Millstone 3

Initiating Events

Mitigating Systems

Significance: G Feb 10, 2001
Identified By: Licensee
Item Type: FIN Finding
THE POWER CABLE FOR CHARGING PUMP 3CHS*P3B WAS INAPPROPRIATELY ROUTED THROUGH THE FIRE AREA HOUSING THE REACTOR PLANT COMPONENT COOLING WATER PUMPS SINCE PLANT CONSTRUCTION
The power cable for charging pump 3CHS*P3B was inappropriately routed through the fire area housing the reactor plant component cooling water (CCP) pumps since plant construction. Since the licensee's fire analysis credits pump 3CHS*P3B to provide reactor coolant pump (RCP) seal cooling, and also credits the flow from the CCP pumps through the thermal barrier heat exchangers as the alternate method of RCP seal cooling, this condition potentially compromised the plant design intended to prevent RCP seal damage that could lead to a small-break loss-of-coolant accident. The identified problem was reported as a condition outside the design basis of the unit. Based upon the defense in depth barriers for plant fire protection, only one of which was degraded by the identified problem, and also considering the availability of other multi-train equipment ("A" train charging pump and "C" swing charging pump) to mitigate the postulated, worst-case result of a major fire in the area, this condition was found to be of very low safety significance (Green).
Inspection Report# : 2000014*(pdf)*

Significance: G Feb 10, 2001
Identified By: NRC
Item Type: FIN Finding
OPERATORS FAILED TO RECOGNIZE THAT THE "B" TRAIN OF SERVICE WATER CONFIGURATION RENDERED THE TRAIN INOPERABLE
Operators failed to recognize that the "B" train of service water configuration rendered the train inoperable and therefore, were not tracking the inoperability against the 72 hour allowed outage time for Technical Specification limiting condition for operation 3.7.4, Service Water System, which is applicable in Modes 1 through 4. Operability Determination (OD) MP3-026-01 was written to justify operability of the "B" train of service water with the discharge check valve for one of the two pumps in the train missing a portion of its soft seat. One of the compensatory measures for this OD required that the "B" train of service water be operated with the "D" pump in the "lead" mode for a sequenced restart to prevent a drain-down of the service water system following a loss of power. However, on February 3, 2001, during Mode 4 (Hot Shutdown) conditions, the inspector identified that the above compensatory measure was not being followed. Instead, the "B" pump controls were in lead, as indicated on the main control board. Operators restored the compensatory measure upon identification of the problem. This condition apparently existed since the previous day, when the plant was at power. The time that the compensatory measures were not in affect did not exceed the TS allowed outage time one train of service water being inoperable. This condition was found to be of very low safety significance (Green) due to the fact that only one train of service water was affected for less than the TS allowed outage time for the plant conditions, and this condition would not have prevented the plant from being maintained in hot shutdown.
Inspection Report# : 2000014*(pdf)*

Significance: G Feb 02, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO CORRECT CONDITIONS ADVERSE TO QUALITY, I.E.., NCVS, WERE NOT PROPERLY ADDRESSED
The NRC identified a Non-Cited Violation of 10 CFR 50, Appendix B, Criterion XVI, due to a failure to properly evaluate and correct conditions adverse to quality. Specifically, four Non-Cited Violations issued in the last year were not fully addressed in the licensee's corrective action program. Although the associated equipment or plant condition was corrected, the subject of the violation (e.g., failure to revise or use appropriate procedures) was not resolved. The safety significance was determined to be very low because the physical deficiencies were corrected.
Inspection Report# : 2000017*(pdf)*

Significance: G Jul 01, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO ESTABLISH ADEQUATE SURVEILLANCE TEST CRITERIA
Technical Specification 4.0.5 requires that inservice testing of check valves be conducted at maximum credited design basis flow. Unit 3 Surveillances SP 3622.7-1 and SP 3622.3-5 established acceptance criteria for auxiliary feedwater (AFW) pump discharge check valve operability below this criteria. This is a violation of Millstone Unit 3 TS 6.8.1, Procedures, and is being treated as a Non-Cited Violation.
Inspection Report# : 2000008*(pdf)*

Significance: N/A May 13, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO PROMPTLY IDENTIFY AND CORRECT NONCONFORMING CONDITIONS AND TO ADEQUATELY CONTROL A "DE FACTO" DESIGN CHANGE ON THE "B" EDG FUEL RETURN SYSTEM
Operability Determination MP3-020-99 documented a nonconforming condition regarding missing check valve internals on the "B" emergency diesel generator (EDG). A review of the action items, documented in condition report CR M3-99-2262 to restore the "B" EDG design basis qualification, determined that corrective measures were neither implemented at the first available opportunity, nor justified for a longer completion schedule. The NRC determined that this nonconforming condition was neither promptly identified and corrected, nor evaluated as a field design change; and thus, represented a violation of 10CFR50, Appendix B. The "B" EDG, while not fully qualified, was determined to be operable. This issue was determined to be a Non-Cited Violation. (This item is documented as NCV 05000423/2000-007-01 in IR 05000423/2000-007)
Inspection Report# : 2000007*(pdf)*

Significance: G Feb 09, 2002
Identified By: NRC
Item Type: NCV NonCited Violation
DELAY IN THE DISCOVERY OF DISCHARGED BREAKER CLOSING SPRINGS FOR THE "B" EDG RESULTED IN AN EXTENDED PERIOD OF EDG INOPERABILITY AND A VIOLATION OF TS 3.8.1.1
The inspector determined that following the conduct of testing activities (i.e., SP 3646A.2) that discharged the "B" EDG breaker closing springs, no documented requirement existed to verify that the springs were recharged. This resulted in a delay in the discovery of "B" EDG system inoperability and therefore, also in an extended period of time for the subject EDG unavailability. While the total unavailability time period (approximately 37 hours) was within the TS allowed outage time (AOT) for one inoperable EDG, the inspector identified that TS 3.8.1.1, action b. requires certain verification activities of redundant electrical power supply availability within 1hour, 8 hour, and 24 hour time periods. These actions were not performed, as required in the times allotted, because of the noted delays associated with the discovery of the inoperable "B" EDG condition. This is considered a violation of TS 3.8.1.1. The inspector evaluated this condition using the NRC Significance Determination Process and concluded that the condition was of very low significance (Green) because the plant TS provided for an AOT of 72 hours, because the AC electrical offsite sources and redundant onsite sources remained operable during the period of "B" EDG unavailability, and because no plant work was done to compromise the Unit 3 risk configuration during the time that the EDG inoperability was not recognized. As a result of the licensee's review activities and corrective actions developed with respect to CR-01-12394, this violation is being treated as a Non-Cited Violation (NCV 50-423/01-14-01) consistent with Section VI.A of the NRC Enforcement Policy, NUREG-1600.
Inspection Report# : 2001014*(pdf)*

Significance: G Dec 29, 2001
Identified By: NRC
Item Type: FIN Finding
LICENSEE REQUALIFICATION EXAM RESULTS
Two of ten Unit 3 crews failed the dynamic simulator portion of a licensed operator requalification exam. The crew failures are more than minor (credible effect on safety) because the rate is 20% and the deficiencies reflected the potential inability of the crews to take appropriate safety related actions in response to actual emergency conditions. Based on the percentage of crew failures (20% - 2 of 10 crews examined failed), the finding was characterized by the SDP as having very low risk significance. The crews failed to successfully complete a "crew critical task," which measured each crew's ability to place and maintain the reactor in a safe operational or shutdown condition.
Inspection Report# : 2001009*(pdf)*

Significance: G Nov 02, 2001
Identified By: NRC
Item Type: FIN Finding
INSUFFICIENT COMPENSATORY MEASURES FOR REMOVAL OF CABLE SPREADING ROOM CO2 SUPPRESSION SYSTEM
The NRC concluded that the measures implemented to compensate for locking out the cable spreading room fixed suppression system were not

fully effective, which could result in delays in suppressing a fire in the area. Deficiencies related to selection and use of fire suppression equipment, fire fighting strategy content and usage, command and control, and communications delayed the application of a hose stream to a simulated fire during a fire brigade drill in the cable spreading room. This delay could have resulted in increased fire damage because the gaseous fixed suppression system was unavailable. This finding was of very low safety significance (Green) because the likelihood of occurence of a fire that could damage safety-related equipment in this area is small, and equipment and procedures were available for alternate shutdown outside of the control room.
Inspection Report# : 2001012*(pdf)*

Significance: G Aug 11, 2001
Identified By: Licensee
Item Type: NCV NonCited Violation
FAILURE TO PERFORM ADEQUATE POST-MAINTENANCE AND SURVEILLANCE TESTING OF THE INDEPENDENT CCE TRAINS
The NRC determined that the failure to perform adequate post-maintenance and surveillance testing of the independent CCE trains constituted a violation of 10 CFR 50, Appendix B, Criterion XI for "Test Control". However, because it was subsequently determined that the charging pumps would remain operable, given the assumed conditions of the loss of service water cooling for the CCE system, as occurred on June 13, the inspector evaluated this condition using Phase 1 of the NRC's Significance Determination Process and concluded that the licensee performance errors contributing to this event and the noted violation were of very low safety significance (Green). Also, since the licensee corrective action plans relating to each performance problem, including those involving test inadequacies, were appropriately documented by the licensee in response to CR-01-06186, this violation is being treated as a Non-Cited Violation.
Inspection Report# : 2001006*(pdf)*

Significance: G Jun 30, 2001
Identified By: NRC
Item Type: FIN Finding
IMPROPER WORK CONTROL REVIEW FOR A TEMPORARY MODIFICATION RESULTED IN TURBINE-DRIVEN AUXILIARY FEEDWATER SYSTEM INOPERABILITY
The licensee's implementation of a temporary plant modification with an improper work control review resulted in a period of turbine-driven auxiliary feedwater system inoperability. Subsequent NRC review identified that the process controls for the modified system alignment had inadequately evaluated the potential for causing a safety system to be declared inoperable. This finding was of very low safety significance because of the short duration of the inoperability and the availability of the redundant auxiliary feedwater components and flowpaths, which remained unaffected by this event.
Inspection Report# : 2001005*(pdf)*

Significance: G Jun 30, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO IMPLEMENT TIMELY CORRECTIVE ACTIONS FOR PIPING LEAKS ON SERVICE WATER STRAINER BLOWDOWN LINES
The NRC identified a Non-Cited Violation for failure to implement appropriate corrective action (10 CFR Appendix B Criterion XVI) after the licensee identified that piping leaks on service water strainer blowdown lines, originally identified during a first quarter 2001 refueling outage, should have been repaired before unit restart at the end of March. This finding was of very low safety significance because although the NRC review determined that additional corrective measures (i.e., procedure revisions) were necessary to address concerns for problem recurrence for adequate operability determinations, the structural integrity for the service water piping had been maintained.
Inspection Report# : 2001005*(pdf)*

Significance: TBD Jun 30, 2001
Identified By: Licensee
Item Type: URI Unresolved item
QUENCH SPRAY SYSTEM MANUAL VALVE MISALIGNMENT
An apparent violation of Technical Specification 3.6.2.1, Containment Quench Spray System, involving the failure to adequately verify the position of quench spray system discharge valves, was identified in LER 50-423/2001-001. The safety significance of the finding is under review, and the apparent violation is being treated as an unresolved item.
Inspection Report# : 2001005*(pdf)*

Barrier Integrity

Significance: G Sep 29, 2001
Identified By: Licensee
Item Type: NCV NonCited Violation
FAILURE TO COMPLETE A VERIFICATION OF ISOLATION TIME TEST FOR CONTAINMENT ISOLATION VALVE FOLLOWING MAINTENANCE
Technical Specification 4.6.3.1 requires that each isolation valve shall be demonstrated operable prior to returning the valve to service after maintenance, repair, or replacement work is performed on the valve or its associated actuator, control, or power circuit by performance of a cycling test and verification of isolation time. Contrary to the above, the licensee failed to complete a verification of isolation time test for containment isolation valve 3CCP*MOV45A (reactor plant component cooling water system supply header isolation valve) following maintenance activities performed on this valve on May 5, 1999. The licensee entered this violation into its corrective action program as Condition Reports CR-01-01158 and CR-01-01649.
Inspection Report# : 2001007*(pdf)*

Emergency Preparedness

Occupational Radiation Safety

Significance: G May 13, 2000
Identified By: Licensee
Item Type: NCV NonCited Violation
FAILURE TO CONTROL A HIGH RADIATION AREA IN ACCORDANCE WITH TECHNICAL SPECIFICATION 6.12.2
On June 19, 1999, licensee personnel identified that the entrance ladder to the north access to the Unit 3 reactor cavity, an area having radiation levels greater than 1000 millirem/hour when measured at 45 centimeters from the source, was not locked or otherwise controlled to prevent unauthorized entry. Technical Specification 6.12.2 requires that plant areas, accessible to personnel, with radiation levels greater than 1000 millirem/hour at 45 centimeters be locked to prevent unauthorized entry. Upon identification, access controls were promptly established. The licensee determined that there was no compromise in their ability to assess dose, that this condition was of short duration, and that no personnel were overexposed as a result of this condition. Consequently, there was very low risk significance associated with this violation. The licensee entered the issue into its corrective action process as condition report M3-99-2430. Additionally, the licensee recognized the matter as a performance indicator affecting Occupational Exposure Control Effectiveness. This item was identified as a Non-Cited Violation. (This item is documented as NCV 05000423/2000-007-02 in IR 05000423/2000-007)
Inspection Report# : 2000007*(pdf)*

Public Radiation Safety

Physical Protection

Significance: G May 12, 2001
Identified By: Licensee
Item Type: NCV NonCited Violation
PROTECTED AREA GATE OPEN WITHOUT COMPENSATORY ACTIONS
On February 5, 2001, the licensee identified that a gate that constituted a portion of the Protected Area barrier was in the fully open position without compensatory actions in place. This condition was contrary to the licensee's NRC approved Physical Security Plan, which states in part, that "Gates that constitute a portion of the protected area boundary area are constructed of the same or equivalent materials that are used for the protected area fence... . All gates are locked and alarmed when not in use...." This issue is more than minor in that, if left uncorrected, the same condition could result in unauthorized entry into the Protected Area. Since there was no malevolent act, no actual intrusion occurred, and there have not been greater than two similar findings in the past four quarters, the Significance Determination Process classifies this finding as one of very low safety significance (Green). This condition is a violation of 10 CFR 73.40, which requires that each licensee maintain physical security in

accordance with their NRC-approved Physical Security Plan (NCV 05000336,423/2001-004-05). This issue was entered into the licensee's corrective action program as CR-01-01032.
Inspection Report# : 2001004*(pdf)*

Miscellaneous

Significance: N/A Feb 02, 2001
Identified By: NRC
Item Type: FIN Finding
LICENSEE'S PERFORMANCE IN THE AREA OF PROBLEM IDENTIFICATION AND RESOLUTION WAS GENERALLY ADEQUATE
The licensee's performance in the area of problem identification and resolution at Millstone Units 2 and 3 was generally adequate. The licensee's staff usually identified risk significant problems at an appropriate threshold, and the problems were classified at an appropriate significance level. The engineering and maintenance backlogs, as well as the corrective action backlog, appeared to be adequately managed. In general, the majority of the issues reviewed were dealt with adequately when entered into the corrective action program; however, the team noted that a number of NRC findings identified over the past year concerned the cross-cutting area of problem identification and resolution. The majority of these findings related to Unit 2, with respect to the prioritization and evaluation of problems, and the effectiveness of corrective actions. The team also noted that many of the corrective actions were extended considerably beyond the original scheduled completion date. Additionally, while procedures allowed waiving of a root cause analyses for significant conditions adverse to quality, about half of the root cause analyses were waived without providing adequate documented justification.
Inspection Report# : 2000017*(pdf)*

Last modified : March 28, 2002