately Measure the Ice Condenser Lower Inlet Door Opening Torque and Closing Torque in Accordance with Technical Specification Requirements
The inspectors identified a Non-Cited Violation of Unit 2 Technical Specification (TS) 4.6.5.3.1.b.3, 4.6.5.3.1.b.4, and 4.6.5.3.1.b.5 requirements associated with testing of the ice condenser lower inlet doors. Contrary to the TS requirements, previous TS 4.6.5.3.1.b surveillance testing performed in Unit 2 on April 21, April 22, and May 4, 2000 failed to adequately measure the door opening torque and the door closing torque in accordance with the TS requirements. Specifically, the methodology used by the licensee to perform TS 4.6.5.3.1.b.3 and 4.6.5.3.1.b.4 testing resulted in door closing torques that were greater in magnitude than the door opening torques, contrary to the TS description of these torque values. The inspectors identified that the measured opening torque values for all the Unit 2 lower inlet doors were less than the associated door closing torque values. Because calculation of the door frictional torque required accurate measurement of the door opening and closing torques, the licensee was unable to demonstrate compliance with the requirements of TS 4.6.5.3.1.b.5. The inspectors assessed this finding using the Significance Determination Process. The inspectors determined that the failure to adequately implement TS 4.5.6.3.b requirements for testing of the Unit 2 lower inlet doors had a credible impact on safety and was more than a minor concern. As stated in the TS 3.6.5 bases, operability of the ice condenser doors ensures that reactor coolant fluid released during a loss of coolant accident (LOCA) will be diverted through the ice condenser bays for heat removal. The ice condenser also augmented the containment recirculation sump water inventory in the event of certain small break LOCAs and limited ice maldistributions within the ice condenser. Because the proper functioning of the ice condenser lower inlet doors was primarily associated with the heat removal function of the ice condenser, the inspectors determined that this issue was associated with the barrier integrity cornerstone. Based on a review of additional testing results for the Unit 2 lower inlet doors performed on February 3 and 4, 2002, the inspectors concluded that there was no actual reduction in the atmospheric pressure control function of the reactor containment nor a loss of capability to provide additional recirculation sump inventory during certain small break LOCAs.
Inspection Report# : 2001020*(pdf)*

Significance: Feb 10, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
Non-conservative Test Acceptance Criteria in PostAccident Hydrogen Monitoring System Backup Air System Test Procedure
A non-cited violation was identified for the failure to ensure that test procedure acceptance criteria associated with the PostAccident Hydrogen Monitoring System (PACHMS) backup air supply incorporated the requirements and acceptance limits contained in applicable design documents. The inspectors concluded that this was a violation of 10 CFR 50, Appendix B, Criterion XI, "Test Control." Design requirements for the PACHMS backup air supply included a twelve hour postaccident air capacity. The minimum air bottle pressure required to meet this design requirement for the Unit 2, train A, PACHMS air bottles was determined to be 2420 psig. Contrary to this design limit, the minimum acceptable bottle pressure limits contained in the PACHMS test procedures was 2000 psig. The inspectors concluded that this failure had a credible impact on safety and was more than a minor violation of NRC requirements because early failure of the PACHMS backup air supply could result in the inability to operate containment hydrogen sample valves. Emergency operating procedures were written to utilize results obtained from the PACHMS system to determine appropriate postaccident follow-up actions. This issue did not result in an actual open pathway in the physical integrity of the reactor containment or an actual reduction of the atmospheric pressure control function of the reactor containment.
Inspection Report# : 2001002*(pdf)*

Emergency Preparedness

Significance: Aug 18, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to perform a semiannual Augmentation drill for 1999
Green. The licensee failed to conduct an off-hours, unannounced staff augmentation drill during the second half of calendar year 1999, which resulted in a Non-Cited Violation of NRC requirements. Although this failure resulted in a missed demonstration of the licensee's augmentation capabilities, it was not an indication that either the emergency preparedness planning standard in 10 CFR 50.47(b)(2) was not met or that the off-hours augmentation methodology could not be implemented. Specifically, off-hours, staff augmentation drills were successfully conducted during the first half of 1999 and the first half of year 2000. Based on the above factors, the failure to conduct an augmentation drill during the second half of 1999 was of very low safety significance.
Inspection Report# : 2000014*(pdf)*

Occupational Radiation Safety

Significance: N/A Feb 16, 2001
Identified By: NRC
Item Type: FIN Finding
ALARA Program Problem Identification and Corrective Action Timeliness
Failure to identify and correct programmatic deficiencies with the ALARA program in a timely manner. Programmatic deficiencies with the routine operational ALARA program existed for an extended period of time, before they were adequately identified and corrective actions were initiated.
Inspection Report# : 2001006*(pdf)*

Significance: Aug 18, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Perform/Record HRA Key Inventories
The inspector identified that on four occasions in July and August of 2000, the licensee had not performed or had not documented inventories of high radiation area (HRA) keys, which resulted in a Non-Cited Violation for the failure to follow procedures. The issue was of very low safety significance because no problems with inventories were noted prior to and after the identified omissions, which indicated that HRA keys were not lost or misused during the stated period of times. In addition, personnel entering the radiologically controlled area were required to have electronic dosimetry. The electronic dosimeters would have provided an indication of an increased exposure had an individual improperly entered such an area and would have reduced the potential for an overexposure. (Section 2OS1.4)
Inspection Report# : 2000018*(pdf)*

Significance: Aug 18, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Radiological Survey for Transfer of Highly Contaminated Filters
The licensee failed to evaluate the potential for airborne radiological hazards associated with the loading of highly contaminated filters into a high integrity container, which resulted in the unplanned intakes of radioactive materials. The inspector identified a Non-Cited Violation for the failure to perform an adequate radiological survey as required by

10 CFR 20.1501. The issue was of very low safety significance because the actual exposures to the workers were below the 10 CFR Part 20 limits and the radiological source term present and the work activities performed would not have constituted a significant potential for an overexposure. (Section 2OS1.3)
Inspection Report# : 2000018*(pdf)*

Public Radiation Safety

Significance: Dec 29, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Meet Analytical Detection Capabilities for Numerous Radiological Environmental Samples Collected Between the Third Quarter of 2000 and the First Quarter of 2001
A Non-Cited Violation of Technical Specification 6.8 was identified for the failure to meet Offsite Dose Calculation Manual (ODCM) required radioanalytical detection capabilities for some environmental samples collected during the third and fourth quarters of 2000, and the first quarter of 2001. This finding included a cross-cutting element as a contributing factor related to the timeliness of the licensee's corrective actions, since the sample analytical problems were known but not effectively corrected for an extended period. Although the licensee's ability to evaluate the environmental impact from some exposure pathways was impaired, this finding was determined to be of very low safety significance because the majority of sample analyses satisfied detection requirements to enable the overall impact on the environment from actual plant effluents to be assessed.
Inspection Report# : 2001019*(pdf)*

Significance: Aug 18, 2000
Identified By: Licensee
Item Type: NCV NonCited Violation
Radioactive Material Inappropriately Removed from the Restricted Area
On three occasions during calendar year 2000, individuals removed potentially contaminated material from restricted areas before procedurally required radiological surveys were performed. The failure to adhere to the licensee's procedure for unconditional release of materials resulted in a Non-Cited Violation. Since the potential public doses from each of the three events was concluded to be much less than 1 millirem total effective dose equivalent (TEDE) and since less than five occurrences were identified, the issue was determined to be of very low safety significance. (Section 3PS1.1)
Inspection Report# : 2000018*(pdf)*

Physical Protection

Significance: Jan 12, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
The Inspectors Observed Some Responder Communication Problems During Force-On-Force Drills Conducted on January 10-11, 2001

The inspectors observed some responder communication problems during force-on-force drills conducted on January 10-11, 2001. This issue represents a matter, that if left uncorrected, could result in evaluations of response performance not reflective of true capabilities
Inspection Report# : 2000026*(pdf)*

Significance: G Jan 12, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
The Effectiveness of Protected Area Intrustion Detection System
Performance testing of the perimeter intrusion alarm system identified some areas where the system did not effectively perform its intended function This single issue could impact the overall effectiveness of response. The inspector identified a Non-Cited Violation for a failure to adequately perform the functions required by Section 5.3.1.1 of the NRC-approved D. C. Cook Security Plan. The inspectors also identified that the licensee's testing procedure was inadequate to identify these problems. The specific zones and problems are considered safeguards information. This is a finding because it represents a potential vulnerability of a safeguards system. This has the potential of affecting the ability of the response force to redeploy with sufficient numbers and in time to interdict an adversary before it could reach a vital target. The issue was of very low safety significance because there was no actual event and there have not been greater than two similar findings in four quarters
Inspection Report# : 2000026*(pdf)*

Significance: N/A Oct 20, 2000
Identified By: NRC
Item Type: FIN Finding
Licensee corrective action for a previously identified finding was not totally effective to prevent recurrence.
The licensee corrective actions for a previously identified finding regarding inadequate personnel authorization to vital areas was not totally effective to prevent recurrence. While the risk of unauthorized access was very low, the finding showed that the scope and focus of licensee corrective action was not totally effective to prevent reoccurrence.
Inspection Report# : 2000024*(pdf)*

Significance: G Oct 20, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Personnel Authorization to Vital Areas
The inspector identified a Non-Cited violation involving the failure of two licensee supervisors to properly follow licensee procedural guidance regarding personnel vital area access authorization that resulted in four badged contractor personnel being authorized access to three specific vital areas even though their duties (work-related need) did not require them to access those areas. This finding was of very low safety significance because none of the individuals had gained access to the three specific vital areas
Inspection Report# : 2000024*(pdf)*

Miscellaneous

Significance: N/A Apr 23, 2002
Identified By: NRC
Item Type: FIN Finding

Summary Conclusion PI&R Inspection
The inspectors concluded that the licensee's corrective action program attributes enabled timely problem identification commensurate with the significance level and that the threshold for problem identification was low. Significance level of identified problems was appropriately characterized and the backlog items that were reviewed revealed that resolution of problems were prioritized based on safety significance. Based on information obtained during interviews, there was no evidence that a safety conscious work environment did not exist. Root cause evaluations were thorough and appropriate corrective actions for significant conditions adverse to quality were identified. However, while implementation of corrective actions to prevent recurrence of significant conditions adverse to quality was considered adequate, a recurring issue was identified regarding the failure to implement some corrective actions as prescribed in root cause evaluations. Four of the eight apparent cause evaluations reviewed by the inspectors failed to identify a reasonable apparent cause of the problem. Therefore, the licensee's ability to consistently identify reasonable causes for conditions adverse to quality was considered inadequate which could adversely impact implementation of prompt and effective corrective actions to resolve the problem. Also, a review of previously documented findings revealed that an adverse performance trend exists regarding the ability to promptly and effectively resolve conditions adverse to quality which was considered a substantive cross-cutting issue.
Inspection Report# : 2002004*(pdf)*

Significance: N/A Apr 23, 2002
Identified By: NRC
Item Type: FIN Finding
Corrective Action Cross-cutting Finding for the Failure to Promptly Implement Effective Corrective Actions for Conditons Adverse to Quality Impacting the Mitigating Systems and Public Radiation Safety
Several findings associated with the implementation of the corrective action program were identified within the mitigating systems and public radiation cornerstone areas. The inspectors determined that the 6 findings identified in the past 12 months indicated an adverse performance trend and had a common causal factor associated with the failure to promptly and effectively resolve conditions adverse to quality. Although the individual findings highlighted were of very low safety significance the number of findings were determined to be a substantive cross-cutting issue indicative of an adverse performance trend pertaining to implementation of the corrective action program.
Inspection Report# : 2002004*(pdf)*

Significance: 

Dec 29, 2001
Identified By: NRC
Item Type: FIN Finding
Human Performance Weaknesses Related to Procedural Adherence and Independent Verification
The inspectors identified a Finding of very low safety significance associated with recent licensee human performance weaknesses. Specifically, two licensee identified violations of NRC requirements occurred during this period which indicated weaknesses in the human performance cross-cutting area. The violations involved inadequate control of the impact energy of loads carried over the spent fuel pool contrary to Technical Specification requirements and the failure to adequately align the Unit 1 "B" Train diesel generator (D/G) voltage regulator for standby service. The human performance aspects of these issues are related to failures to follow procedural guidance, inadequate self checking, and the failure to perform adequate independent verifications. The inspectors assessed the safety significance of this issue using the Significance Determination Process (SDP). The inspectors concluded that these human performance weaknesses had a credible impact on safety and could become a more significant safety concern if left uncorrected. Specifically, the failure to limit the impact energy of loads carried over spent fuel could result in fuel barrier damage greater than assumed in the safety analysis following a postulated crane failure. The inspectors determined that the failure to adequately control impact energy was associated with the fuel barrier; therefore, this issue was determined to be of very low safety significance following a Phase 1 SDP. Additionally, the failure to align the diesel generator voltage regulation system for standby service could result in the failure of the diesel generator to adequately provide power to supported equipment. The inspectors determined that, based on the as-found voltage regulator settings, the

Unit 1 "B" Train D/G would have been able to perform its associated safety function. Because the failure to adequately align the Unit 1 "B" Train D/G did not result in an actual loss of safety function, this issue was also determined to be of very low safety significance. Therefore, the inspectors concluded that these human performance weaknesses constituted a finding of very low risk significance based on the safety significance of the resultant issues and their impact to the cornerstones of reactor safety.
Inspection Report# : 2001019*(pdf)*

Significance: N/A Apr 18, 2001
Identified By: NRC
Item Type: FIN Finding
Failure To Implement Adequate Corrective Actions For Previously Identified Maintenance Rule Violations
The inspectors identified several examples of ineffective corrective actions for previous violations of the Maintenance Rule. Specifically, the licensee failed to properly evaluate and identify several maintenance preventable functional failures associated with the Unit 1 auxiliary feedwater system and set adequate goals for the ice condenser system. Previous violations involved the failure to properly evaluate and identify maintenance preventable functional failures of the Unit 2 250 Vdc system and failure to establish performance goals for the Unit 1 chemical and volume control system. Ineffective corrective actions for previous Maintenance Rule violations are more than a minor concern in that ineffective corrective actions could impact the ability of the licensee to adequately maintain the reliability, availability and performance of risk-significant SSCs within the scope of the Maintenance Rule. Although the inspectors determined that this issue does not impact a specific reactor safety cornerstone and did not represent a violation of NRC requirements, this corrective action weakness provided substantive information relating to the problem identification and resolution cross-cutting issue and relates to previously identified findings.
Inspection Report# : 2001007*(pdf)*

Significance: N/A Feb 02, 2001
Identified By: NRC
Item Type: FIN Finding
Annual PI&R Inspection Results
The licensee is effective at identifying problems and initiating condition reports at an adequate threshold. The licensee's audits and assessments were effectively managed, adequately covering the subject areas, and findings and recommendations were appropriately captured in condition reports. Generic communications were being appropriately identified for evaluation. In general, identified issues were appropriately characterized and classified, and appropriate evaluations were conducted for significant conditions adverse to quality. However, the large backlog of post-restart condition reports and inconsistent timeliness and effectiveness of root cause evaluations continue to challenge the organization. The inspectors noted several examples where effectiveness reviews for significant conditions adverse to quality had not been completed in a timely manner. In addition, although condition report evaluations ordinarily identified the correct causal factors which were effective in resolving issues, the inspectors noted several examples where corrective actions for conditions adverse to quality were not effective in preventing recurrence.
Inspection Report# : 2001003*(pdf)*

Significance: N/A Nov 11, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Provide Adequate Clearance Isolation Results in Draindown of Between 1,800 and 3,000 Gallons From Reactor Cavity
A non-cited violation was identified for the failure to verify the mechanical isolation for a clearance and establish energy control measures to ensure worker safety and equipment protection. Between 1,800 and 3,000 gallons of water from the reactor cavity was inadvertently drained to lower containment. The spill resulted in an unplanned radiation dose to the plant workers assigned to the cleanup. This issue was determined to be of very low risk significance because the actual worker radiation doses received as a result of this event were minimal and did not affect the licensee's ability to assess dose. The failure to establish an adequate mechanical isolation for the work activity was

considered an example of a human performance issue.
Inspection Report# : 2000022*(pdf)*

Significance: Aug 26, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Verify Position of ESW Valves as Required by TSs
During the recently completed outage the licensee added room coolers to the auxiliary feedwater pump rooms. Due to an error, four valves added to the essential service water system to cool the room coolers were not added to the surveillance which would periodically verify the position of the valves as required by Technical Specification 3.7.4.1. The failure to verify these essential service water valve positions once per 31 days was considered to be a non-cited violation of Technical Specification 3.7.4.1.
Inspection Report# : 2000019*(pdf)*

Significance: Jul 13, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
Erroneous Plant Process Computer Input Data Resulted in Power Range Trip Setpoints Above TS Limit
On July 13, 2000, the licensee identified that the neutron high flux trip setpoints for the power range nuclear instrumentation were above the Technical Specification 2.2.1 allowable value of 110 percent of rated thermal power. The licensee determined that the power range nuclear instrument setpoints were set based on an erroneous plant computer calorimetric. The failure to set the power range nuclear instrumentation neutron high flux trip setpoints within the limits of Technical Specification 2.2.1 was considered to be a non-cited violation.
Inspection Report# : 2000019*(pdf)*

Significance: Jun 28, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Perform 4 Hour Rod Position Surveillance With Inoperable Rod Deviation Monitor
On June 28, 2000, the licensee identified that the rod position deviation monitor was inoperable. Due to a software error, the rod position deviation monitor failed to annunciate when the Technical Specification allowable deviation limit was reached. Technical Specification 4.1.3.2, required that with the rod position deviation monitor inoperable, the demand position indication system and the rod position indicator channel should be compared once per 4 hours. The failure to compare the demand position indication and the rod position indicator channel once per 4 hours was considered to be a non-cited violation of Technical Specification 4.1.3.2.
Inspection Report# : 2000019*(pdf)*

Significance: Jun 12, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
Auxiliary Feedwater Pump Inoperable Due to Incorrect Flow Retention Valve Settings
On June 12, 2000, the licensee identified that the Unit 2 turbine driven auxiliary feedwater pump was inoperable for 88 hours after entry into Mode 3 (Hot Standby). The Technical Specification 3.7.1.2 action statement allowed the pump to be inoperable for 72 hours. The failure to comply with the action statement of Technical Specification 3.7.1.2 was considered to be a non-cited violation

Inspection Report# : 2000019*(pdf)*

Last modified : August 29, 2002