Cooper

Initiating Events

Significance: G May 13, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO FOLLOW MAINTENANCE PROCEDURES
IR05000298-00-06; on 04/02-5/13/00; Nebraska Public Power District, Cooper Nuclear Station. Integrated Resident & Regional Report; Maintenance Rule and Health Physics. On two occasions, maintenance personnel failed to follow maintenance procedures when working on a control rod drive flow control valve. Maintenance workers failed to perform a specified step of a work order. As a result, the control rod subsequently operated at approximately 3 times normal rod speed. Planners also deleted a postmaintenance test that would have verified the rod's speed. The planners did not follow maintenance procedures that required work order revision approval for such changes. Both examples were in violation of Technical Specification 5.4.1(a) that requires written procedures to be established, implemented, and maintained. The licensee documented these issues in their corrective action process as Resolved Condition Report 2000-0046 and Resolved Condition Report 2000-0061, respectively. This noncited violation was characterized as a "green" finding using the significance determination process. The increased control rod speed had very low significance because reactor engineers demonstrated that excess margins were available to thermal limits during all times that the control rod was able to be moved.
Inspection Report# : 2000006*(pdf)*

Significance: G May 13, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
INAPPROPRIATE USE OF TECHNICAL SPECIFICATION LCO
IR05000298-00-06; on 04/02-5/13/00; Nebraska Public Power District, Cooper Nuclear Station. Integrated Resident & Regional Report; Maintenance Rule and Health Physics. Licensed operators armed and withdrew Control Rod 42-19, after determining that the rod was inoperable, in violation of Technical Specification 3.1.3. The rod had exhibited excessive rod speed during a reactor startup. Technical Specification 3.1.3 requires that an inoperable control rod be fully inserted and disarmed. Operators inappropriately applied the permissive of Technical Specification 3.0.5 to manipulate the control rod for troubleshooting and rod speed adjustment. Technical Specification 3.0.5 permits testing of equipment solely to determine operability following corrective maintenance. The licensee documented these issues in their corrective action process as Resolved Condition Report 2000-0046 and Resolved Condition Report 2000-0061, respectively. This noncited violation was characterized as a "green" finding using the significance determination process. The increased control rod speed had very low safety significance because reactor engineers demonstrated that excess margins were available to thermal limits during all times that the control rod was able to be moved.
Inspection Report# : 2000006*(pdf)*

Significance: G Apr 01, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
APPENDIX R LIGHTING INADEQUATE
The inspectors identified a failure to provide required emergency lighting for the access and egress route to the service water pumps. The vestibule area outside the service water pump room did not have an emergency light. This issue had low safety significance. Operations personnel could have taken compensatory measures to gain access to the room without lighting
Inspection Report# : 2000004*(pdf)*

Significance: G Dec 18, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to develop a procedure for combating emergencies and other significant events required by Regulatory Guide 1.33, Appendix A, Section 6.0
On September 7, 2001, a lightning storm caused the loss of one of the two offsite power circuits, as well as, intermittent degraded voltage on the other. No emergency or abnormal procedure was available to address degraded voltage or partial loss-of-offsite power conditions. The failure to have a procedure for combating emergencies and other significant events, specifically the loss or degradation of offsite power sources, was a violation of Technical Specification 5.4.1, which requires that procedures for combating emergencies be established in accordance with Regulatory Guide 1.33, Appendix A, Section 6.0. This violation is being treated as a noncited violation in accordance with Section VI.A of the NRC

Enforcement Policy. The licensee documented this issue in their corrective action process as Notification 10111895. This issue was more than minor because it involved a credible impact on safety, in that, no procedure had been established for operators to combat the partial loss or degradation of one or both offsite power sources. The lack of a procedure for the operators could cause or increase the likelihood of an initiating event due to a loss-of-offsite power. The issue was evaluated by the team using the significance determination process and determined to be of very low safety significance (Green), since the reactor did not scram, and the critical busses remained energized without the need for emergency power.
Inspection Report# : 2001010*(pdf)*

Significance: G Oct 04, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
Licensee's Technical Specification bases Control program failed to ensure that the Technical Specification Bases were maintained consistent with the Updated Final Safety Analysis Report
The licensee's Technical Specification Bases Control program failed to contain provisions to ensure that the Technical Specification Bases were maintained consistent with the Updated Final Safety Analysis Report with respect to the offsite power sources supplying power to the essential switchgear. The licensee documented this issue in their corrective action process as Notification 10110178. This issue was considered to have an actual impact on safety, in that part of the safety functions of both off-site power sources was impacted. The issue was evaluated by the inspectors, through discussion with a senior reactor analyst, to be of very low risk significance. All events resulting in the abnormal electrical distribution configuration lasted less than 12 hours, and the critical busses remained energized without the need for emergency power (Section 1R04.1).
Inspection Report# : 2001006*(pdf)*

Significance: G Jun 22, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate measures to assure that accurate and conservative values were used to establish second level undervoltage relay setpoint.
The measures established by the licensee for the translation of design requirements were not adequate to assure that the values used to establish the second level undervoltage relay setpoint were accurate and conservative with respect to the technical specifications. In addition, the measures for promptly identifying and correcting the adverse condition were not adequate as demonstrated by the length of time this condition has existed (since 1987). The failure to accurately translate design requirements was a violation of Criterion III of Appendix B to 10 CFR Part 50, and the untimely corrective actions was a violation of Criterion XVI of Appendix B to 10 CFR Part 50. This violation is noncited in accordance with Section VI.A of NRC's Enforcement Policy, and is in the licensee's corrective action program (Notification 10092429). (Section 1R21.5.b.1.) The finding was of very low safety significance because, although the calculated values were not conservative and were not consistent with the technical specification values, there were administrative procedures in place to prevent exceeding the correct analytical limit. Additionally, there was no actual loss of safety function.
Inspection Report# : 2001005*(pdf)*

Significance: N/A Apr 03, 2001
Identified By: NRC
Item Type: URI Unresolved item
Potential Unreviewed Safety Question Related to Off-Site A/C Sources
IR 05000298-00-15; 12/31/2000-03/31/2001; Nebraska Public Power District; Cooper Nuclear Station. Integrated Resident/Regional Report; Safety Eval. Prog., Heat Sink Perf., Personnel Perf. During Nonroutine Plant Evolutions, Postmaintenance Testing, and Physical Security Plan. The inspectors identified that the 161 kV Auburn, Nebraska, line has never been analyzed and accepted as a General Design Criteria 17 qualified offsite ac power source. The original design basis had the power source transferred from the 345 kV/161 kV startup station service transformer to the 69 kV emergency transformer upon a loss of the 345 kV source. This issue is considered to be an unresolved item awaiting additional technical evaluation by the licensee and the NRC (1R02).
Inspection Report# : 2000015*(pdf)*

Significance: G Mar 31, 2001
Identified By: NRC
Item Type: FIN Finding
Plant operators failed to properly control plant transients during a normal reactor shutdown.
IR 05000298-00-15; 12/31/2000-03/31/2001; Nebraska Public Power District; Cooper Nuclear Station. Integrated Resident/Regional Report; Safety Eval. Prog., Heat Sink Perf., Personnel Perf. During Nonroutine Plant Evolutions, Postmaintenance Testing, and Physical Security Plan. Plant operators failed to properly control plant transients during a normal reactor shutdown. Improper operator actions, to control reactor vessel level, could have produced a loss of feed initiating event (Section 1R14). The inspectors determined the event was of very low safety significance using the guidance of Inspection Manual Chapter 0609. The inspectors noted that Reactor Feed Pump A remained available, other emergency core cooling system equipment was capable of injecting, and that the length of the transient was only slightly more than an hour.
Inspection Report# : 2000015*(pdf)*

Significance: G Nov 20, 1999
Identified By: NRC
Item Type: NCV NonCited Violation
MAINTENANCE WORKERS FAILED TO PROPERLY IMPLEMENT A MAINTENANCE PROCEDURE, RESULTING IN THE UNPLANNED LOSS AND SWITCHING OF A VITAL BUS (SECTION 1RO3)
Maintenance workers failed to properly implement a maintenance procedure, resulting in the unplanned loss and switching of a vital bus. The inspectors concluded that worker failure to properly implement a maintenance procedure, resulting in the unplanned loss of a vital bus, was a violation. This loss of the vital bus was characterized as having low safety significance based upon the significance determination process review for reactor safety. Deenergizing the essential bus made the equipment powered from this bus unavailable for mitigation of an accident. However, redundant equipment was continuously operable from another essential bus, and the deenergized bus automatically transferred and reenergized within approximately 2 seconds. We are treating this violation as a noncited violation, consistent with the Interim Enforcement Policy for pilot plants. Operations personnel documented this in their corrective action process as Significant Condition Report 99-0746.
Inspection Report# : 1999014*(pdf)*

Mitigating Systems

Significance: G Dec 14, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Implement Design Requirements
Cooper Nuclear Station NRC Inspection Report 50-298/00-07 This special inspection report covered the activities associated with inspection and assessment of environmental qualification issues. Plant personnel failed to identify problems with the environmental qualifications program until they were specifically characterized by the NRC. Plant personnel also failed to identify problems with equipment that did not meet program requirements during field walkdowns. In addition, plant personnel failed to enter self-identified deficiencies, in the environmental qualifications program, into the corrective action program. These failures to properly identify problems and enter them into the corrective actions process constituted an apparent violation of 10 CFR Part 50, Appendix B, Criterion XVI (Section 02.04) This item was originally opened as an apparent violation but later closed per letter from Nebraska Public Power District dated November 8, 2001, Reference #NLS2001104, and reopened and closed as a noncited violation. This apparent violation was closed by letter from Nebraska Public Power District to NRC dated November 8, 2001, Reference #NLS2001104. It was opened and closed as an NCV by same letter.
Inspection Report# : 2000007*(pdf)*

Significance: SL-IV Dec 14, 2000
Identified By: NRC
Item Type: VIO Violation
Failure to Maintain Environmental Qualifications of Safety-Related Equipment
Cooper Nuclear Station NRC Inspection Report 50-298/00-07 This special inspection report covered the activities associated with inspection and assessment of environmental qualification issues. The failures to environmentally qualify, maintain the qualification of, and document qualifications in an auditable form, for equipment important to safety, constituted an apparent violation of 10 CFR 50.49 (Section 2.02). This item was orginally opened as an apparent violation in IR 00-07. It was later closed per letter from Nebraska Public Power District dated November 8, 2001, Reference #NLS2001104 and reopened as a violation, Severity Level IV.
Inspection Report# : 2000007*(pdf)*

Significance: G Nov 04, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO ESTABLISH, IMPLEMENT, AND MAINTAIN PROCEDURES FOR THE OFF-SITE AC POWER CIRCUITS
IR 05000298-00-13; on 9/24-11/04/2000; Nebraska Public Power District; Cooper Nuclear Station, Integrated Resident & Regional Report. Maintenance Rule Effectiveness. On August 24, 2000, engineering and maintenance personnel performed a temporary modification in the 345/161Kv switchyard. The licensee provided temporary power to auxiliary circuits for control power to off-site ac circuit breakers. The inspectors identified that the licensee had not established procedures for the operation and maintenance of off-site access circuits. The failure to establish, implement, and maintain Regulatory Guide 1.33, Appendix A, recommended procedures, was a violation of Technical Specification 5.4.1(a). This noncited violation was determined to have very low safety significance because the minimum required number of offsite circuits remained available at all times (Section 1R23).
Inspection Report# : 2000013*(pdf)*

Significance: G Nov 04, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO PERFORM OPERABILITY DETERMINATION AND/OR DECLARE EQUIPMENT INOPERABLE
IR 05000298-00-13; on 9/24-11/04/2000; Nebraska Public Power District; Cooper Nuclear Station, Integrated Resident & Regional Report. Maintenance Rule Effectiveness. The inspectors determined that operations personnel did not declare that safety-related equipment was inoperable, under degraded or nonconforming conditions, on three separate occasions. The separate conditions were the loss of an off-site ac power circuit, a potentially generic problem with the closing mechanism of safety-related Magne-Blast circuit breakers, and the apparent excessive leakage from the reactor equipment cooling system. The failure to perform operability determinations was considered a violation of Technical Specification 5.4.1(a), for failure to follow Regulatory Guide 1.33, Appendix A, recommended procedures. This noncited violation was determined to have very low safety significance because the minimum required number of offsite circuits remained available for the first example, and subsequent evaluations determined there was not a loss of safety function for the other two examples (Section 1R15).
Inspection Report# : 2000013*(pdf)*

Significance: G Aug 25, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Estabilish an Adequate Procedure
The licensee failed to establish an adequate work control procedure because it did not contain the requirement to establish a basis for deferring corrective maintenance on Valve HPCI-MOV-MO19 for degraded conditions (i.e., degraded grease in motor-operator valve motor actuators) beyond the next refueling outage. Generic Letter 96-07, "Periodic Evaluation of Motor Operated Valves," provided evaluation guidance for degraded grease and the impact on motor operated valve operability. However, no technical evaluation or justification was performed for deferral of the corrective maintenance. The issue was placed into the licensee's corrective action program as Problem Identification Report 4-11043. This violation of 10 CFR Part 50, Appendix B, Criterion V, is being treated as a Non-Cited Violation consistent with Section VI.A of the NRC Enforcement Policy (50-298/0010-02) (Section 4OA2.2.b). This issue was characterized as a green finding using the Significance Determination Process. It was determined to have a very low risk significance because alternate means for safe shutdown and cooldown were available for the degraded deferred components and the valve passed its last refueling outage surveillance tests.
Inspection Report# : 2000010*(pdf)*

Significance: G Aug 25, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Follow Procedures
Eleven examples of failure to follow required procedures were identified. The majority involved failure to perform operability evaluations as required by Procedure 0.5.OPS and parent Procedure 0.5, "Conduct of Problem Identification and Resolution Process." One example was for not performing an operability determination for the "D" diesel-driven fire water pump associated with the failure of an engine cooling system raw water solenoid valve to stroke during a surveillance test. Failure to follow Procedure 0.5 OPS was a violation of Technical Specification 4.5.1.a. This violation is being treated as a Non-Cited Violation in accordance with Section VI.A of the NRC Enforcement Policy. This issue was entered into the licensee's corrective action program as Problem Identification Report 4-11393 (50-298/0010-01)(Section 4OA2.1.b). This issue was characterized as a green finding using the Significance Determination Process. It was determined to have very low risk significance because the system remained operable in the examples identified or the specific example had been previously addressed by the Significance Determination Process at this level.
Inspection Report# : 2000010*(pdf)*

Significance: N/A Aug 12, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO ATTAIN PRIOR COMMISSION APPROVAL FOR A PROCEDURE REVISION INVOLVING AN UNREVIEWED SAFETY QUESTION
IR05000298-00-11; on 06/25-08/12/00; Nebraska Public Power District, Cooper Nuclear Station. Integrated Resident & Regional Report; Maintenance Risk Assessments and Emergent Work Evaluation, Surveillance Testing. On July 2, 2000, engineering and operations personnel revised a surveillance procedure to raise the drywell temperature limit from 148° F to 150° F. The licensee's basis for raising the limit was that the instrument inaccuracy was already accounted for in the calculated net positive suction head margin for emergency core cooling systems. However, the inspectors determined that adequate margin did not exist in these calculations. As a result, during the licensee's review of the procedure change, the licensee failed to identify that the change involved an unreviewed safety question and therefore required Commission approval. The failure to obtain Commission approval prior to raising the drywell temperature limit was a violation of 10 CFR 50.59. This violation is being treated as a noncited violation in accordance with Section VI.A of the NRC Enforcement Policy and is in the licensee's corrective action program as Problem Identification Report 4-10381.
Inspection Report# : 2000011*(pdf)*

Significance: G May 13, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO ENTER APPROPRIATE LCO FOR SWBP CONDITION
IR05000298-00-06; on 04/02-5/13/00; Nebraska Public Power District, Cooper Nuclear Station. Integrated Resident & Regional Report; Maintenance Rule and Health Physics. The inspectors determined that a maintenance procedure was inadequate to address the seismic qualification of service water system piping when an idle section of piping was removed. Procedure 7.2.57.1, ""Pipe Support Removal and Re-installation," provided guidance for the removal of snubbers, hangers, and other such equipment. However, the procedure did not address the impact from removal of the piping itself. As a result, operations personnel determined that residual heat removal service water booster pump system components were operable when seismic reviews to support operability had not been completed. This was in violation of Technical Specification 5.4.1(a) that requires written procedures to be established, implemented, and maintained. The licensee documented these issues in their corrective action process as Resolved Condition Report (RCR) 2000-0108. This noncited violation was characterized as a "green" finding using the significance determination process. This issue was determined to be of very low significance because, while the repairs affected the operability of one system loop, redundant safety capability was still available from the other loop. Also, operators and engineers determined that previous repairs were all conducted within the most restrictive Technical Specification allowed outage times.
Inspection Report# : 2000006*(pdf)*

Significance: G May 09, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
INADEQUATE CORRECTIVE ACTION FOR A DESIGN CALCULATION ERROR
IR05000298-00-05; on 04/17-4/20/00; Nebraska Public Power District, Cooper Nuclear Station. Supplemental Engineering Inspection. During review for replacement of a high pressure core injection steam isolation valve completed on December 23, 1997, licensee engineers found that an inaccurate, nonconservative valve actuator weight had been used in the existing pipe stress calculation. This was a violation of 10 CFR Part 50, Appendix B, Criterion XVI, for failing to implement measures to promptly identify and correct other possible examples of this error. We are treating this violation as noncited in accordance with the NRC Enforcement Policy. This violation was included in the licensee's corrective action program as Problem Identification Report 4-08665. This issue was determined to be of low safety significance by the Safety Determination Process because allowable pipe stresses were not exceeded and the pipe remained fully operable. Specifically, licensee engineers failed to scope this issue to determine if this nonconservative weight had been used in other pipe stress calculations for other actuators of the same type.
Inspection Report# : 2000005*(pdf)*

Significance: G May 09, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO CONSIDER SEISMIC EFFECTS ON SERVICE WATER PIPE OPERABILITY
IR05000298-00-05; on 04/17-4/20/00; Nebraska Public Power District, Cooper Nuclear Station. Supplemental Engineering Inspection. During calculations to evaluate the effects of wall thinning on service water piping, the engineers failed to include seismic considerations as required by design requirements. This was a violation of 10 CFR Part 50, Appendix B, Criterion III. We are treating this as noncited in accordance with the NRC Enforcement Policy. The inspectors noted that the probability of a seismic event was very low. As a result, the lack of evaluating seismic stresses imposed very low risk significance. The licensee replaced the affected piping during the refueling outage.
Inspection Report# : 2000005*(pdf)*

Significance: G Apr 17, 2000
Identified By: NRC
Item Type: FIN Finding
POOR ENGINEERING CORRECTIVE ACTION
IR05000298-00-05; on 04/17-4/20/00; Nebraska Public Power District, Cooper Nuclear Station. Supplemental Engineering Inspection. This focused inspection was performed by the NRC to assess a licensee engineering self-assessment performed during September and October 1999. The inspection is being documented as a supplemental inspection; however, no "white" issue characterization caused the inspection. In 1995, the licensee relocated and reorganized the engineering staff. The licensee completed an engineering self-assessment and a follow up self-assessment in 1996 in order to evaluate the effectiveness of the engineering organization, staff, and processes. In 1998 the licensee implemented a strategy for achieving engineering excellence. Included in this strategy was an action to perform a self-assessment in 1999, again reviewing the effectiveness of the engineering organization, staff, and processes, and measuring progress made. In letters from the licensee to the NRC dated October 7, 1998, and May 19, 1999, the licensee outlined commitments in order to improve engineering performance and documented the licensee's understanding of the NRC's plans for monitoring licensee engineering performance. One of the NRC's plans was to evaluate the licensee's 1999 assessment. That evaluation is contained in this report. This inspection was performed using portions of Inspection Procedures 95001 and 71152. During this inspection, the inspectors determined that licensee engineering management generally understood the causes of poor engineering performance. The 1999 licensee self-assessment failed, however, to emphasize the effects of the engineering backlog and failed to emphasize

design issues associated with the 250/125 volt dc system. The inspectors also determined that the causes of poor engineering performance were not fully corrected; however, planned corrective actions were reasonable and improvements had been made.
Inspection Report# : 2000005*(pdf)*

Significance: G Apr 01, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
SCAFFOLD BLOCKING CONTAINMENT VALVE
Maintenance personnel constructed a scaffolding in the auxiliary building that blocked the operation of a secondary containment isolation valve. Operations and maintenance personnel determined that the valve was obstructed for a period of 4-5 days and that the valve would not have closed as required on a containment isolation signal. The inspectors concluded this was a noncited violation of Technical Specification 5.4.1(a). This issue had low safety significance. A redundant valve, in series with the obstructed valve, remained operable
Inspection Report# : 2000004*(pdf)*

Significance: G Apr 01, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
RHR CROSS-CONNECTION RESULTED IN AN UNCONTROLLED VESSEL DRAINING
The cross-connecting of residual heat removal loops produced an uncontrolled vessel level transient that was self-terminated when the nonoperating loop was filled. The inspectors determined that an inadequate equipment control release allowed a cross-connect valve between the two residual heat removal loops to be opened. The inspectors concluded this was a noncited violation of Technical Specification 5.4.1(a). This issue had low safety significance. Since the secured loop vent and drain valves were closed at the time, the transient lasted only 2 to 3 minutes, resulting in approximately 2500 gallons of water being lost from the refueling cavity. This resulted in only a minor decrease in refueling cavity level and no increase in adverse radiological conditions.
Inspection Report# : 2000004*(pdf)*

Significance: G Apr 01, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
LEAKING TORUS VACUUM BREAKERS
On March 6, 2000, operations and licensing personnel reported to the NRC that the torus vacuum breakers failed a leak test surveillance. Proper mitigation of a loss-of-coolant accident requires that the vacuum breakers do not permit excessive communication between the drywell and the suppression chamber. Inadequate maintenance procedures for the refurbishment of the valves in the last refueling outage led to the excessive leakage. The inspectors concluded this was a noncited violation of Technical Specification 5.4.1(a). This issue had low safety significance. Engineering personnel provided analyses and documentation that showed that, while the leakage was above administrative limits, it remained within design limits for the plant
Inspection Report# : 2000004*(pdf)*

Significance: G Apr 01, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
MOV-53-A OPERABILITY EVALUATION
The inspectors identified a noncited violation of Technical Specification 5.4.1(a) for failure to perform an operability evaluation on a reactor recirculation pump discharge valve. The Reactor Recirculation Pump A Discharge Valve exhibited degraded performance during a forced outage in January, and subsequently failed to operate on March 4, 2000. The valve is required to close on a loss-of-coolant accident signal to prevent the short cycling of a subloop for low pressure coolant injection. This issue had low safety significance. The other subloop, and the low pressure core spray system, remained operable.
Inspection Report# : 2000004*(pdf)*

Significance: G Apr 01, 2000
Identified By: NRC
Item Type: FIN Finding
CONTROL ROOM PERSONNEL UNAWARE OF HEIGHTENED CONFIGURATION RISK AND ASSOCIATED CONTINGENCY PLANS
On March 20, 2000, the inspectors questioned control room personnel about outage risk, configuration control, and contingency plans. The control room personnel were unaware that configuration risk was in the orange, or second highest, band. The operators also were unaware of specific

contingency plans that they were responsible to implement. This issue had low safety significance. While a potential existed for improper configuration management, the lack of operator awareness did not result in any actual impact to the plant.
Inspection Report# : 2000004*(pdf)*

Significance: G Feb 19, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
INADEQUATE SURVEILLANCE TESTING FOR TURBINE BYPASSES
Although technicians tested that the fast open feature would function when the reactor was near rated thermal power, the functional testing did not include a verification that the permissive enabled the fast open feature at 25 percent rated thermal power. This was in noncompliance with Technical Specification Surveillance Requirement 3.7.7.2. The turbine bypass valve fast opening feature is required to prevent exceeding minimum critical power ratio limits for certain transients while the reactor is operating between 25 and 30 percent of rated thermal power. However, the plant is infrequently operated in this region, resulting in a low probability of occurrence for these transients. Reactor engineering personnel also provided corollary data and vendor information to demonstrate that there was still considerable margin to safety limits. As a result, this issue was characterized as having very low safety significance based upon the significance determination process. Licensing personnel documented the procedure inadequacy in their corrective action process as Significant Condition Report 2000-0024
Inspection Report# : 2000001*(pdf)*

Significance: G Feb 19, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
INOPERABILITY OF FAST OPEN FEATURE OF TURBINE BYPASSES
Technical Specification 3.7.7 requires that the fast open feature be enabled prior to exceeding 25 percent of rated thermal power. However, the fast open feature was inoperable whenever the reactor was operated between 25 and 33 percent. The cause of the inoperable fast open feature for the turbine bypass valves was a design error made during original construction of the facility that was not identified prior to the implementation of Improved Technical Specifications in August of 1998. Engineers inappropriately designed the turbine bypass valve controller resulting in the blocking of the fast open feature of the valves until approximately 33 percent rated thermal power. The turbine bypass valve fast open feature is required to prevent exceeding minimum critical power ratio limits for certain transients while the reactor is operating between 25 and 30 percent of rated thermal power. However, the plant is infrequently operated in this region, resulting in a low probability of occurrence for these transients. Reactor engineering personnel also provided corollary data and vendor information to demonstrate that there was still considerable margin to safety limits. As a result, this issue was characterized as having very low safety significance based upon the significance determination process. Licensing personnel documented that personnel had failed to identify this deficiency in the corrective action process as Significant Condition Report 2000-0024
Inspection Report# : 2000001*(pdf)*

Significance: G Feb 19, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO PERFORM SAFETY FUNCTION DETERMINATION PROGRAM IN ACCORDANCE WITH TECHNICAL SPECIFICATION 5.5.11.
Plant personnel failed to perform required evaluations because licensed operators inappropriately declared the reactor equipment cooling system operable following the discovery of a system leak greater than design allowances. On December 30, 1999, the NRC granted a Notification of Enforcement Discretion indicating its intention to exercise discretion not to enforce compliance with Technical Specification 3.7.3, "Reactor Equipment Cooling System." This discretion only related to the noncompliance with Technical Specification 3.7.3 resulting from continued operation of the plant with excessive reactor equipment cooling system leakage.
Inspection Report# : 2000001*(pdf)*

Significance: G Jan 01, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
INADEQUATE PROCEDURES TO ENSURE EQ PANEL CLOSURE
Green. Operations and maintenance procedures were inadequate to ensure proper closure of environmentally qualified equipment panels. This issue was characterized as having low safety significance based upon the significance determination process. Various electrical and equipment control panels throughout the facility require closure and proper fastening to ensure environmental qualification (EQ). The inspectors found a number of EQ designated panels for high pressure coolant injection (HPCI) subsystems not properly fastened. Subsequent review by engineers provided evidence that the identified panels provided environmental qualification only for high radiation. As a result, they were not required to be sealed. The inspectors and engineers also determined, however, that the existing procedures did not differentiate between EQ actions for high radiation panels and actions for other harsh environment panels. Plant staff did not find any inoperable equipment in the HPCI panels. The lack of

procedural control over EQ panel configuration created a possibility, however, that workers would not properly restore panels that require a seal from steam intrusion. The inspectors concluded that operating and maintenance procedures did not ensure personnel knew when to address EQ requirements. The inadequacy of these procedures is considered a violation of Technical Specification 5.4.1(a). This violation is being treated as a non-cited violation, consistent with the Interim Enforcement Policy for pilot plants. Licensing personnel documented this in their corrective action process as Repetitive Condition Report 99-0824 (Section 1R04.)
Inspection Report# : 1999016*(pdf)*

Significance: G Jan 03, 2002
Identified By: Licensee
Item Type: NCV NonCited Violation
Licensee personnel inappropriately racked out the Residual Heat Removal Pump B breaker
On November 9, 2001, the licensee identified that, during performance of a tagout, personnel inappropriately racked out the Residual Heat Removal Pump B breaker. This was determined to be a violation of Technical Specification 5.4.1(a). This violation is being treated as a noncited violation consistent with Section VI.A of the NRC Enforcement Policy. This issue has been entered into the licensee's corrective action process as Notification 10122626. The safety significance of this violation was determined to be very low. Residual Heat Removal Pump B was not in use when the breaker was removed and did not affect the ability to maintain the plant in a safe shutdown condition. Specifically, the reactor cavity was flooded to greater than 23 feet, the spent fuel pool gates were open, a division of shutdown cooling was operable, and emergency core cooling system instrumentation was not affected. Additionally, the removal of the wrong breaker was immediately identified by the licensee and it was returned to service within 1 hour.
Inspection Report# : 2001007*(pdf)*

Significance: G Jan 03, 2002
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to identify and correct 10 CFR 50.49 requirements associated with safety-relief valve cables
The licensee failed to identify and correct a condition adverse to quality. Power cables to the safety-relief valve solenoid valves were not maintained in conformance with 10 CFR 50.49 requirements from 1995 through October of 2001. The licensee had several opportunities to identify and correct this condition from April 2000 to October 2001. This was determined to be a violation of 10 CFR Part 50, Appendix B, Criterion XVI. This violation is being treated as a noncited violation consistent with Section VI.A of the NRC Enforcement Policy. This issue has been entered into the licensee's corrective action process as Notification 10092693. This finding was more than minor because, if left uncorrected, it would have posed a more significant issue. This noncited violation was characterized under the significance determination process as having very low safety significance because the safety-relief valves were later determined to have been qualified.
Inspection Report# : 2001007*(pdf)*

Significance: G Jan 03, 2002
Identified By: Licensee
Item Type: NCV NonCited Violation
Licensee personnel inappropriately removed seismic restraint/pipe support from an operable and running service water piping system
On November 15, 2001, the licensee identified that personnel had inappropriately removed a seismic restraint/pipe support (SW-H138) from an operable and running service water piping system. This was determined to be a violation of Technical Specification 5.4.1(a). This violation is being treated as a noncited violation consistent with Section VI.A of the NRC Enforcement Policy. This issue has been entered into the licensee's corrective action process as Notification 10123800. The safety significance of this violation was determined to be very low. Although the operators declared the service water system inoperable, the removal of the support hanger did not affect the service water system from performing its function to maintain the plant in a safe shutdown condition. Specifically, the reactor cavity was flooded to greater than 23 feet, the spent fuel pool gates were open, a division of shutdown cooling was operable, and emergency core cooling system instrumentation was not affected. Additionally, the section of piping affected was immediately isolated following discovery of the missing hanger until repairs were performed.
Inspection Report# : 2001007*(pdf)*

Significance: G Jan 03, 2002
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to follow procedure resulting in a fire
The licensee failed to ensure that combustible material was removed or protected from hot work resulting in a fire on November 26, 2001, located in the reactor building on the torus area floor. This was determined to be a violation of Technical Specification 5.4.1.d. This violation is being treated as a noncited violation consistent with Section VI.A of the NRC Enforcement Policy. This issue has been entered into the licensee's corrective action process as Notification 10126869. This issue was determined to have a credible impact on safety because an actual fire inside the reactor building occurred. This noncited violation was characterized under the significance determination process as having very low safety significance

because the fire was quickly identified and extinguished, and the fire did not, and could not affect any equipment necessary for maintaining safe shutdown conditions. Specifically, the reactor cavity was flooded to greater than 23 feet, the spent fuel pool gates were open, a division of shutdown cooling was operable, and emergency core cooling system instrumentation was not affected.
Inspection Report# : 2001007*(pdf)*

Significance: G Dec 18, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
Failures to follow required procedures were identified when operability determinations were not performed or issues were not considered for their impact on the plant.
Two examples of a failure to follow procedure were identified, which involved failure to perform operability evaluations, as required by Procedure 0.5.OPS, "Operations Review of Problem Identification Reports/Operability Determinations/ Evaluations," Revision 7. Failure to follow Procedure 0.5 OPS was a violation of Technical Specification 5.4.1.a. This violation is being treated as a noncited violation in accordance with Section VI.A of the NRC Enforcement Policy (Section 4OA2.a). Two examples included: On August 28, 2001, operators placed the electrical distribution system in a configuration that rendered both offsite power circuits inoperable, but did not declare them inoperable or enter a limiting condition for operation, as required by their technical specifications. The team determined that this configuration would not allow both offsite circuits to auto-transfer to both critical buses, as described in the Updated Safety Analysis Report. The licensee failed to evaluate operability for a degraded condition that affected the function of an offsite power circuit. This issue was documented as Notification 10109209. This issue was considered to have an actual impact on safety, in that, part of the safety functions of both offsite power sources was impacted. The issue was evaluated using the significance determination process by the team and a senior reactor analyst, to be of very low safety significance (Green). The abnormal electrical distribution configuration lasted less than 12 hours, and the critical buses remained energized without the need for emergency power. On September 7, 2001, the licensee lost both offsite power sources because of lightning strikes. On September 13, 2001, line crews conducting tests in the 345 kV switchyard found a failed relay, which improperly allowed the T2 auto-transformer to isolate. The licensee failed to recognize that the switchyard did not operate as designed and, therefore, failed to evaluate the failed relay's impact on operability. The licensee documented this deficiency in Notification 10109324. This issue was considered to have an actual impact on safety, in that, a defective relay caused the fault on a non-qualified offsite power source to trip a qualified source. The team and a senior reactor analyst reviewed the loss-of-offsite power initiators and accidents. The issue was evaluated using the significance determination process by the team and a senior reactor analyst, to be of very low safety significance (Green), since this issue did not significantly increase the likelihood of a loss-of-offsite power/loss-of-coolant accident scenario.
Inspection Report# : 2001010*(pdf)*

Significance: N/A Dec 18, 2001
Identified By: NRC
Item Type: FIN Finding
Numerous examples of inadequate corrective actions and improper implementation of the corrective action program demonstrated a continued trend of inadequate problem identification and resolution.
Numerous examples of inadequate corrective actions and improper implementation of the corrective action program demonstrated continued inadequate problem identification and resolution. This was primarily due to a general lack of understanding and ownership of site-wide programs and procedures associated with the identification and resolution of problems. Each of the program areas discussed below include violations of NRC requirements that were determined to be more than minor but of very low safety significance (Green) using the significance determination process. The licensee documented this issue in their corrective action process as Notification 10112315, which is being addressed in Significant Condition Report 2001-0938, "Continued Difficulty in Implementing the Corrective Action Program." For example: The team identified that during the implementation of the corrective action program issues were improperly characterized and classified resulting in those issues being inappropriately removed from the corrective action program. This resulted in ineffective and untimely corrective actions since the items were either closed or awaiting resolution. This issue is described in this report and involves both the mitigating systems and barrier integrity cornerstones of reactor safety. Numerous concerns with scaffolds constructed near operable safety-related equipment were identified. The licensee had not constructed scaffolding in accordance with plant procedures and the required scaffolding engineering evaluations for nonconforming items had not been performed. Previous similar findings associated with improper scaffolding had been identified in NRC Inspection Report 50-298/00-04. Despite corrective actions involving new procedures and training, similar problems continued. The licensee had not effectively corrected problems with personnel recognizing when and how to perform adequate operability determinations and evaluations. A noncited violation was identified, which involved examples from both the mitigating system and barrier integrity cornerstones. This cross-cutting issue was documented in the previous NRC problem identification and resolution inspection and other similar findings associated with this cross-cutting issue are noted in NRC Inspection Reports 50-298/00-10, 50-298/00-13, 50-298/00-14, and 50-298/01-02.
Inspection Report# : 2001010*(pdf)*

Significance: G Dec 18, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
Ineffective corrective actions related to operability determinations/evaluations
The licensee failed to correct a previously identified problem associated with conducting adequate operability determinations/evaluations. The NRC problem identification and resolution inspection (50-298/00-10), conducted August 2000, identified multiple examples of a failure to perform operability determinations and evaluations, as required by Administrative Procedure 0.5 OPS, "Operations Review of Problem Identification Reports/Operability Determinations/Evaluations." Subsequently, a substantive cross-cutting finding of inadequate human performance was

identified in NRC Inspection Report 50-298/00-13, associated with failure to implement the problem identification program in the area of operability determinations/evaluations. Numerous additional noncited violations associated with inadequate operability determinations/ evaluations were identified in NRC Inspection Reports 50-298/00-14 and 50-298/01-02. These repeat findings from past inspections combined with two additional examples associated with reactor building equipment cooling flow and an unrecognized overvoltage condition on the emergency station service transformer collectively reflect inadequate corrective actions and a continued programmatic problem. This 10 CFR Part 50, Appendix B, Criterion XVI, corrective action violation is being treated as a noncited violation in accordance with Section VI.A of the NRC Enforcement Policy. The licensee wrote Notification 10112315 to address this violation. This issue was more than minor because it involved a credible impact on safety, in that, failing to recognize when degraded structures, systems, or components require an operability determination or evaluation could result in continued operation of the facility when plant technical specifications would require a shutdown. This issue was determined to have very low risk significance (Green) because the systems remained operable in the examples identified or each specific example had been previously addressed by the NRC's significant determination process at this level.
Inspection Report# : 2001010*(pdf)*

Significance: G Dec 18, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to properly classify issues in the licensee's Problem Identification and Resolution program that resulted in ineffective corrective actions
Issues had not been classified properly in accordance with Licensee Procedure 0.5.CLSS, "Classification of Problem Identification Reports (PIRs)." Some of these issues were inappropriately removed from the problem identification and resolution program when they should have remained. The improper classification contributed to a lack of prompt corrective actions. These examples were contrary to 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action." This issue was placed in the licensee's problem identification and resolution program as Notification 10113236. This violation is being treated as a noncited violation in accordance with Section VI.A of the NRC Enforcement Policy (Section 4OA2.b). Two examples included: Reactor building equipment cooling flow control valves located downstream of the drywell fan coil units were changed from a throttled to fully open position in December 1995. In October 2000, the licensee identified that the procedure change for the valve positions had an inadequate engineering review and that estimated actual flow through the cooling coils was significantly greater than rated flow for the coolers. The issue was downgraded and removed from the corrective action program in November 2000, and reclassified as an "OTHER NAIT" work item with approval from the licensee's condition review group. According to Procedure 0.5.CLSS, Revision 1, a classification of "OTHER" applied to any condition that requires correction by a process outside of the corrective action program that does not represent an actual or potential condition or significant condition adverse to quality (significant condition report or resolve condition report level of classification). After questions were raised by the team, the licensee subsequently estimated the flow rates and determined analytically that the high flow condition was acceptable. The licensee documented this issue in their corrective action process as Notification 10114113. This issue of conducting changes to the facility without adequate engineering documentation was more than minor because it involved a credible impact on safety, in that, the procedure change permitted plant operation with flow in excess of rated capacity without an evaluation of the impact the increased erosion would have on primary containment integrity. This issue was evaluated using the significance determination process and was determined to be of very low safety significance (Green) because the finding did not represent an actual open pathway in the physical integrity of reactor containment. On August 21, 2001, emergency transformer secondary voltage exceeded 4600 volts (4615 volts). Emergency transformer secondary voltage is normally maintained between 4435 and 4575 volts to ensure that under full load conditions, emergency bus voltage can be maintained near it's nominal voltage of 4160 volts. Operators referred to Station Operating Procedure 2.2.17, "Emergency Station Service Transformer (ESST)," but they failed to recognize that secondary voltage exceeded the operability limit of 4600 volts listed in the procedure and subsequently failed to declare the emergency station service transformer inoperable. Notification 10105501 was written, but was subsequently removed from the corrective action program by being classified as a "Department Disposition" item. The team concluded that the licensee should have placed this deficiency in the corrective action program as a "Resolve Condition Report - Apparent Cause" in accordance with Procedure 0.5.CLSS, Revision 5. The licensee documented this issue in their corrective action process as Notification 10112753. Had the transformer been loaded during this overvoltage condition, it could have affected the function of a safety-related power supply; therefore, this issue was more than minor because it involved a credible impact on safety. This condition could have a credible impact on the availability and reliability of the onsite electrical power system. The condition was determined to be of very low safety significance (Green) since operators never placed the emergency station service transformer in service.
Inspection Report# : 2001010*(pdf)*

Significance: G Dec 18, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
Ineffective corrective actions related to the scaffold control program
The licensee failed to correct a previously identified problem in the construction and control of scaffolding in accordance with Procedure 7.0.7, "Scaffolding Construction and Control." During a plant walkdown with operators, the team identified numerous examples where scaffolding was constructed in close proximity or attached to operable safety-related equipment, which did not satisfy requirements contained in Procedure 7.0.7. Many of these nonconformances identified by the team had not been evaluated by engineering, as required by Procedure 7.0.7. The licensee subsequently performed additional walkdowns and a total of 47 scaffolding configuration nonconformances were identified. Each nonconformance was evaluated by engineering and, although no operability issues were identified, 11 nonconformances had to be corrected. This 10 CFR Part 50, Appendix B, Criterion XVI, corrective action violation is being treated as a noncited violation in accordance with Section VI.A of the NRC Enforcement Policy. The issue was placed in the licensee's problem identification and resolution program as Notification 10111303. The issue of inadequate implementation of the scaffolding construction and control program was more than minor because it involved a credible impact on

safety, in that, numerous scaffolding configuration discrepancies were identified with construction of scaffolding on and in close proximity to operable safety-related systems, structures, or components. The team concluded that this issue was of very low safety significance (Green) using the significance determination process because an actual impact on safety systems did not occur.
Inspection Report# : 2001010*(pdf)*

Significance: G Oct 19, 2001
Identified By: NRC
Item Type: FIN Finding
Two of seven simulator operating test crew failures occurred during the 2000 annual requalification operating test.
During the 2000 Annual Operator Requalification Operating Test, two out of seven total crews failed the dynamic simulator portion of their operating test. The safety significance of this finding was very low because the overall crew failure rate was less than 34 percent, the crews were not performing licensed duties, and the failed crews were appropriately retrained and retested prior to being returned to licensed duties.
Inspection Report# : 2001012*(pdf)*

Significance: TBD Oct 19, 2001
Identified By: NRC
Item Type: AV Apparent Violation
Licensed operator requalification written examination compromise involving an apparent violation of 10 CFR 55.49
The licensee had compromised their 2000 Biennial Requalification Written Examinations. This constitutes an apparent violation of 10 CFR Part 55.49 for engaging in activities, which compromised the integrity of an examination. The finding was preliminarily evaluated as having low to moderate safety significance because after identification of the compromise, the corrective action process (compensatory actions) failed to adequately evaluate the requalification examinations for the effects of the compromise. Had the licensee performed a detailed question analysis and regraded the requalification examinations by removing those questions where compromise was indicated, at least two licensed operators would have failed instead of receiving their original passing grade. Subsequently, at least two operators were returned to licensed duties without completion of the required retraining and testing for having failed the examination.
Inspection Report# : 2001012*(pdf)*

Significance: G Oct 04, 2001
Identified By: Licensee
Item Type: NCV NonCited Violation
Inappropriate corrective actions of the primary containment isolation valve function exceeded the licensee's established goal for repeat maintenance preventable functional failures
Green. The licensee failed to demonstrate that performance of radwaste primary containment isolation valves was being effectively controlled through the performance of appropriate preventive maintenance in that repetitive failures of the valves occurred that were not prevented by preventive or corrective maintenance. This was determined to be a violation of 10 CFR 50.65 (a)(2). This violation is being treated as a noncited violation consistent with Section VI.A of the NRC Enforcement Policy. This issue has been entered into the licensee's corrective action program as Notification 10095968. This issue was determined to have a credible impact on safety because the failure of these valves to operate properly affected the ability to isolate primary containment. This noncited violation was characterized under the significance determination process as having very low safety significance because there was no occurrence in which the inboard and outboard primary containment isolation valves failed concurrently. Therefore, no actual open pathway affecting the physical integrity of the primary containment was present (Section 1R12.1).
Inspection Report# : 2001006*(pdf)*

Significance: G Oct 04, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
Loose bolts on the Division 1 diesel generator jacket water heat exchanger
Technical Specification 5.4.1(a) requires that the licensee establish, implement, and maintain written procedures recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978. Appendix A recommends procedures for performing maintenance. On September 11, 2001, the licensee identified that 7 out of 12 bolts were loose on the Division 1 diesel generator jacket water heat exchanger. The licensee's root cause evaluation determined the failure to establish an adequate maintenance procedure resulted in the condition. This is being treated as a noncited violation. The licensee entered this issue into the corrective action process as Resolve Condition Report 2001-0868.
Inspection Report# : 2001006*(pdf)*

Significance: G Jul 10, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate procedures to ensure emergency core cooling systems filled with water.

The licensee failed to have adequate surveillance procedures in accordance with Technical Specification 5.4.1(a) to satisfy Technical Specification Surveillance Requirement 3.5.1.1, which verifies that all emergency core cooling systems (ECCS) are full of water. This noncited violation was evaluated under the risk significance determination process as being Green. The issue was determined to have a credible impact on safety because the potential existed for a system void not being properly evaluated. Also, extenuating circumstances were involved related to the degraded condition of the pressure maintenance system used to keep the residual heat removal (RHR) Loop A system filled with water. This issue was characterized as having very low safety significance because no systems were identified as being degraded by voiding (Section 1R22.1).
Inspection Report# : 2001002*(pdf)*

Significance:  Jun 22, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to properly account for the static head in Calculation NEDC 92-050AT, "CM-PS-270 Setpoint Calculation," Revision 0.
The failure to properly account for the static head in Calculation NEDC 92-050AT, "CM-PS-270 Setpoint Calculation," Revision 0, resulted in the licensee adjusting Switch CM-PS-270, residual heat removal system, loop A keep fill system. The incorrect setting could have allowed a void in the keep fill line from being detected by the operators. This failure was a violation of Criterion III of Appendix B to 10 CFR Part 50. This violation is noncited in accordance with Section VI.A of NRC's Enforcement Policy, and is in the licensee's corrective action program (Notification 10089082). (Section 1R21.5.b.2.) The finding was of very low safety significance because there was no evidence that voids existed and, therefore, there was no actual loss of safety function.
Inspection Report# : 2001005*(pdf)*

Significance:  Apr 06, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to perform calculations to ensure that the locations and conditions of fire areas did not require as much water as is discharged by nominal 1/2-inch orifice sprinkler . . .
IR 05000298/01-03; on 04/02-06/2001, onsite and 04/09-13/01, in-office; Cooper Nuclear Station; Triennial Fire Protection Inspection. The team identified that on October 20, 1985, the licensee implemented modification design change MDC 85-48 in which they replaced 1/2-inch diameter sprinkler heads with 1/4-inch diameter sprinkler heads in the reactor recirculation pump motor generator set lube oil pump area (958-foot elevation of the reactor building) and in the reactor recirculation pump motor generator lube oil pump area (976 foot elevation of the reactor building). The licensee failed to perform calculations to ensure that the reduction in the diameter of the sprinkler heads did not adversely affect the suppression requirements in these fire areas, as required by the National Fire Protection Association Code 13. This was not in accordance with 10 CFR 50.48 (b). This violation was entered into the licensee's corrective action program as Notification 10073757. This finding was determined to be of very low safety significance, because there were no safe shutdown systems in the areas that could be affected by a postulated fire.
Inspection Report# : 2001003*(pdf)*

Significance:  Apr 06, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to install detectors as documented in the safety evaluation report which was not in accordance with 10 CFR 50.48(b).
IR 05000298/01-03; on 04/02-06/2001, onsite and 04/09-13/01, in-office; Cooper Nuclear Station; Triennial Fire Protection Inspection The team identified a noncited violation in three areas (control room, diesel generator room, and the 1001-foot elevation of the reactor building) in which the licensee failed to install detectors as documented in the safety evaluation report which was not in accordance with 10 CFR 50.48(b). This violation was entered into the licensee's corrective action program as Notification 10078580, 10078607, and 10078606. This finding was determined to be of very low safety significance due to the number of mitigating systems remaining.
Inspection Report# : 2001003*(pdf)*

Significance:  Apr 06, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to provide 20 feet seperation between redundant service water equipment.
IR 05000298/01-03; on 04/02-06/2001, onsite and 04/09-13/01, in-office; Cooper Nuclear Station; Triennial Fire Protection Inspection Cornerstone: Mitigating Systems The team identified a noncited violation in Fire Zone 20A (service water pump room) in which equipment required for safe shutdown of the plant following a fire was not separated by 20 feet horizontal distance, and there were intervening combustibles (Rubatex insulation) that were not part of an exemption, nor included in the licensee's engineering evaluation. This was not in accordance with Section III.G.2 (b) of Appendix R. This violation was entered into the licensee's corrective action program as Notification 10075408 and 10076323. This finding was of very low safety significance because the area-wide fire suppression and detection systems were not degraded, and the increase in combustible loading of the Rubatex insulation did not substantially increase the severity of a postulated fire in the fire area.

Inspection Report# : 2001003*(pdf)*

Significance: G Apr 06, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to provide adequate emergency lighting to perform operator actions for safe shutdown.
IR 05000298/01-03; on 04/02-06/2001, onsite and 04/09-13/01, in-office; Cooper Nuclear Station; Triennial Fire Protection Inspection Green. The team identified a noncited violation in Fire Zone 7A (control room basement) in that emergency lighting was not aligned properly to adequately perform safe shutdown operator actions in accordance with Section III.J of Appendix R to 10 CFR Part 50. This violation was entered into the licensee's corrective action program as Notification 10076810. This finding was of very low safety significance because the operators would have available dedicated hand held lights that would assist them in performing required actions.
Inspection Report# : 2001003*(pdf)*

Significance: G Mar 31, 2001
Identified By: NRC
Item Type: FIN Finding
Testing of the residual heat removal heat exchangers may have resulted in an inaccurate estimation of their performance under design-basis conditions.
IR 05000298-00-15; 12/31/2000-03/31/2001; Nebraska Public Power District; Cooper Nuclear Station. Integrated Resident/Regional Report; Safety Eval. Prog., Heat Sink Perf., Personnel Perf. During Nonroutine Plant Evolutions, Postmaintenance Testing, and Physical Security Plan. Three elements for the testing of the residual heat removal heat exchangers may have resulted in an inaccurate estimation of their performance under design-basis conditions. The testing was often conducted under dynamic rather than stabilized thermal conditions, the testing was not conducted during the worst season for biological growth (and the design basis temperatures), and the testing was conducted after a flush of the heat exchanger that may have had the effect of improving the thermal performance (Section 1R07). The risk associated with the three anomalies in the testing of the residual heat removal heat exchangers was determined to be of very low safety significance because the cumulative effect was likely to be less than the available thermal performance margin. Additional factors that mitigated this concern were a recent change-out of valves in the service water system that reduced the standby leakage flow through the residual heat removal heat exchangers and a recently-initiated practice of running normal flow through the heat exchangers weekly for 30 minutes, both of which should have the effect of reducing the buildup of slime and scale.
Inspection Report# : 2000015*(pdf)*

Significance: G Mar 31, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to document and maintain a design standard for surge suppression varistors in the Division 2 Emergency Diesel control circuit.
IR 05000298-00-15; 12/31/2000-03/31/2001; Nebraska Public Power District; Cooper Nuclear Station. Integrated Resident/Regional Report; Safety Eval. Prog., Heat Sink Perf., Personnel Perf. During Nonroutine Plant Evolutions, Postmaintenance Testing, and Physical Security Plan. The inspectors identified a noncited violation for the failure to document and maintain a design standard, for surge suppression varistors in the Division 2 emergency diesel control circuit. The use of incorrect values for these components caused the generator to frequently trip during the shutdown process, and thereby be unavailable for immediate restart (Section 1R19). The noncited violation was of very low safety significance because this condition only affected one diesel, and the condition only affected its ability to do a hot restart immediately after a previous run. The time that a diesel is in this condition, compared to the standby condition, is very small. Therefore the probability of an actual demand for the diesel during these conditions was very low.
Inspection Report# : 2000015*(pdf)*

Significance: G Jan 04, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to perform operability determination and/or declare equipment inoperable
IR 05000298-00-14, on 11/5-12/30/2000, Nebraska Public Power District, Cooper Nuclear Station Integrated Resident/Regional Report. The inspectors determined that operations personnel did not perform an operability assessment for a safety-related service water pump, or declare the pump inoperable, when the functionality of the pump was questioned. The failure to perform an operability determination, as required by station procedure, is in violation of Technical Specification 5.4.1(a), for failure to follow Regulatory Guide 1.33, Appendix A, recommended procedures. This noncited violation was determined to have very low safety significance because the nature of the failure was determined, through subsequent testing, to not affect the safety function of the service water pump (Section 1R14).
Inspection Report# : 2000014*(pdf)*

Significance: G Jan 04, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to maintain design control for service water system
IR 05000298-00-14, on 11/5-12/30/2000, Nebraska Public Power District, Cooper Nuclear Station Integrated Resident/Regional Report. This inspection report covers a 7-week period of inspection by the resident inspectors. The inspectors identified a lack of design control for service water pump bolting standards after operators reported finding loose foundation nuts. Conflicting information regarding the use of washers for the service water pump foundation bolts was provided in design documents. This is in violation of Criterion III of 10 CFR Part 50, Appendix B, for improper design control. This noncited violation was determined to have very low safety significance because there would be no loss of service water function, based upon the remaining foundation bolts being properly fastened and the licensee's seismic analysis for the loose bolts (Section 1R04).
Inspection Report# : 2000014*(pdf)*

Significance: G Jan 04, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to properly implement a surveillance test procedure
IR 05000298-00-14, on 11/5-12/30/2000, Nebraska Public Power District, Cooper Nuclear Station Integrated Resident/Regional Report. This inspection report covers a 7-week period of inspection by the resident inspectors. While performing undervoltage testing on Division 1 4160V Essential Bus 1F, technicians failed to follow a procedural step, resulting in an unplanned plant transient. An inadvertent undervoltage signal caused the following loads to trip: Reactor Recirculation Pump A, Service Water Pump A, Control Rod Drive Pump A, and selected nonessential 480 volt motor control centers. The failure to implement a surveillance procedure is in violation of Technical Specification 5.4.1(a), for failure to follow Regulatory Guide 1.33, Appendix A, recommended procedures. This noncited violation was determined to have very low safety significance based upon a significance determination process analysis of the equipment lost, performed by the regional senior reactor analyst. The event lasted only 4 to 5 minutes, with one train of emergency core cooling systems remaining operable for the entire period (Section 1R22).
Inspection Report# : 2000014*(pdf)*

Significance: G Nov 20, 1999
Identified By: NRC
Item Type: NCV NonCited Violation
A LICENSED OPERATOR FAILED TO PROPERLY IMPLEMENT A SURVEILLANCE PROCEDURE, RESULTING IN THE UNPLANNED WITHDRAWL OF A CONTROL ROD (SECTION 1R22).
A licensed operator failed to properly implement a surveillance procedure, resulting in the unplanned withdrawl of a control rod and a reactivity transient. This issue was characterized as having low safety significance based upon the significance determination process review for events. The operator action of withdrawing the control rod, instead of inserting it, caused reactor power to exceed steady state licensed thermal power for a period of approximately 3 minutes. Reactor engineers verified that no thermal limits were exceeded and that design basis transient analysis permits brief operation at the power level attained during this transient. The inspectors concluded that the operator failed to properly insert the control rod as specified in Procedure 6.CRD.301, "Withdrawn Control Rod Operability IST Test," Revision 6. We are treating this violation as a noncited violation, consistent with the Interim Enforcement Policy for pilot plants. Operations personnel documented this in their corrective action process as Repetitive Condition Report (RCR) 99-0824.
Inspection Report# : 1999014*(pdf)*

Significance: G Oct 29, 1999
Identified By: NRC
Item Type: FIN Finding
Reactor Equipment Cooling System Leak was Considered to be Potentially Significant.
A leak from the reactor equipment cooling system was found to be the result of leaking tubes in a room cooler in the northeast quadrant of the secondary containment building. This was considered to be potentially significant because the reactor equipment cooling system is required to be capable of providing cooling for 30 days without makeup water. This issue was considered GREEN in the significance determination process since it did not represent an actual loss of safety function of a system, of a single train for more than the technical specification allowable outage time, or of a single train of non-technical specification equipment designated as risk-significant under 10 CFR 50.65 for more than 24 hours.
Inspection Report# : 1999011*(pdf)*

Significance: G Sep 10, 1999
Identified By: NRC
Item Type: NCV NonCited Violation

UNTIMELY CORRECTIVE ACTIONS FOR THE RHR SYSTEM
Green: In using the cornerstone significance determination process, this issue was determined to have very low risk significance because the system remained operable, although degraded. The residual heat removal heat exchanger operator workaround conditions involving the operation of the heat exchanger outlet valves (including the service water side) had existed for several years. Long-term corrective actions to restore the system's ability to maintain temperature control during shutdown cooling mode of operation, according to the system's original design, had not been developed and implemented. Failure to establish prompt corrective actions for conditions adverse to quality was a violation of 10 CFR Part 50, Appendix B, Criterion XVI. This violation is being treated as a noncited violation (50-298/9903-01), consistent with the Interim Enforcement Policy for pilot plants (Section 1RO7).
Inspection Report# : 1999003*(pdf)*

Significance: G Sep 10, 1999
Identified By: NRC
Item Type: FIN Finding
Logic Testing Problems with Residual Heat Removal System Contacts
A narrowly focused approach in response to Generic Letter 96-01 involving surveillance issues associated with logic testing led to a recent noncited violation (50-298/9904-04) for inadequate corrective actions. Subsequent to the noncited violation, a condition, described in Licensee Event Report 99-005, addressed related circumstances associated with surveillance testing of the residual heat removal logic contacts. The corrective actions associated with the residual heat removal logic testing identified another example of the previously documented noncited violation. In using the cornerstone significance determination process, this issue was determined to have very low risk significance because the system remained operable, although degraded (Section 1R22).
Inspection Report# : 1999003*(pdf)*

Barrier Integrity

Significance: G Aug 12, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO INITIATE ACTIONS WITHIN ONE HOUR AS REQUIRED BY TECHNICAL SPECIFICATION LIMITING CONDITION FOR OPERATION 3.0.3
IR05000298-00-11; on 06/25-08/12/00; Nebraska Public Power District, Cooper Nuclear Station. Integrated Resident & Regional Report; Maintenance Risk Assessments and Emergent Work Evaluation, Surveillance Testing. On June 28, 2000, operations personnel declared the drywell floor drain sump flow monitoring system inoperable to perform a surveillance test. Operators did not recognize that the drywell atmospheric monitoring system had previously been declared inoperable on June 23 due to a failed sample pump. As a result, all reactor coolant system leak detection instrumentation required by Technical Specification 3.4.5, "RCS Leakage Detection Instrumentation," was inoperable for 1 hour and 9 minutes. Because the operators did not recognize this condition, the requirements of Technical Specification 3.0.3 to initiate actions within 1 hour to shut down the plant was not satisfied. This was determined to be a violation and is being treated as a noncited violation in accordance with Section VI.A of the NRC Enforcement Policy. It is in the licensee's corrective action program as Significant Condition Report 2000-0701.
Inspection Report# : 2000011*(pdf)*

Significance: G Jan 03, 2002
Identified By: Licensee
Item Type: NCV NonCited Violation
Failure to follow procedure resulting in disabling the suppression chamber vacuum relief valves
On November 2, 2001, the licensee identified that personnel inadvertently placed the Suppression Chamber Vacuum Relief Valves PC-AO-243 and PC-AO-244 operating switches to close while performing a tagout of another system for maintenance. This was determined to be a violation of Technical Specification 5.4.1(a). This violation is being treated as a noncited violation consistent with Section VI.A of the NRC Enforcement Policy. This issue has been entered into the licensee's corrective action process as Notification 10120889. This issue was considered to have a credible impact on safety, in that the suppression chamber vacuum relief function was disabled. This event was characterized as having very low safety significance because licensed operators identified that the switches were in the incorrect position and corrected the condition within approximately 3 hours. This was within the Technical Specification allowed outage time.
Inspection Report# : 2001007*(pdf)*

Significance: G Jan 03, 2002
Identified By: NRC

Item Type: NCV NonCited Violation
Failure to identify and correct design control deficiencies associated with the reactor feedwater check valves
The licensee failed to implement effective corrective actions resulting in repetitive failures of reactor feedwater check valves to pass local leak rate testing requirements from 1983 through November of 2001. This was determined to be a violation of 10 CFR Part 50, Appendix B, Criterion XVI. This violation is being treated as a noncited violation consistent with Section VI.A of the NRC Enforcement Policy. This issue has been entered into the licensee's corrective action process as Significant Condition Report 2001-1161. This issue was considered to have a credible impact on safety, in that the failure of these valves caused a higher than normal containment leakage. This noncited violation was characterized under the significance determination process as having very low safety significance. The finding was a Type B finding in accordance with the significance determination process because these valve failures did not affect core damage frequency. Type B findings related to containment isolation valves in plants with Mark I containments and are considered to be Green, based on Table 3 of Inspection Manual Chapter 0609-H, "Containment Integrity Significance Determination Process."
Inspection Report# : 2001007*(pdf)*

Significance: G Jan 03, 2002
Identified By: Licensee
Item Type: NCV NonCited Violation
Ineffective corrective actions resulting in repetitive scaffold construction nonconformances
The licensee failed to implement effective corrective actions, resulting in repetitive scaffold construction nonconformances potentially affecting the operation of equipment important to safety. Examples included scaffolding built in the proximity of and over safety-related equipment, as well as scaffold components that could have interfered with the safety function of plant components. This violation of 10 CFR Part 50, Appendix B, Criterion XVI, is being treated as a noncited violation consistent with Section VI.A of the NRC Enforcement Policy. This issue has been entered into the licensee's corrective action process as Notification 10127237. This issue was considered to have a credible impact on safety, in that the failure to properly construct scaffolds could affect the operation of equipment important to safety. This noncited violation was characterized under the significance determination process as having very low safety significance because the failure to construct scaffolds in accordance with the procedural requirements did not result in any equipment failure or loss of safety function.
Inspection Report# : 2001007*(pdf)*

Significance: G Oct 04, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
Exceeded Licensed Thermal Power
Cooper Nuclear Station License DPR-46, Section 2.C.1, states "The licensee is authorized to operate the facility at steady state reactor core power levels not in excess of 2381 megawatts (thermal)." From 12 p.m. through 8:55 p.m., on August 25, 2001, the licensee averaged between 2381 and 2384 megawatts thermal, due to a mispositioned reactor water cleanup filter bypass valve. This is being treated as a noncited violation. The licensee entered the issue into the corrective actions process as Notification 10106705.
Inspection Report# : 2001006*(pdf)*

Significance: G Jul 10, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to provide administrative controls for opening primary containment isolation valves
The licensee failed to provide administrative controls, as required by Technical Specification 3.6.1.3, from May 8-10, 2001, to ensure that primary containment Isolation Valves RW-AOV-AO-82, 83, 94, and 95 could be isolated. This issue was determined to have a credible impact on safety because administrative controls were insufficient to ensure that primary containment could be isolated rapidly. This noncited violation was characterized under the risk significance determination process as having very low safety significance because the valves never failed to close when they were administratively opened and this condition lasted for less than 3 days (Section 1RO4.2).
Inspection Report# : 2001002*(pdf)*

Significance: G Jul 10, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to perform operability determination and/or declare equipment inoperable
The licensee failed to declare equipment inoperable following multiple failures of primary containment isolation Valves RW-AOV-AO82, -83, -94, and -95 to pass surveillance testing requirements. This was a violation of Technical Specification 5.4.1(a). This issue was determined to have a credible impact on safety because the failure of these valves affected the ability to isolate primary containment. This noncited violation was characterized under the risk significance determination process as having very low safety significance because both the inboard and outboard primary containment isolation valves had never failed at the same time. Therefore, no actual open pathway affecting the physical integrity of the

primary containment was present (Section 1R04.1).
Inspection Report# : 2001002*(pdf)*

Significance: G Oct 09, 1999
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to use a gauge that provided adequate repeatability for low pressure testing of the primary containment drywell airlock.
Green. 10 CFR Part 50, Appendix B, Criteria XI, requires that licensees have available and use adequate test instrumentation. The failure to use a gauge that provided adequate repeatability for low pressure testing of the primary containment drywell airlock is a violation. We are treating this violation as noncited, consistent with the Interim Enforcement Policy for pilot plants. The licensee placed this issue in the corrective action program as Problem Identification Report 4-04709. Since the subsequent airlock leak test at accident pressure proved that the airlock continuously met the Technical Specification 3.6.1.2 requirements for operability, the inspectors concluded that this problem had minimal risk significance.
Inspection Report# : 1999013*(pdf)*

Emergency Preparedness

Significance: W Oct 11, 2000
Identified By: NRC
Item Type: FIN Finding
Failure of exercise critique process to identify a risk-significant planning standard problem
IR 05000298-00-16, on 8/28-31/2000, Nebraska Public Power District, Cooper Nuclear Station. Exercise Evaluation. The inspection was conducted by regional inspectors and resident inspectors. This inspection identified one finding. Cornerstone: Emergency Preparedness The formal exercise critique process failed to identify a dose assessment performance problem which caused the issuance of incorrect protective action recommendations for offsite populations. There were three opportunities for protective action recommendations, and only one was performed correctly. During its initial critique, the licensee assessed that three protective action recommendation opportunities had been successfully completed. The issue was preliminarily determined to have low to moderate safety significance because the issue involved a failure of the licensee's critique process to identify a risk-significant emergency preparedness planning standard problem.
Inspection Report# : 2000016*(pdf)*

Significance: TBD Sep 06, 2001
Identified By: NRC
Item Type: AV Apparent Violation
Failure to Meet Planning Standard 10 CFR 50.47(b)(8)
TBD. The licensee failed to maintain an adequate emergency operations facility to support emergency response since September 14, 1991. This is an apparent violation of 10 CFR 50.54(q) and 10 CFR 50.47(b)(8). This apparent violation was evaluated under the risk significance determination process as having low to moderate safety significance based on the following: (1) the finding is an apparent violation of 10 CFR 50.54(q); and (2) this finding was a failure to meet nonrisk significant planning standard 10 CFR 50.47(b)(8) (Section 40A3.3).
Inspection Report# : 2001009*(pdf)*

Significance: TBD Sep 06, 2001
Identified By: NRC
Item Type: AV Apparent Violation
Failure to Meet Planning Standard 10 CFR 50.47(b)(2)
TBD. The licensee failed to activate the emergency response facilities within approximately one hour following declaration of an Alert on June 25, 2001. This was an apparent violation of 10 CFR 50.54(q) and 10 CFR 50.47(b)(2). This apparent violation was evaluated under the risk significance determination process as having low to moderate safety significance based on the following: (1) the finding is an apparent violation of 10 CFR 50.54(q); and (2) this finding was a failure to meet nonrisk significant planning standard 10 CFR 50.47(b)(2) (Section 4OA3.2)
Inspection Report# : 2001009*(pdf)*

Significance: TBD Sep 06, 2001
Identified By: Self Disclosing
Item Type: AV Apparent Violation
Failure to Perform Timely Offsite Notification during Alert
TBD. The licensee failed to notify state and local governmental agencies within 15 minutes of declaring an Alert on June 25, 2001. This was an apparent violation of 10 CFR 50.54(q) and the licensee's emergency plan. This apparent violation was evaluated under the risk significance determination process as having low to moderate safety significance based on the following: (1) the failure to notify state and local governmental agencies in a timely manner, following declaration of an Alert, during an actual event on June 25, 2001; and (2) this finding represents a failure to implement the risk significant planning standard 10 CFR 50.47(b)(5) (Section 4OA3.1).

Inspection Report# : 2001009*(pdf)*

Significance: W Jun 27, 2001
Identified By: NRC
Item Type: VIO Violation
Failure to correct a risk-significant EP performance weakness
Corrective actions implemented to prevent recurrence of a dose assessment performance weakness identified during the August 29, 2000, biennial exercise were not fully effective in that they were narrowly focused. The dose assessment team failed to recognize a degraded core condition and to revise its dose projections for the degraded condition. As a result, protective action recommendations were not upgraded. Corrective actions for the performance weakness concentrated on procedural inconsistencies that contributed to the failure and did not sufficiently recognize the need for additional personnel training. As a result, the performance weakness was repeated during an April 11, 2001, drill. This was an apparent violation of 10 CFR Part 50, Appendix E, Paragraph IV.F.2.g. This finding had greater than minor significance because the failure to use a degraded core in dose calculations had a credible impact on safety, in that it resulted in incorrect protective action recommendations which could have caused offsite populations to receive unnecessary radiation dose. It had been preliminarily determined to have low to moderate safety significance (White) using the Emergency Preparedness Significance Determination Process because it represented a failure to correct a performance weakness associated with a risk-significant emergency preparedness planning standard. This violation was entered into the licensee's corrective action program as RCR 2001-0331. The final determination for a white finding and notice of violation were issued for EA-01-154 on August 13, 2001.
Inspection Report# : 2001004*(pdf)*

Occupational Radiation Safety

Significance: G May 13, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO FOLLOW ALARA PROCEDURES
IR05000298-00-06; on 04/02-5/13/00; Nebraska Public Power District, Cooper Nuclear Station. Integrated Resident & Regional Report; Maintenance Rule and Health Physics. A radiation worker and a radiation protection technician failed to follow the requirements of their radiation work permits. Specifically, the radiation worker failed to rinse equipment being removed from the reactor cavity pool to reduce the possible spread of contamination and radioactive particles, and the radiation protection technician failed to perform air sampling during the installation of the reactor cavity/fuel pool shield plugs to monitor the radiological airborne work conditions. The licensee documented the above occurrences in Problem Identification Reports 4-07254 and 4-08306, respectively. This noncited violation was characterized as a "green" finding using the occupational radiation safety significance determination process. This issue was determined to be of very low significance because these incidents did not result in an overexposure or have a significant potential to cause an overexposure.
Inspection Report# : 2000006*(pdf)*

Significance: G Mar 24, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
VIOLATION OF 10 CFR 20.1501(a)/FAILURE TO EVALUATE THE DOSE GRADIENT BETWEEN CHEST AND HEAD TO DETERMINE IF DOSIMETRY IS LOCATED CORRECTLY
The inspectors identified a noncited violation of 10 CFR 20.1501(a) because the licensee failed to evaluate the dose gradient between the chest and head to determine if dosimetry was located correctly to measure the dose to the part of the body receiving the highest exposure. The failure to perform this survey could have resulted in an unplanned and unmonitored radiation dose. However, because the incident did not result in an overexposure or have a significant potential to cause an overexposure, the Occupational Radiation Safety Significance Determination Process indicated that the violation had a low risk significance. This violation is in the licensee's corrective action program as Problem Identification Report 4-07142.
Inspection Report# : 2000003*(pdf)*

Significance: G Jan 03, 2002
Identified By: Licensee
Item Type: NCV NonCited Violation
The licensee failed to lock and control items hanging in the spent fuel pool
The licensee failed to lock and control items hanging in the spent fuel pool that would create a high radiation area if removed. Specifically, on October 26, 2001, two items were found with underwater on contact radiation levels of 40 and 120 Rem per hour and, on November 29, 2001,

another item was found with contact radiation levels of 200 Rem per hour. Licensee personnel assumed that these contact dose rates would have resulted in a high radiation area if the components had been removed from the pool. These occurrences were determined to be a violation of Technical Specification 5.4.1(a). This violation is being treated as a noncited violation consistent with Section VI.A of the NRC Enforcement Policy. This issue has been entered into the licensee's corrective action process as Notification 10127300. The safety significance of this violation was determined to be very low by the occupational radiation safety significance determination process because there was no actual overexposure or substantial potential for an overexposure, and the ability to assess dose was not compromised.
Inspection Report# : 2001007*(pdf)*

Significance: N/A Jul 10, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to perform an ALARA review.
On May 22, 2001, the inspector identified that the as low as reasonably achievable (ALARA) committee had not reviewed job Package RE19AL-23, "Resolution of EQ Splice Issues," before the job exceeded 5 person-rem. The failure to review a job package before job dose exceeds 5 person-rem is a violation of Technical Specification 5.4.1. This violation is in the licensee's corrective action program as Notification 10086481. The significance of this violation was determined to be more than minor because the failure to perform an appropriate ALARA Committee review could have a credible impact on safety. This violation did not affect the Occupational Radiation Safety cornerstone, since there were no unplanned or unintended doses that resulted from actions contrary to Technical Specifications. However, the issue was determined to be greater than minor (Section 2OS2).
Inspection Report# : 2001002*(pdf)*

Significance: G Jul 10, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to prevent unauthorized entry to a locked high radiation area.
On May 23, 2001, the inspector determined that the door used to control access to the steam jet air ejector room, a locked high radiation area, would not prevent unauthorized entry. The failure to prevent unauthorized entry to a locked high radiation area is a violation of Technical Specification 5.7.2. This violation is in the licensee's corrective action program as Notification 100866582. The safety significance of this violation was determined to be very low by the Occupational Radiation Safety Significance Determination Process because there was no overexposure or substantial potential for an overexposure, and the ability to assess dose was not compromised. This violation was more than minor because the failure to prevent unauthorized entry to a locked high radiation area has a credible impact on safety and the potential for unplanned or unintended dose (Section 2OS2).
Inspection Report# : 2001002*(pdf)*

Significance: G Sep 10, 1999
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO PERFORM RADIOLOGICAL SURVEY
Green: In using the cornerstone significance determination process, this issue was determined to have very low risk significance because there was no unintended exposure or substantial potential for one and the ability to assess dose was not compromised. During withdrawal of the transverse incore probe from the reactor core, radiation levels exceeded the 5000 millirems per hour limit of the survey meter in use. As a result, on May 24, 1997, the extent of the radiation levels was unknown. The failure to perform an adequate radiological survey was a violation of 10 CFR Part 20, Section 1501. This violation is being treated as a noncited violation (50-298/9903-02), consistent the Interim Enforcement Policy for pilot plants (Section 2OS4).
Inspection Report# : 1999003*(pdf)*

Significance: G Jul 17, 1999
Identified By: Licensee
Item Type: FIN Finding
INSPECTORS REVIEWED THE LICENSEE'S ACTIONS FOLLOWING A JUNE 4, 1999, SPILL OF FLOW-LEVEL RADIOACTIVE CONDENSATE DEMINERALIZER RESIN TO ASSESS SIGNIFICANCE.
Green. On June 4, 1999, approximately 5,000 gallons of water with 3 to 4 cubic feet of condensate demineralizer resin spilled onto the radioactive waste building basement floor. The inspectors determined that no significant radiation exposure nor potential overexposure had occurred. The inspectors determined that, because no significant radiation exposure nor potential overexposure had occurred, the spill remained within the licensee's response band (green). Operators documented the event in Problem Identification Report 4-02417 (Section 4OA3).
Inspection Report# : 1999006*(pdf)*

Public Radiation Safety

Significance: G Oct 04, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
The licensee identified that decay heat calculations were not being performed as required by the certificate of compliance for Type B packages
10 CFR 71.12(c)(2) states, in part, that the general license applies to a licensee who complies with the terms and conditions of the license, certificate, or other approval as applicable. On September 21, 2000, the licensee identified that decay heat calculations were not being performed as required by the certificate of compliance for Type B packages. This event is described in the licensee's corrective action program, reference Problem Identification Report 4-11571. This is being treated as a noncited violation.
Inspection Report# : 2001006*(pdf)*

Significance: G Oct 04, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to properly classify and manifest radioactive waste shipments
On August 21, 2001, the inspector identified that the licensee had incorrect shipping manifests and had under reported isotopic and total shipment radioactivity. The licensee had utilized nonconservative 3-year average waste stream analysis scaling factors for each waste stream to classify all radioactive waste shipments. Various isotopic scaling factors were low by a factor of between 10 and 100. The failure to properly classify and manifest radioactive waste shipments in 1999, 2000, and 2001 was a violation of 10 CFR Part 20, Appendix G. This violation is being treated as a noncited violation consistent with Section VI.A.1 of the NRC Enforcement Policy. This violation is in the licensee's corrective action program as Notification 10106415. The safety significance of this violation was determined to be very low by the Public Radiation Safety Significance Determination Process because radiation limits were not exceeded, and there was no breach of package during transit, certificate of compliance problem, low level burial ground access problem, or failure to make notifications or provide emergency information. The violation was more than minor because there was a credible impact on safety due to incorrect shipping manifests and underreported isotopic and shipment activities, and the issue involved an occurrence in the licensee's radioactive material transportation program (Section 2PS2).
Inspection Report# : 2001006*(pdf)*

Significance: G Oct 04, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
The licensee identified that the 10 CFR Part 61 annual waste stream sampling and analysis had not been completed in 1998 in accordance with radiation protection procedural requirements
Technical Specification 5.4.1.a requires that procedures be established, implemented, and maintained for activities recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978. On September 21, 2000, the licensee identified that the 10 CFR Part 61 annual waste stream sampling and analysis had not been completed in 1998 in accordance with radiation protection procedural requirements. This event is described in the licensee's corrective action program, reference Problem Identification Report 4-11611. This is being treated as a noncited violation.
Inspection Report# : 2001006*(pdf)*

Significance: G Oct 04, 2001
Identified By: Licensee
Item Type: NCV NonCited Violation
Radioactive waste and material shipping containers were defective and repaired by radiation protection without procedural, material, or quality guidance
49 CFR 173.28(c)(2) states, in part, that reconditioning of a nonbulk packaging is restoring the packaging by repair or replacement of components to a condition such that it conforms in all respects with the requirements of this subchapter. On September 8, 2000, the licensee identified that radioactive waste and material shipping containers were defective and repaired by radiation protection without procedural, material, or quality guidance. This event is described in the licensee's corrective action program, reference Problem Identification Report 4-11390. This is being treated as a noncited violation.
Inspection Report# : 2001006*(pdf)*

Significance: G Aug 26, 1999
Identified By: NRC
Item Type: NCV NonCited Violation

FAILURE TO CARRY OUT A COMPREHENSIVE SYSTEM OF PLANNED AND PERIODIC AUDITS OF 10 CFR PART 71 REQUIREMENTS (SECTION 4OA1)
The inspector identified a violation for failure to carry out a comprehensive system of planned and periodic audits of the radioactive material packaging and transportation programs in accordance with 10 CFR 71.137. The failure to review all aspects of the radioactive material processing and shipping program could cause programmatic problems to be missed which could ultimately result in unnecessary exposure to radiation workers and members of the public. This violation is being treated as a noncited violation (NCV), consistent with Appendix F of the NRC Enforcement Policy. This violation is in the licensee's corrective action program as Problem Identification Report (Serial Number) 4-03782 (Section 4OA1).
Inspection Report# : 1999009*(pdf)*

Physical Protection

Significance: G Mar 31, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to provide adequate compensatory measures following degradation of a segment of the perimeter detection system.
IR 05000298-00-15; 12/31/2000-03/31/2001; Nebraska Public Power District; Cooper Nuclear Station. Integrated Resident/Regional Report; Safety Eval. Prog., Heat Sink Perf., Personnel Perf. During Nonroutine Plant Evolutions, Postmaintenance Testing, and Physical Security Plan. Section 9.2.B of the licensee's physical security plan and paragraph 6.5 of licensee's security procedure 2.14 require that upon degradation of a portion of the perimeter detection system, an observer or armed guard with view of the degraded coverage area, will be positioned within 10 minutes. On November 6, 2000, the licensee identified that an observer or armed guard was not posted at a degraded segment of the perimeter detection system until 48 minutes following degradation, as described in the licensee's corrective action program, reference Problem Identification Report 4-12402. This issue was determined to be greater than minor in nature because the condition, if left uncorrected, would become a more significant safety concern. The issue was further determined to be of very low safety significance (Green) by the significance determination process because there were not greater than two similar findings in the last four quarters.
Inspection Report# : 2000015*(pdf)*

Miscellaneous

Significance: N/A Nov 04, 2000
Identified By: NRC
Item Type: FIN Finding
SUBSTANTIVE FINDING OF A CROSS-CUTTING HUMAN PERFORMANCE ISSUE FOR OPERABILITY DETERMINATIONS
IR 05000298-00-13; on 9/24-11/04/2000; Nebraska Public Power District; Cooper Nuclear Station, Integrated Resident & Regional Report. Maintenance Rule Effectiveness. The inspectors identified a trend with human performance, in determining operability of safety-related equipment, being the common element. This trend was evidenced by the following: • Ten months prior to this inspection, operations personnel failed to perform an operability determination for a reactor recirculation valve degraded condition (NCV 50-298/0004-02). • During the last 3 months, three additional examples of failures to perform operability determinations were identified (NCV 50-298/0013-01). The causal relationship of these errors was that operations personnel lacked a questioning attitude toward degraded or nonconforming conditions. Each of these individual findings could directly impact safety, based upon failures to recognize the potential loss of safety function(s) for safety-related equipment. The inspectors considered this performance trend to be a substantive cross-cutting issue, not captured in individual issues, indicating a performance trend. The significance determination process does not address such human performance issues. Therefore, this finding is considered to have no color (Section 4OA4).
Inspection Report# : 2000013*(pdf)*

Significance: G Aug 25, 2000
Identified By: NRC
Item Type: VIO Violation
Failure to Take Prompt Corrective Actions
The licensee did not take timely corrective actions for restoration of environmentally qualified electrical and controls equipment control panels for the high pressure coolant injection system, which were not properly secured. Furthermore, the licensee did not implement measures through maintenance procedure revisions and corrective actions to address environmental qualification aspects of maintenance on safety-related equipment. This issue had previously been identified as a Non-Cited Violation in NRC Inspection Report 50-298/9916-01, yet actions to revise maintenance procedures and restore compliance had not been promptly taken and continued to be uncorrected 9 months after initial identification. No formally reviewed and approved analysis had been performed to justify not correcting the discrepant condition, which could affect equipment operability. Nonconformance conditions are required to be promptly corrected or sufficient interim compensatory measures established, or technical evaluations performed to justify the existing condition. The failure to establish prompt corrective actions for conditions adverse to quality was a

violation of 10 CFR Part 50, Appendix B, Criterion XVI (50-298/0010-03) (Section 4OA2.3.b). This issue was characterized as a green finding using the significance determination process. The issue was determined to have very low risk significance because of redundant systems and the actual impact on the affected equipment was low.
Inspection Report# : 2000010*(pdf)*

Significance:  Jun 24, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO FOLLLOW EQUIPMENT CONTROL AND TAGGING PROCEDURE
IR05000298-00-08; on 05/14-06/24/00; Nebraska Public Power District, Cooper Nuclear Station. Integrated Resident & Regional Report; Resident Inspection and Security. Maintenance workers failed to follow an administrative procedure for equipment control and tagging. The workers operated the drywell personnel airlock while a danger tag was hanging on it. Through interviews conducted with maintenance personnel, the inspectors found that workers did not have an adequate understanding of the controls and restrictions associated with equipment tagging. The inspectors considered this to be a crosscutting human performance issue. The failure to follow the procedure for equipment tagging was a violation of Technical Specification 5.4.1 (a). This violation is being treated as a noncited violation in accordance with Section VI.A of the NRC Enforcement Policy and is in the licensee's corrective action program as Problem Identification Report 4-09638. This noncited violation was characterized as a green finding using the significance determination process. It was determined to have very low risk significance because at least one drywell personnel airlock door remained operable at all times.
Inspection Report# : 2000008*(pdf)*

Significance:  Dec 18, 2001
Identified By: Licensee
Item Type: NCV NonCited Violation
Five examples of failure to follow corrective action program procedures for performing operability determinations and evaluations
The following findings of very low safety significance were identified by the licensee and are violations of NRC requirements and meet the criteria of Section VI.A of the NRC Enforcement Policy, NUREG-1600, for being dispositioned as a noncited violation. On July 23, 2001, crimps improperly installed...on August 7, 2001, numerous EQ deficiencies...on August 9, 2001, examples where operability determinations were not performed...on August 7, 2001, primary containment isolation switches did not meet Reg Guide 1.97 requirements...on August 23, 2001, main steam isolation valve limit switches did not have qualification packages to account for actual ambient temperature.
Inspection Report# : 2001010*(pdf)*

Significance: N/A Sep 10, 1999
Identified By: NRC
Item Type: FIN Finding
CORRECTIVE ACTION PROGRAM ADEQUATE
PIM NRC FIN OTHER No Color 9/10/99 71152 Corrective action program adequate The corrective action program was generally implemented adequately across all cornerstones, with very low risk significance examples of untimely corrective actions. The licensee's self-assessments were appropriately focused on substantive performance improvement areas. Licensee management identified improving ownership, accountability, and support as a site-wide improvement area and was developing improvement plans at the end of the inspection.
Inspection Report# : 1999003*(pdf)*

Last modified : March 28, 2002