Kewaunee

Initiating Events

Mitigating Systems

Significance: G Feb 21, 2002
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Perform Thorough 10 CFR 50.59 Safety Evaluation
The inspectors identified a Non-Cited Violation for failure to perform an adequate 10 CFR 50.59 safety evaluation associated with emergency operating procedure changes to address component cooling water pump dead-head operational concerns. The safety evaluation did not evaluate the potential for initiating a loss-of-coolant accident via the reactor coolant loop seals during conditions of a complete loss of component cooling water.
Inspection Report# : 2001017*(pdf)*

Significance: N/A Sep 30, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO ESTABLISH CONTINGENCY PLANS FOR ORANGE RISK CONDITION
The inspectors identified the failure to establish contingency plans during a planned high risk plant configuration. Contrary to administrative requirements, the licensee approved an orange risk condition during a refueling outage with no contingency plans to mitigate the consequences of a loss of spent fuel pool cooling with a full core offload in the pool. A Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified. The finding was of very low safety significance because although the licensee had not approved appropriate contingency actions for the orange risk condition, the licensee subsequently rescheduled the planned maintenance to eliminate the orange risk condition.
Inspection Report# : 2001013*(pdf)*

Significance: N/A Aug 24, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO CONDUCT BIENNIAL SURVIELLANCE OF SAFETY-RELATED PROCEDURES PER TS 6.8.c
A Non-Cited Violation of Technical Specification 6.8.c was identified for the failure to perform a biennial surveillance of safety-related procedues. This issue was more than minor because if left uncorrected, could under the same condition become a more significant safety concern. However, since no specific cornerstone had been impacted, this finding is designated as No Color.
Inspection Report# : 2001012*(pdf)*

Significance: G Aug 24, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
INADEQUATE CORRECTIVE ACTIONS FOR PREVIOUS PROBLEM WITH THE CONTROL OF SAFETY-RELATED MATERIALS
A Non-Cited Violation of Criterion XVI, "Corrective Action," of Appendix B of 10 CFR Part 50 was identified for ineffective corrective actions for a problem with the control of the storage of consumable materials, such as thread sealant, used in safety-related applications. These ineffective actions subsequently resulted in the inadequate control of the storage of grease used in safety-related breakers. This issue was more than minor because if left uncorrected, could under the same condition become a more significant safety concern. In that this issue could credibly affect the operability, availability, reliability, or function of a system or train in a mitigating system, it is a Green finding.
Inspection Report# : 2001012*(pdf)*

Significance: G Aug 09, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
NON-RATED FIRE BARRIER

A Non-Cited Violation [of 10 CFR Part 50, Appendix R, Section III.G.2.a] was identified for failure to provide a 3-hour rated fire barrier to separate redundant trains of safe shutdown equipment. This finding was of very low safety significance because the licensee tested a replica of the fire barrier and demonstrated that the fire barrier provided protection for at least 60 minutes, which was sufficient for the hazards in the area.
Inspection Report# : 2001011*(pdf)*

Significance:  Jul 20, 2001
Identified By: NRC
Item Type: FIN Finding
LICENSED OPERATOR REQUALIFICATION EXAMINATION RESULTS
The inspectors identified that two of eight crews examined during the licensee's calendar year 2001 licensed operator requalification operating test had failed. The finding was of very low safety significance because both crews that had failed received remedial training prior to being returned to shift, and the results of the licensee's operator licensing requalification operating test given in calendar year 2000 indicated that only one crew, out of a total of eight crews tested, had failed.
Inspection Report# : 2001011*(pdf)*

Significance:  Jun 30, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO IDENTIFY DEFICIENT CONDITION OF VALVE AFW-1B
The inspectors identified that the licensee failed to promptly identify and correct the 'B' train auxiliary feedwater pump discharge check valve which was stuck in an intermediate position. A Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was issued. The finding was of very low safety significance because, although the check valve was stuck in an intermediate position, the time that it was known to have been stuck was less than the technical specification allowed outage time for one train of auxiliary feedwater to be out of service (less than 72 hours). Additionally, the other two trains of auxiliary feedwater were each capable of 100 percent decay heat removal.
Inspection Report# : 2001009*(pdf)*

Significance: N/A Jun 30, 2001
Identified By: NRC
Item Type: FIN Finding
FAILURE TO BALANCE RELIABILITY AND AVAILABILITY AS REQUIRED BY 10 CFR 50.65(a)(3)
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 inspectors identified that the licensee did not have an administrative process to track maintenance rule functional failures and maintenance preventible maintenance functional failures. As a result, reliability and availability could not be balanced as required by the Maintenance Rule periodic evaluation. 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, this finding was considered to be of regulatory concern in the area of maintenance rule implementation due to the extent of the problems with the Maintenance Rule Program.
Inspection Report# : 2001009*(pdf)*

Significance:  Jun 30, 2001
Identified By: Licensee
Item Type: NCV NonCited Violation
FAILURE TO TRACK UNAVAILABILITY OF SYSTEMS REQUIRED DURING SHUTDOWN OPERATION
10 CFR 50.65(a)(1), required, in part, that the licensee monitor the performance or condition of SSCs within the scope of the rule as defined by 10 CFR 50.65(b), against licensee-established goals, in a manner sufficient to provide reasonable assurance that such SSCs are capable of fulfilling their intended functions. 10 CFR 50.65(a)(2) stated, in part, that monitoring as specified in 10 CFR 50.65(a)(1) was not required where it had been demonstrated that the performance or condition of an SSC was being effectively controlled through the performance of appropriate preventive maintenance, such that the SSC remained capable of performing its intended function. Contrary to the above, the licensee failed to demonstrate that the performance or condition of systems required to be available during shutdown conditions and within the scope of the rule had been effectively controlled through the performance of appropriate preventive maintenance and did not monitor against licensee-established goals. Specifically, the licensee failed to monitor the unavailability of systems required during shutdown operation.
Inspection Report# : 2001009*(pdf)*

Significance:  Jun 30, 2001
Identified By: Licensee

Item Type: NCV NonCited Violation
FAILURE TO ESTABLISH MAINTENANCE RULE (a)(1) GOALS
10 CFR 50.65(a)(1), requires, in part, that the licensee monitor the performance or condition of SSCs within the scope of the rule as defined by 10 CFR 50.65(b), against licensee-established goals, in a manner sufficient to provide reasonable assurance that such structures, systems, and components, are capable of fulfilling their intended functions. Such goals shall be established commensurate with safety. When the performance or condition of a structure, system, or component does not meet established goals, appropriate corrective action shall be taken. Contrary to the above, from 1996, the licensee did not take appropriate corrective actions when the performance of those systems in (a)(1) did not meet licensee established goals. Specifically, the licensee determined timely and appropriate corrective actions had not been taken for five systems that had been in (a)(1) category for approximately 3 years to 5 years: component cooling (entered (a)(1) on April 23, 1997), control room air conditioning (July 24, 1996), station and instrument air (July 3, 1997), auxiliary building air ventilation (July 31, 1997), and control rod drive (August 6, 1998). This issue is in the licensee's corrective action system as KAP WO 01-3323. The inspectors evaluated the risk significance of this issue using the Significance Determination Process. The inspectors did not identify where this failure resulted in a total loss of a risk significant SSC. 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 low, the inspectors concluded that this was more than a minor concern because the failure to recognize and correct ineffective maintenance practices resulted in risk significant systems in (a)(1) for years with no improvement in performance. The NRC tracking number for this issue is 50-305/01-09-02.
Inspection Report# : 2001009*(pdf)*

Significance:  Mar 31, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
FIRE DOOR FUSIBLE LINKS.
On February 20, 2001, the licensee determined that the installed fusible link arrangement on roll-up fire Doors 279 and 281, which separated both trains of service water pumps, would not actuate as designed to ensure that the doors would automatically close to provide a 3-hour fire barrier, contrary to 10 CFR Part 50, Appendix R, Section III.G.2.a which required, in part, separation of cables and equipment of redundant trains by a fire barrier having a 3-hour rating.
Inspection Report# : 2001006*(pdf)*

Significance:  Mar 12, 2001
Identified By: Licensee
Item Type: NCV NonCited Violation
INADEQUATE SMOKE DETECTOR COVERAGE IN FIRE ZONE TU-95B.
Licensee identified violation of licensee's operating license that the licensee failed to install a detector in each beam pocket in Fire Zone TU-95B.
Inspection Report# : 2001002*(pdf)*

Significance:  Feb 13, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO TEST FIRE DOOR IN ACCORDANCE WITH FIRE PLAN.
The inspectors identified a non-cited violation for failure to properly test a fire door in accordance with the facility's fire protection program plan. The finding was of very low safety significance because, although the fire door separated both trains of service water pumps and did not fully close as designed when subsequently tested, the fire loading in the area was insufficient to credibly impact more than two of the four service water pumps in the area.
Inspection Report# : 2001004*(pdf)*

Significance: N/A Nov 09, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO COMPLETE COMPONENT RE-TEST REQUIREMENTS PRIOR TO RETURNING EQUIPMENT TO AN OPERABLE STATUS.
No Color. The inspectors identified a Non-Cited Violation for failure to complete component retest requirements following maintenance performed on the B train control room air conditioner compressor condenser. The unit had been returned to an operable status prior to the retest requirements being completed as prescribed in the associated maintenance procedure. This issue was determined to be a violation of the licensee's Operational Quality Assurance Program Manual, Section 8, "Maintenance Planning and Control." Although the risk associated with this finding was very low and did not affect any cornerstones, the inspectors noted that this finding was similar to previous NRC-identified findings and therefore was of greater than minor significance and warranted documentation. (Section 1R19).
Inspection Report# : 2000020*(pdf)*

Significance: G Sep 29, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO IDENTIFY CORROSION AS POTENTIAL FAILURE MECHANISM.
The inspectors identified that the licensee failed to identify corrosion as a potential failure mechanism in the operability determination for a carbon steel key in the service water system. Thus, the licensee failed to quantify the corrosion rate and therefore did not adequately evaluate the expected service life of the carbon steel key. One non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified.
Inspection Report# : 2000019*(pdf)*

Significance: G Sep 29, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
PRESSURE RATING OF AUXILIARY FEEDWATER STEAM TRAPS.
The inspectors identified that a root cause evaluation for a 1996 equipment issue in the turbine-driven auxiliary feedwater system was not completed until 1999. The evaluation stated that the internals of the steam traps were designed to operate at pressures up to a maximum 600 psig but that the traps were exposed to pressures up to 1025 psig. A corrective action item to initiate a design change request to replace the steam traps with a different model rated for the design pressure of the system was described in the evaluation. However, the inspectors identified that the design change request had never been initiated and the KAP (Kewaunee corrective action document) had been closed. As a result, the corrective action item for this design problem was lost. In addition, operability of the system had never been formally evaluated despite the identification that the system design requirements were not met. The licensee subsequently determined that the steam traps remained operable and was planning to initiate the design change to correct the problem. One non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified.
Inspection Report# : 2000019*(pdf)*

Significance: G Aug 09, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
DESIGN CONTROL VIOLATION FOR AUXILIARY FEEDWATER STRAINER MESH SIZE.
The inspectors questioned the mesh size of the strainers, which were installed in the suction of the three auxiliary feedwater (AFW) pumps. As a result of the inspectors' questions, license personnel inspected the strainers on August 21, 2000, and found the strainers to have 1/16 inch openings. A note was later found on Figure 10.2-3 of the UFSAR that indicated that the AFW suction strainer size was 1/8 inch. The smaller openings would not support the use of service water as a safety related source for AFW and as a result all three trains of AFW were declared inoperable. This condition had apparently existed for approximately 25 years and was identified as a non-cited violation of Criterion III, "Design Control," of 10 CFR 50, Appendix B.
Inspection Report# : 2000012*(pdf)*

Significance: N/A Aug 09, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
RETRIEVAL OF SERVICE WATER SYSTEM DESIGN INFORMATION.
In many cases, design basis information for the service water system was difficult if not impossible to locate. Licensee personnel wrote KAP WO 00-002566 to enter the problem in the corrective action program.
Inspection Report# : 2000012*(pdf)*

Significance: G Aug 09, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO PROPERLY CONTROL CORRECTED TEST DATA NECESSARY FOR DESIGN CALCULATIONS.
An example of a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," was identified in the handling of service water system flow test data, which was subsequently used in calculations. Gauge readings corrected for post test calibration checks, gauge reading corrections for elevation considerations, and flow values corrected for pump degradation were contained in spreadsheets in the possession of an individual staff member, but not currently packaged with raw test data, and not bearing evidence of a formal review and control process. The connection between the test data, which had been vaulted, and the values used in the calculation, could not be made without use of the uncontrolled spreadsheet.
Inspection Report# : 2000012*(pdf)*

Significance: G Aug 09, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
IMPROPER DESIGN CALCULATION IDENTIFICATION, NON-CONSERVATIVE ASSUMPTIONS, CALCULATION ERRORS, AND DUPLICATE CALCULATIONS.
An example of a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," was identified because of inadequate control of design calculations. The control failures included improper identification of calculations, non-conservative assumptions, calculation errors, and duplicate or superceded calculations not properly identified or canceled. The failure to follow the established design control process increased the potential for errors in the design and operation of the service water system. Because the system was subsequently demonstrated to be capable of removing the design heat load, the actual significance was low and this finding screened out as having very low risk significance.
Inspection Report# : 2000012*(pdf)*

Significance: G Aug 09, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO DOCUMENT IN THE CORRECTIVE ACTION PROGRAM THE USE OF INCORRECT MATERIAL IN A SERVICE WATER PUMP KEY.
An example of a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified because of inadequate corrective action to correct an incorrect coupling adjust nut set screw and a low strength "soft" key material, which had contributed to a pump shaft failure. Licensee personnel had known of the "soft" key material since July 21, 1999. The "soft" key material was found in other service water pumps but had not been removed from all pumps. As of July 25, 2000, licensee personnel had not documented the existence of the "soft" key material in the corrective action program.
Inspection Report# : 2000012*(pdf)*

Significance: G Jul 07, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO COMPLETE COMPONENT RETEST REQUIREMENTS IN ACCORDANCE WITH PROCEDURE.
On June 26, 2000, during a review of post maintenance testing requirements following maintenance performed on the control room post accident system charcoal filter heat detector, the inspectors identified that maintenance technicians had not completed the component re-test requirements, as required by a preventative maintenance procedure prior to the system being returned to an operable status. On July 7, the inspectors identified a second example of failing to complete component re-test requirements following maintenance on the zone special ventilation system charcoal filter heat detector as required. The issue was considered to be of very low safety significance based on the determination that although the licensee had not completed all of the component retest requirements prior to returning the equipment to service, the subsequent testing determined that the equipment was in an operable status. The failure to complete the component retest requirements in accordance with site procedures was identified as a Non-Cited Violation.
Inspection Report# : 2000014*(pdf)*

Significance: G Jun 22, 2000
Identified By: NRC
Item Type: FIN Finding
FAILURE TO MEET SINGLE FAILURE CRITERIA FOR RESIDUAL HEAT REMOVAL VALVE CIRCUITRY.
The licensee identified that the circuitry associated with the residual heat removal system discharge to safety injection system suction isolation valves did not meet single failure criteria. The inspectors noted that this design requirement was identified in the facility's updated safety analysis report. The licensee subsequently implemented a temporary change to the facility. The inspectors reviewed the issue and identified that the facility had been operating outside of its design basis, which was reportable to the NRC. The licensee subsequently made a one hour non-emergency report to the NRC. Since there was no actual loss of safety function to the system, this issue was screened as very low risk significance.
Inspection Report# : 2000008*(pdf)*

Significance: G Jun 22, 2000
Identified By: NRC
Item Type: FIN Finding
MAINTENANCE RULE FAILURES ASSOCIATED WITH REACTOR HEAD VENT VALVE.
The inspectors reviewed the licensee's implementation of the maintenance rule for failures associated with a reactor head vent

valve. The licensee's corrective action documents identified a potential maintenance rule functional failure but the completed evaluation of the problem did not document the final determination. However, the inspectors identified that the repeated failures may have been prevented if maintenance activities such as valve disassembly and cleaning had been performed. In this case, maintenance rule reliability goals were not exceeded. The licensee had documented similar maintenance rule program deficiencies and developed a corrective action program to address the deficiencies. Although programmatic deficiencies exist, since no maintenance rule reliability criteria had been exceeded, this issue was considered of very low risk significance.
Inspection Report# : 2000008*(pdf)*

Significance: G Jun 22, 2000
Identified By: Licensee
Item Type: NCV NonCited Violation
FAILURE TO TEST ADDITIONAL RELIEF VALVES IN ACCORDANCE WITH TECHINCAL SPECIFICATIONS.
The licensee identified that the suction relief valve for an auxiliary feedwater pump may have failed its relief test criteria, but did not process the documented deficiency until several weeks later. The licensee then expanded the scope of the relief testing to the suction relief valves associated with the other auxiliary feedwater pumps to meet technical specification requirements. Since any one train of auxiliary feedwater was capable of supplying 100 percent of the decay heat removal requirements, this issue was screened as very low risk significance. However, the time delay in complying with technical specification requirements for testing other relief valves was identified as an NCV.
Inspection Report# : 2000008*(pdf)*

Significance: G Jun 22, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO INITIATE KEWAUNEE ASSESSMENT PROCESS DOCUMENT REGARDING REFUELING WATER STORAGE TANK LOW-LOW LEVEL ALARM INOPERABILITY.
The inspectors identified that the refueling water storage tank low-low level alarm which was actuating five percent higher than normal had not been documented in a Kewaunee Assessment Process form by the licensee, and therefore had not received an operability evaluation. This failure was identified as contrary to site administrative procedures. Following the licensee's documentation of the problem, the inspectors identified that the associated operability evaluation considered the acceptability of an operator workaround to address the issue, but did not address any safety implications or consequences of the alarm actuating early. A subsequent operability evaluation by the licensee was evaluated as adequate by the inspectors. Since the subsequent operability evaluation was adequate and it was determined that no safety mitigation equipment was adversely affected by the early actuation of the alarm, this issue was considered of very low risk significance. A non-cited violation (NCV) was identified for failing to document a non-conforming condition, contrary to site administrative procedure requirements.
Inspection Report# : 2000008*(pdf)*

Significance: G May 22, 2000
Identified By: NRC
Item Type: FIN Finding
FIRE EXTINGUISHERS NOT LOCATED IN ALL AREAS OF CONTAINMENT BUILDING AT BEGINNING OF REFUELING OUTAGE.
During a walkdown of the containment building, the inspectors identified that portable fire extinguishers were not located in the containment basement at the beginning of the plant refueling outage. Additionally, site fire protection procedures required that responsible fire protection personnel perform inspections of selected plant areas to ensure that the quantity of combustible material was minimized. However, the procedure did not list the containment as an area to be inspected and the procedures did not require the placement and location of portable fire suppression equipment inside containment during the refueling outage. Due to a low number of work activities ongoing at the time, this issue was screened as Green (very low risk significance).
Inspection Report# : 2000007*(pdf)*

Significance: G May 22, 2000
Identified By: Licensee
Item Type: NCV NonCited Violation
FAILURE TO INSTALL RAYCHEM HEAT SHRINK MATERIAL IN ACCORDANCE WITH PROCEDURE REQUIREMENTS.
The licensee identified that two Raychem electrical cable splices utilized in environmentally qualified (EQ) safety-related equipment had not been installed in accordance with EQ requirements. These splices were associated with pressurizer level transmitters and were installed in 1984. The licensee subsequently performed extensive EQ testing of the splices to determine the qualification of the splices' as-found configurations. Test results indicated that the splices would have been able to perform their intended function in a harsh environment inside containment. This issue was considered to be of low safety significance based on the successful EQ testing of the as-found splices' configurations and was screened as Green (very low risk significance). One non-cited violation was

identified.
Inspection Report# : 2000007*(pdf)*

Barrier Integrity

Significance: G Jun 22, 2000
Identified By: Self Disclosing
Item Type: NCV NonCited Violation
FAILURE TO UPDATE COMPUTER ALARM FOR CURRENT AXIAL FLUX DISTRIBUTION TARGET BAND.
The licensee identified, following plant startup, that a computer alarm had not been updated properly to alarm if axial flux distribution deviated outside of the flux distribution target band. This condition was contrary to technical specification requirements. The licensee reviewed the axial flux distribution history since the startup and determined that at no time was the flux distribution outside of the target band. Since the axial flux distribution was never outside of the target band, this issue was screened as very low risk significance. An NCV was identified for failing to comply with technical specification requirements for monitoring axial flux distributions.
Inspection Report# : 2000008*(pdf)*

Significance: G May 22, 2000
Identified By: Licensee
Item Type: FIN Finding
TECHNICAL SPECIFICATIONS INTERPRETATION FOR TESTING REACTOR COOLANT SYSTEM PRESSURE ISOLATION VALVES.
The NRC determined that the licensee's practice of testing reactor coolant system pressure isolation Valve SI-22B prior to entering the cold shutdown condition was contrary to Technical Specification requirements 4.2.a.3.a. Technical Specification 4.2.a.3.a required that periodic leakage testing of Valve SI-22B be accomplished prior to reaching operating mode after the plant was placed in cold shutdown. This issue was considered to be of low safety significance because of a subsequent successful valve test and was screened as Green (very low risk significance). Enforcement discretion was applied to this item in accordance with Section VII.B.6 of the Enforcement Policy.
Inspection Report# : 2000007*(pdf)*

Significance: G May 19, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO PROPERLY IMPLEMENT FLAW ACCEPTANCE CRITERIA FOR SLEEVE WELD INSPECTIONS.
During 1998 inservice inspection examinations, the licensee failed to properly implement the flaw acceptance criteria for laser welded sleeve inspection within two steam generator tubes. The safety significance was very low based on the absence of adverse consequences, and May 2000 in-situ pressure testing where both welds exhibited zero leakage at normal operating pressure, main steam line break pressure, and three times normal operating differential pressures. As such, this issue was characterized as a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion IX, “Control of Special Processes.” To correct the error, the licensee plugged both tubes (Section 1RO8).
Inspection Report# : 2000011*(pdf)*

Emergency Preparedness

Significance: W Mar 30, 2001
Identified By: NRC
Item Type: VIO Violation
FAILURE TO CORRECT SELF-IDENTIFIED ERO AUGMENTATION DRILL DEFICIENCIES.
During a baseline inspection of the emergency preparedness program conducted on August 14 - September 21, 2000, the NRC identified a preliminary White issue and potential violation for the licensee’s failure to successfully correct deficiencies identified during staff augmentation drills and to demonstrate timely staff augmentation in 1999 and 2000. The issue was unresolved pending the outcome of the NRC’s final significance determination. On January 30, 2001, the NRC conducted a regulatory conference with the licensee and subsequently issued the licensee a White finding and Notice of Violation (Enforcement Action No. 00-214)

associated with the performance issue.
Inspection Report# : 2001007*(pdf)*

Significance: G Mar 30, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
SUPPLEMENTAL INSPECTION OF WHITE ERO AUGMENTATION FINDING AND RESULTING GREEN FINDING.
This supplemental inspection was performed by the NRC to evaluate the licensee's evaluation associated with the failure to conduct successful quarterly, off-hours, unannounced staff augmentation drills during the second, third, and fourth quarters of 1999 and the second quarter of 2000. This performance issue was previously characterized as having low to moderate risk significance ("White") in NRC Inspection Report No. 50-305/2000015(DRS). During this supplemental inspection, performed in accordance with Inspection Procedure95002, the inspector concluded that the licensee performed a comprehensive evaluation of the unsuccessful staff augmentation drills. The licensee's evaluation identifiedtwo root causes which resulted in the unsuccessful drills and in the staff's inability tocorrect thedeficiencies: (1) Management has not effectively acted to provide increased depth and flexibility in the emergency response organization following a reduction in staffing several years ago; and (2) Management has accepted an adverse trend of test failures without requiring investigation into the root causes. The inspector reviewed the licensee's corrective actions, both completed and planned, and concluded that the programmatic corrective actions appeared to address the identified root causes. In particular, the licensee assigned certain positions to an on-call rotation to ensure personnel were capable of augmenting in a timely manner, and the licensee was progressing in training additional staff to increase the depth of personnel assigned to key emergency response positions. In addition, the licensee was continuing its efforts in improving its corrective action program. The inspector reviewed the licensee's immediate response to the issue and identified that one of the licensee's initial corrective actions resulted in a Non-Cited Violation of regulatory requirements. To obtain a timely response of a key emergency response position (severe accident management - core hydraulics), the emergency preparedness staff effectively changed the emergency plan without revising the necessary procedures and without formally assessing the impact of that change. The staff instructed and trained personnel to respond to a location other than the Technical Support Center, which was contrary to the licensee's current implementing procedures. While this change enabled the licensee to augment its staff in a timely manner, the change was not performed in accordance with NRC requirements. In order to make such a change, the licensee's emergency plan required that the change be formally assessed to ensure that it did not reduce the effectiveness of the plan or any other implementing procedure. Since the issue did not result in a failure to meet an emergency preparedness planning standard, the failure to adequately implement the emergency plan was determined to be a violation of very low safety significance (Green) (Section 02.3(a)). Due to the licensee's acceptable performance in assessing the emergency response augmentation drill deficiencies, 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 IMC 0305, "Operating Reactor Assessment Program." Implementation of the licensee's corrective actions will be reviewed during a future inspection.
Inspection Report# : 2001007*(pdf)*

Significance: G Mar 23, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
POST-ACCIDENT SAMPLING SYSTEM CONTAINMENT AIR SAMPLE PANEL TESTING.
A Non-Cited Violation of Technical Specification 6.14 was identified for the failure to implement a program that ensured the capability to obtain and analyze containment atmosphere samples under accident samples using the cantainment air sampling panel (CASP). Although the CASP was installed, as was indicated in the emergency plan, the licensee had neither developed procedures nor had tested its capability to obtain a containment atmosphere sample using the CASP. The licensee could not recall if and when containment air samples were last obtained using the CASP.
Inspection Report# : 2001006*(pdf)*

Significance: N/A Feb 27, 2001
Identified By: NRC
Item Type: FIN Finding
SUPPLEMENTAL INSPECTION OF YELLOW ANS PERFORMANCE INDICATOR AND ASSOCIATED CORRECTIVE ACTION PROGRAM DEFICIENCIES.
This supplemental inspection was performed by the NRC to assess the licensee's evaluation associated with a Yellow performance indicator for the Alert and Notification System (ANS) and the associated Yellow finding related to the licensee's corrective action program. During this supplemental inspection, performed in accordance with Inspection Procedure 95002, the inspectors concluded that the licensee performed comprehensive evaluations of the performance problems associated with the ANS and its corrective action program. These evaluations identified primary root causes and contributing causes for both issues. Along with the electronics/hardware problems, the licensee identified the primary root causes for the ANS to be the failure to make changes to the system via a change control process and the failure of the activation procedure to provide for alternate/backup activation methods and to provide clear success criteria. In the case of the corrective action program, the licensee concluded that the primary root causes were plant management's inadequate risk evaluation regarding decisions affecting the corrective action program and the development of a culture in the licensee's organization, which minimized the importance of information from outside organizations. In particular, the licensee focused on low-cost power operation and failed to recognize the value of changes and improvements which

had occurred throughout the industry, such as the value and expansion of the corrective action program. In the case of the Yellow ANS performance indicator, the licensee had completed several significant corrective actions to address the root causes and contributing causes identified in its evaluation. The inspectors found that the corrective actions appeared appropriate to address the underlying root causes and that ANS testing data indicated an improving trend in the NRC performance indicator. The licensee also performed comprehensive assessments of the emergency preparedness program, quality assurance program, plant operations, and other plant programs to determine the extent of condition (re. the root causes described above). Based on these evaluations, the licensee began to implement significant actions to correct the deficiencies in the corrective action program and other weaknesses identified. Generally, the inspectors observed progress in the licensee's initial implementation of these corrective actions. Due to the licensee's acceptable performance in assessing the Yellow ANS performance indicator and the associated Yellow finding, the Yellow finding will not be considered in assessing future plant performance.
Inspection Report# : 2001005*(pdf)*

Significance: Y Sep 21, 2000
Identified By: NRC
Item Type: FIN Finding
INADEQUATE ROOT CAUSE EVALUATION FOR YELLOW ALERT AND NOTIFICATION SYSTEM PERFORMANCE INDICATOR.
The licensee's evaluation of the Yellow Alert and Notification (siren) System Performance Indicator (PI) was inadequate. The inspector concluded that the licensee's evaluation was not performed at the depth necessary to identify the root causes of the siren performance problems and, instead, only identified the symptoms of the root causes. Specifically, the inspector identified the following substantive weaknesses in the licensee's evaluation of the siren system performance, which appeared to result from systemic corrective action program deficiencies within this cornerstone: • The licensee's evaluation was not of sufficient depth to clearly identify the root causes associated with the decline in siren system performance. • Licensee management did not provide well-understood and clear guidance/expectations for performing root cause evaluations. • The licensee's evaluation of the quality assurance program was narrowly focused and was not critical of its role in failing to identify and correct the siren performance problems. • The licensee did not establish a priority for each of the long-term corrective actions in accordance with the associated significance or risk. • The licensee did not have any formal provisions for measuring the effectiveness of its corrective actions. • Within the licensee's evaluation, the licensee had not evaluated common causes or the extent of the condition. Due to the corrective action program performance deficiencies within this cornerstone, we have been unable to conclude that the performance issues that resulted in the yellow PI have been addressed. Therefore, we are issuing a yellow finding that corresponds to the original issues that resulted in a yellow PI. Additional inspection effort will be focused on the licensee's further evaluation of the siren reliability root causes and the continuing corrective action program implementation deficiencies identified during this inspection.
Inspection Report# : 2000017*(pdf)*

Significance: N/A Apr 05, 2000
Identified By: NRC
Item Type: FIN Finding
LICENSEE FAILED TO IDENTIFY THE FULL SCOPE OF PROBLEMS WITH THE ALERT AND NOTIFICATION SYSTEM PERFORMANCE.
The inspectors concluded that the licensee's assessment was not sufficiently comprehensive to identify the full scope of problems associated with the Alert and Notification System (ANS) performance program. As a result, licensee corrective actions generally were focused on the equipment problem rather than all root causes and contributing factors. For example, the inspectors identified that: (1) management oversight of the ANS performance program was limited; (2) an audit failed to identify degrading ANS performance as a concern; (3) annual preventive maintenance was not consistently performed on the system; (4) the corrective action program was not used consistently to document ANS problems; and (5) maintenance procedures and records were deficient. Collectively, these problems indicate that the ANS performance program lacked sufficient structure and oversight.
Inspection Report# : 2000006*(pdf)*

Occupational Radiation Safety

Significance: G Oct 02, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
HIGH RADIATION AREA ACCESS CONTROLS
Non-Cited Violation of Technical Specification 6.13 and an associated Green Finding for failure to 'barricade' three ladders that provided entry to high radiation areas (less than 1000 mrem/hour) located on the steam generator/pressurizer platforms.
Inspection Report# : 2001014*(pdf)*

Significance: G May 19, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO POST A VERY HIGH RADIATION AREA.
The inspectors identified a noncited violation for the failure to post a very high radiation area in accordance with 10 CFR 20.1902(c). Although the area was not adequately posted, the licensee had provided physical controls and barriers that were consistent with its requirements for a very high radiation area. Based on the adequacy of these controls, the potential for an overexposure from the inadvertent entry of personnel into the area was low. Consequently, this finding was determined to be of very low safety significance (Section 20S1.1).
Inspection Report# : 2000009*(pdf)*

Public Radiation Safety

Physical Protection

Significance: N/A Jul 21, 2000
Identified By: NRC
Item Type: FIN Finding
CORRECTIVE ACTION ON SEARCH ISSUES DID NOT WORK.
The inspector determined that the licensee's effectiveness of implemented corrective actions for a previously identified inspection finding regarding an inadequate vehicle search was not totally effective in preventing recurrence. Previous corrective action was not adequately focused (Section 3PP2.2).
Inspection Report# : 2000013*(pdf)*

Significance: G Jul 21, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
SEARCHES INADEQUATE (REPEAT).
The inspector identified a Non-Cited violation by observing that, a security officer failed to search an easily accessible compartment on one vehicle. The failure resulted from human error because the officer did not observe the access panel to the compartment during the vehicle search process. When searched, no prohibited items were found. Corrective actions were implemented. The inspector determined that the licensee's effectiveness of implemented corrective actions for a previously identified inspection finding regarding an inadequate vehicle search was not totally effective in preventing recurrence. Previous corrective action was not adequately focused.
Inspection Report# : 2000013*(pdf)*

Miscellaneous

Significance: N/A Feb 21, 2002
Identified By: Licensee
Item Type: NCV NonCited Violation
Failure to Implement Required Fire Watch Following Completion of Hot Work Activities
A licensee-identified violation was reviewed by the inspectors. Corrective actions taken or planned by the licensee appeared reasonable.
Inspection Report# : 2001017*(pdf)*

Significance: N/A Aug 24, 2001
Identified By: NRC
Item Type: FIN Finding
IDENTIFICATION AND RESOLUTION OF PROBLEMS
The team concluded that the licensee was generally effective at identifying problems and putting them into the corrective action program. The program itself contained all the necessary attributes of an acceptable corrective action program and was generally successful in correcting identified issues. However, the team noted that, although licensee management had taken efforts to ensure

that issues were resolved in accordance with program guidance and requirements, additional efforts appeared necessary to ensure timely resolution of issues. A positive program initiative was the establishment of positions in each of the major plant departments to serve as liaisons between the departments and the corrective action program and to assist with self-assessments. However, examples were identified by the inspectors of problems with the licensee's identification and resolution of problems, prioritization and evaluation of issues, and the effectiveness of corrective actions. Included in these examples were the routine granting of due date extensions for problem evaluation and corrective action implementation, failure to perform a Technical Specification-required biennial surveillance of safety-related procedures, and ineffective corrective actions that resulted in the lack of proper controls over the storage of grease used in safety-related breakers. Based on a review of records and discussions with plant staff, the inspectors concluded that workers at the site felt free to input safety issues into the corrective action program.
Inspection Report# : 2001012*(pdf)*

Significance: N/A Nov 09, 2000
Identified By: NRC
Item Type: FIN Finding
FAILURE TO TAKE ADEQUATE CORRECTIVE ACTIONS TO ENSURE COMPONENT RE-TEST REQUIREMENTS COMPLETED ACCORDING TO MAINTENANCE PROCEDURES.
No Color. The inspectors determined that a negative performance trend had developed in the licensee's ability to identify and promptly take appropriate corrective actions to prevent recurrence based on two previously identified examples (NCV 50-305/2000014-01) and one example identified during this inspection period (NCV 50-305/00-20-01). All three examples related to the licensee returning safety-related equipment to service prior to completing all required post-maintenance retesting. While the risk of the individual examples was very low, the licensee had failed to ensure that all retest requirements had been completed before returning safety-related equipment to service. These findings collectively indicated a problem with the licensee's ability to provide timely and adequate corrective actions to prevent recurrence. (Section 4OA2).
Inspection Report# : 2000020*(pdf)*

Significance: N/A Sep 29, 2000
Identified By: NRC
Item Type: FIN Finding
EFFECTIVENESS OF CORRECTIVE ACTION PROGRAM.
Based on the results of this inspection, the NRC concluded that the corrective action program at Kewaunee showed significant weaknesses and inconsistencies across all of the procedural elements inspected. These weaknesses existed across departments and affected multiple cornerstones in the strategic performance areas of Reactor Safety, Radiation Safety, and Safeguards. Of particular note was the lack of procedures for determining the significance of conditions adverse to quality and for trending of issues and the complete lack of trending within your corrective action program. We also identified a lack of urgency in correcting issues which resulted in repeat examples occurring and, coupled with a poor tracking system, a tendency for issues to be dropped. While none of the specific examples identified by the team were of high risk significance when looked at in isolation, in the aggregate they were similar in nature to prior issues in the emergency preparedness area that rose to a higher significance level and contributed to a degraded cornerstone. While we concluded that the station had fostered an environment in which personnel freely identified conditions adverse to quality without fear of discrimination or retaliation, we also concluded that significant weaknesses with, and inconsistent implementation of, the station corrective action program resulted in multiple examples where station personnel did not enter deficiencies into the station's formal corrective action program.
Inspection Report# : 2000019*(pdf)*

Significance: N/A Sep 29, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
NO PROCEDURAL GUIDANCE FOR DETERMINING IF CONDITIONS ADVERSE TO QUALITY ARE SIGNIFICANT.
The inspectors reviewed the quality assurance (QA) manual requirements against Kewaunee's implementing procedures and identified that two QA manual requirements were not being implemented. Specifically, Program Requirement 3.1.9 which stated that directives and procedures shall provide for the review of conditions adverse to quality to determine if the conditions are significant in nature. This requirement paralleled 10 CFR Part 50, Appendix B, Criterion XVI, which requires that the cause of significant conditions adverse to quality be determined and corrective actions taken to prevent recurrence. The inspectors reviewed the Nuclear Administrative Directive (NAD 11.08) and the procedure (GNP 11.08.01) governing the KAP (Kewaunee corrective action program) process and found no procedure requirements for identifying significant conditions adverse to quality. This finding does not directly affect a cornerstone. As a result, this issue was not evaluated with the Significance Determination Process and was not assigned a color. One example of a non-cited violation of 10 CFR Part 50, Appendix B, Criterion II, "Quality Assurance Programs," was identified.
Inspection Report# : 2000019*(pdf)*

Significance: N/A Sep 29, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
NO PROCEDURAL GUIDANCE FOR TRENDING CONDITIONS ADVERSE TO QUALITY.
The inspectors reviewed the quality assurance (QA) manual requirements against Kewaunee's implementing procedures and identified that two QA manual requirements were not being implemented. Specifically, QA Program Requirement, 3.1.10, stated that directives and procedures shall provide for analyzing trends of conditions adverse to quality. Once identified these trends were

required to be considered significant conditions adverse to quality. The inspectors found that conditions adverse to quality were not defined in the KAP (Kewaunee corrective action program) procedures and that no procedure existed for trending. This finding does not directly affect a cornerstone. As a result, this issue was not evaluated with the Significance Determination Process and was not assigned a color. One example of a non-cited violation of 10 CFR Part 50, Appendix B, Criterion II, "Quality Assurance Program," was identified.
Inspection Report# : 2000019*(pdf)*

Significance: N/A Jun 22, 2000
Identified By: NRC
Item Type: FIN Finding
CONTROL ROOM OPERATIONS HUMAN PERFORMANCE ISSUES.
The inspectors interviewed operators to evaluate their awareness of degraded control room indications and alarms, and their ability to adequately take manual actions based on degraded alarm functions. The inspectors identified, during interviews, that there was a lack of awareness by operators of a degraded refueling water storage tank low-low level alarm which would be potentially confusing to operators and therefore increase the risk associated with initiating long term sump recirculation.
Inspection Report# : 2000008*(pdf)*

Last modified : July 22, 2002