Millstone 2

Initiating Events

Mitigating Systems

Significance: G Dec 28, 2002
Identified By: NRC
Item Type: NCV NonCited Violation
INADEQUATE CORRECTIVE ACTION TO PREVENT RECURRENCE OF EDG EXHAUST DAMPER SOLENOID VALVE FAILURE
The inspectors identified a failure to determine the cause and take corrective action to preclude repetition of the May 2000 "A" emergency diesel generator (EDG) room ventilation exhaust damper solenoid valve failure. Following an "A" EDG ventilation system solenoid valve failure, the identified condition was not adequately investigated and the root cause never fully determined to prevent recurrence of a similar failure in August 2002. The failure of the "A" EDG's ventilation exhaust damper rendered the EDG incapable of performing its required safety function. The finding impacted the Mitigating Systems cornerstone and affected the availability of the "A" EDG. The inspectors evaluated the significance of this finding using the SDP Phase 1 worksheets and the SDP Phase 2 risk-informed inspection notebook (Revision 1) for Millstone Unit 2. Based on the results of the SDP Phase 2 evaluation, a SDP Phase 3 evaluation was performed. The SDP Phase 3 evaluation concluded that the finding was of very low safety significance (Green) following application of refined operator recovery credit. The increase in core damage frequency was greater than 1.0E-7, but less than 1.0E-6 due to internal initiating events. The issue was determined to be a violation of 10 CFR 50, Appendix, B, Criterion XVI, Corrective Action. Because the finding is of very low safety significance and it was captured in the licensee's corrective action program, this finding is being treated as a non-cited violation, consistent with Section VI.A of the NRC Enforcement Policy. As a result, URI 50-336/02-05-02 is closed. This issue is related to the Problem Identification and Resolution cross-cutting area with failure to determine the root cause and take effective corrective action to preclude repetition as causal factors.
Inspection Report# : 2002006*(pdf)*

Significance: G Nov 22, 2002
Identified By: NRC
Item Type: NCV NonCited Violation
DESIGN CONTROL - HIGH ENERGY LINE BREAK IMPACT ON OPERABILITY OF THE MOTOR-DRIVEN AUXILIARY FEEDWATER PUMPS
The inspectors identified that a small line high energy line break (HELB) in the turbine building could cause a loss of both motor-driven auxiliary feedwater pumps. The loss of the pumps would be the result of the motor bearings overheating and failing due to the high ambient room temperatures caused by the small line HELB. This issue was considered to be of very low safety significance (Green) based on a Phase 1 evaluation of the Significance Determination Process because the inadequate cooling of the auxilliary feedwater (AFW) pump motor bearings was a design deficiency of the AFW system that did not result in an actual loss of system function. The issue was determined to be a non-cited violation of 10 CFR 50, Appendix B, Criterion III, Design Control. This issue is related to the Problem Identification and Resolution cross-cutting area with failure to identify a condition adverse to quality as a causal factor.
Inspection Report# : 2002012*(pdf)*

Significance: G Nov 22, 2002
Identified By: NRC
Item Type: NCV NonCited Violation
DESIGN CONTROL - AVAILABILITY OF SERVICE WATER SYSTEM FOLLOWING A FLOODING EVENT
The inspectors identified that the design bases of the service water system (SWS) pertaining to pump operation following a flooding event were not correctly translated into instruction because, (1) the need to and the steps that are required to restore operability of the SWS within two hours were not included in the applicable plant procedure; and (2) the steps required to initiate manual blowdown of the SWS strainers were not included in the applicable plant procedure. This issue was considered to be of very low safety significance (Green) based on a Phase 1 evaluation of the Significance Determination Process (SDP) because the inadequate service water system restoration procedure was a system design deficiency that did not result in an actual loss of system function. The issue was determined to be a non-cited violation of 10 CFR 50, Appendix B, Criterion III, Design Control. This issue is related to the Problem Identification and Resolution cross-cutting area with failure to identify a condition adverse to quality as a causal factor.
Inspection Report# : 2002012*(pdf)*

Significance: G Sep 28, 2002
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO ADEQUATELY ESTABLISH, IMPLEMENT, AND MAINTAIN PROCEDURES COVERING THE CLEANING, INSPECTION AND LUBRICATION OF PUMP COUPLINGS
The inspectors identified an inadequate preventive maintenance procedure , which caused a failure of the "C" charging pump high speed coupling and rendered the "C" charging pump incapable of performing its required safety function. Specifically, vendor manual instructions related to grease removal and seal inspections were not translated into the licensee's procedures. The finding impacted the Mitigating Systems cornerstone and affected the availability of the "C" charging pump to perform its required safety function. However, this finding was of very low safety significance (Green) based on a Phase 1 Significance Determination Process evaluation because the finding did not represent an actual loss of the charging system's safety function or an actual loss of charging pumps for greater than the technical specification allowed outage time. The issue was determined to be a violation of Technical Specification 6.8.1, Procedures. Because the finding is of very low safety significance and it was captured in the licensee's corrective action program, this finding is being treated as a non-cited violation, consistent with Section VI.A of the NRC Enforcement Policy.
Inspection Report# : 2002005*(pdf)*

Significance: G Sep 28, 2002
Identified By: NRC
Item Type: NCV NonCited Violation
INADEQUATE 50.59 EVALUATION IN SUPPORT OF AN ALTERNATE INJECTION PATH WOULD SUBJECT HIGH PRESSURE SAFETY INJECTION PIPING AND NOZZLE TO THERMAL TRANSIENTS NOT BOUNDED BY DESIGN
The inspectors identified an inadequate 10 CFR 50.59 evaluation involving a procedure change to allow the use of the "A" high pressure safety injection (HPSI) flow path as an alternate charging flow path in Mode 3. The licensee's safety evaluation failed to accurately assess the temperature transients in piping associated with this flow path. The procedure change was developed during a forced shutdown of Unit 2 and the HPSI system piping and nozzle were subjected to thermal transients that were not bounded by the Final Safety Analysis Report (FSAR). This finding is associated with the Mitigating Systems cornerstone and it had the potential to impact the NRC's ability to perform its regulatory function. However, because of the potential for the thermal transients to impact the integrity of the HPSI system under subsequent operational conditions, the inspectors evaluated the finding in accordance with Appendix "A" of the Significance Determination Process. The inspectors determined that the impact from thermal cycles in excess of the FSAR analyses was of very low safety significance (Green) because a subsequent licensee analysis showed there would be no actual loss of the system's safety function. The issue was determined to be a violation of 10 CFR 50.59, Changes, tests, and experiments. Because the finding is of very low safety significance and because the finding was captured in the licensee's corrective action program, this finding is being treated as a non-cited violation, consistent with Section VI.A of the NRC Enforcement Policy.
Inspection Report# : 2002005*(pdf)*

Significance: G Sep 28, 2002
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO TAKE ADEQUATE CORRECTIVE ACTIONS TO PROMPTLY IDENTIFY AND CORRECT CVCS WELD SUSCEPTIBILITY TO FATIGUE FAILURES
The inspectors identified inadequate corrective actions to promptly identify and correct welds susceptible to fatigue failure following two weld failures in the chemical and volume control system (CVCS) which occurred in July 1999 and November 2001. This finding is associated with the Mitigating Systems cornerstone and it affected the reliability of the charging system. The failure to promptly identify and correct susceptible welds in the CVCS system resulted in two additional weld failures, on like welds, during August 2002. The finding was of very low safety significance (Green) because neither weld failure would have prevented the CVCS discharge header from completing its safety function while the Unit was at power. The issue was determined to be a violation of 10 CFR 50, Appendix B, Criterion XVI, Corrective Action. Because the finding is of very low safety significance and the finding was captured in the licensee's corrective action program, this finding is being treated as a non-cited violation, consistent with Section VI.A of the NRC Enforcement Policy.
Inspection Report# : 2002005*(pdf)*

Significance: G Jun 29, 2002
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO MAINTAIN FIRE BARRIER REQUIREMENTS DESCRIBED IN THE PLANT FIRE HAZARDS ANALYSIS
The inspectors identified a penetration into the north wall of the west DC switchgear room that had not been sealed to maintain a 3-hour rated fire barrier, as described in the plant Fire Hazards Analysis. The inspectors determined that the safety significance of the degraded fire barrier was very low since it did not separate redundant safe shutdown equipment. The issue was determined to be a violation of License Condition 2.C. (3) to Facility Operating License DRP-65, Fire Protection Program. Because the finding is of very low safety significance and the finding

was captured in the licensee's corrective action program, the finding is being treated as a non-cited violation, consistent with Section VI.A of the NRC Enforcement Policy.
Inspection Report# : 2002004*(pdf)*

Significance: G Feb 01, 2002
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO PERFORM AN OPERABILITY DETERMINATION ON THE POTENTIAL TO PRESSURIZE THE UNIT 2 ATMOSPHERIC DUMP VALVES (ADVs) ACTUATORS GREATER THAN THEIR DESIGN LIMIT
The Problem Identification and Resolution team inspectors identified a failure to perform an operability determination in accordance with procedures for the potential to pressurize the Unit 2 atmospheric dump valves (ADVs) actuators greater than their design limit. However, the failure to perform on operability determination was considered to have a very low safety significance because, a subsequently performed license operability determination provided a reasonable basis for concluding that when the final evaluation is complete, the ADVs will be shown to be capable of performing their safety function in the existing configuration. The issue was determined to be a violation of 10 CFR 50, Appendix B, Criteria V, Instructions, Procedures and Drawings. Because the finding is of very low safety significance and was captured in the licensee's corrective action program, the finding is being treated as a non-cited violation, consistent with section VI.A of the NRC Enforcement Policy.
Inspection Report# : 2001015*(pdf)*

Barrier Integrity

Significance: TBD Dec 28, 2002
Identified By: NRC
Item Type: URI Unresolved item
REACTOR COOLANT SYSTEM LEAKAGE
Technical Specification 3.4.6.2 states that reactor coolant system leakage shall be limited to no pressure boundary leakage in Modes 1 through 4. Contrary to this requirement, on February 19 and 22, 2002 while shutdown (Mode 5), the licensee's visual inspections found small boron deposits on two pressurizer heater penetrations indicating that a small leak was present during the previous operating cycle. The licensee also conducted helium leak tests which found that the RCP seal cooler had been leaking at an estimated rate to be less than 0.003 gal/min during the previous operating cycle. Both components are part of the reactor coolant pressure boundary. The risk significance of this issue is under review.
Inspection Report# : 2002006*(pdf)*

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Significance: G May 11, 2002
Identified By: Licensee
Item Type: NCV NonCited Violation
INADEQUATE SURVEY OF A CONTAMINATED TOOL RESULTED IN THE TOOL BEING INAPPROPRIATELY RELEASED FROM THE SITE AND RECEIVED BY AN OFF-SITE VENDOR
10 CFR 20.1501 requires, in part, that licensees make radiation surveys that are necessary to comply with 10 CFR Part 20. Contrary to this requirement, an inadequate survey of a contaminated tool resulted in the tool being inappropriately released from the site and received by an off-site vendor on 3/27/2002. The vendor determined that the tool had fixed contamination levels of approximately 300 counts per minute over a small area. No significant dose resulted to a member of the public from this activity. The tool was subsequently returned to the licensee. The issue involving this matter was addressed by various corrective actions and entered into the corrective action process as Condition Report 02-03753. This issue is being treated as a non-cited violation consistent with Section VI.A of the NRC Enforcement Policy.

Inspection Report# : 2002003*(pdf)*

Physical Protection

Miscellaneous

Significance: N/A Feb 01, 2002
Identified By: NRC
Item Type: FIN Finding
PROBLEM IDENTIFICATION AND RESOLUTION TEAM INSPECTION RESULTS
Overall the licensee identified problems at an appropriate threshold and entered them into the CAP for resolution. The identification of repetitive trends appeared proper. However, the use of trend cause codes to identify possible precursor trends was limited. No deficiencies were identified in completed operability determinations. The significance level 1 root cause evaluations reviewed during the inspection sufficiently identified likely causal factors and corrective actions. The significance level 2 apparent cause evaluations generally appeared appropriate. The selected effectiveness reviews were of good quality. Several instances were identified where the evaluation of problems documented in significance level 2 and level "N" condition reports were either not adequately evaluated or prioritized for completion, or were not completed in sufficient detail to provide for timely and effective corrective actions. Corrective actions appeared appropriate. The effectiveness reviews selected were of good quality, including several where the reviewer appropriately identified inadequate corrective actions. Some safety-related pump bearing oil problem concerns continue to occur, but previous corrective actions may not have had time to correct existing issues.
Inspection Report# : 2001015*(pdf)*

Last modified : March 25, 2003