

November 1, 2001

Mr. J. Alan Price, Vice President -
Nuclear Technical Services - Millstone
c/o Mr. D. A. Smith, Process Owner - Regulatory Affairs
Dominion Nuclear Connecticut, Inc.
Millstone Power Station
Rope Ferry Road
Waterford, Connecticut 06385

SUBJECT: MILLSTONE UNITS 2 AND 3 - NRC INSPECTION REPORTS 50-336/01-07
AND 50-423/01-07

Dear Mr. Price:

On September 29, 2001, the NRC completed inspections at your Millstone Units 2 & 3 reactor facilities. The enclosed reports document the inspection findings which were discussed on October 16, 2001, with Mr. C. Schwarz and other members of your staff.

These inspections examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

Based on the results of these inspections, the inspectors identified one issue of very low safety significance (Green). This issue was determined to involve a violation of NRC requirements. However, because of its very low safety significance and because it has been entered into your corrective action program, the NRC is treating this issue as a Non-Cited Violation, in accordance with Section VI.A.1 of the NRC's Enforcement Policy. If you deny this Non-Cited Violation, you should provide a response with the basis for your denial, within 30 days of the date of these inspection reports, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington DC 20555-0001; with copies to the Regional Administrator, Region I; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at the Millstone facility.

Since September 11, 2001, Millstone Power Station has assumed a heightened level of security based on a series of threat advisories issued by the NRC. Although the NRC is not aware of any specific threat against nuclear facilities, the heightened level of security was recommended for all nuclear power plants and is being maintained due to the uncertainty about the possibility of additional terrorist attacks. The steps recommended by the NRC include increased patrols, augmented security forces and capabilities, additional security posts, heightened coordination with local law enforcement and military authorities, and limited access of personnel and vehicles to the site.

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The NRC continues to interact with the Intelligence Community and to communicate information to Dominion Nuclear Connecticut, Inc. In addition, the NRC has monitored maintenance and other activities which could relate to the site's security posture.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosures will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/NRC/ADAMS/index.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Curtis J. Cowgill, Chief
Projects Branch 6
Division of Reactor Projects

Docket Nos.: 50-336, 50-423
License Nos.: DPR-65, NPF-49

Enclosures:

- (1) NRC Inspection Report 50-336/01-07
Attachment 1: Supplemental Information
- (2) NRC Inspection Report 50-423/01-07
Attachment 1: Supplemental Information

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ENCLOSURE 1

**U.S. NUCLEAR REGULATORY COMMISSION
REGION I**

Docket No.: 50-336

License No.: DPR-65

Report No.: 50-336/01-07

Licensee: Dominion Nuclear Connecticut, Inc.

Facility: Millstone Power Station, Unit 2

Location: P. O. Box 128
Waterford, CT 06385

Dates: August 12, 2001 - September 29, 2001

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Approved by: Curtis J. Cowgill, Chief
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Division of Reactor Projects

SUMMARY OF FINDINGS

IR 05000336-01-07; on 08/12-09/29/01; Dominion Nuclear Connecticut, Inc., Millstone Power Station; Unit 2. Maintenance Risk Assessments and Emergent Work Evaluation.

The inspection was conducted by resident and regional inspectors. The inspection identified one Green finding, which was a Non-Cited Violation. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using IMC 0609, "Significance Determination Process" (SDP). The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described at its Reactor Oversight Process website at <http://www.nrc.gov/NRR/OVERSIGHT/index.html>. Findings for which the SDP does not apply are indicated by "No Color" or by the severity level of the applicable violation.

A. Inspector Identified Findings

Cornerstone: Mitigating Systems

- **Green.** The inspectors identified a Non-Cited Violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," for the licensee's failure to prevent recurrence of a gasket failure on a steam trap in the main steam admission line to the turbine driven auxiliary feedwater (TDAFW) pump. The licensee's corrective actions specified in January 2000 to obtain and use gaskets rated for continuous main steam temperature were not correctly completed and resulted in the subsequent failure of the TDAFW pump steam trap body-to-bonnet gasket in August 2001.

This finding had a credible impact on safety because a steam leak in the TDAFW pump room could have prevented access to the room by plant personnel under emergency conditions. Although this finding affected the availability of the TDAFW pump, the inspectors determined that this finding was of very low safety significance because the size of the steam leak would not have prevented the TDAFW pump from fulfilling its design basis safety function. Because this 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.1 of the NRC Enforcement Policy. (Section 1R13.3)

B. Licensee Identified Violations

Violations of very low significance which were identified by the licensee have been reviewed by the inspectors. Corrective actions taken or planned by the licensee appear reasonable. These violations are listed in Section 4OA7 of this report.

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Report Details

SUMMARY OF UNIT 2 STATUS

Unit 2 operated at or near 100 percent power for most of the inspection period. The unit was operated at reduced power during a three-week period in August to address main condenser waterbox fouling.

1. REACTOR SAFETY (Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity and Emergency Preparedness)

1R01 Adverse Weather Protection

a. Inspection Scope

The inspectors reviewed the licensee's preparation for adverse weather associated with the current hurricane season. This review included a walkdown of various plant areas that contain safety-related structures, systems, and components (SSCs) to verify that extraneous material was not present that could impact operability of SSCs. Additionally, the inspectors reviewed design information contained in the Final Safety Analysis Report (FSAR) and verified the adequacy of various licensee procedures regarding the preparation and response to hurricanes, including:

- Common Operating Procedure (COP) 200.6, "Storms and Other Hazardous Phenomena (Preparation and Recovery)", Revision 1, Change 1; and
- Abnormal Operating Procedure (AOP) 2560, "Storms, High Winds, and High Tides", Revision 9, Change 2.

The inspectors verified that the licensee's procedures adequately addressed the protection and availability of selected safety-related SSCs, which included selective service water pumps, and the availability of adequate cooling water for emergency diesel generators in the event of a station blackout. The inspectors verified that deficiencies identified during the licensee's hurricane preparedness were entered into its corrective action program.

b. Findings

No findings of significance were identified.

1R02 Evaluation of Changes, Tests, or Experiments

a. Inspection Scope

The inspectors reviewed twelve 10 CFR 50.59 safety evaluations which were issued prior to the implementation of the new 10 CFR 50.59 program on June 29, 2001. The reviews were to verify that changes made to the plant or procedures as described in the FSAR were reviewed and documented in accordance with 10 CFR 50.59, and that the safety issues pertinent to the changes were properly resolved or adequately addressed. The safety evaluations reviewed covered activities associated with three cornerstones:

initiating events, mitigating systems, and barrier integrity. The inspectors also reviewed eleven screened-out safety evaluations to verify that the screen-out process was appropriately implemented.

In addition, the inspectors reviewed Regulatory Affairs Compliance Procedure 12, "50.59 Screens and Evaluations," Revision 3, that was used to control the screening, preparation, and issuance of the safety evaluations and screened-out safety evaluations to ensure that the procedure adequately covered the requirements of 10 CFR 50.59.

The inspectors also interviewed engineering personnel engaged in the preparation and review of the selected 10 CFR 50.59 safety evaluations.

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment

.1 High Pressure Safety Injection (HPSI) System Partial System Alignment

a. Inspection Scope

During preventive maintenance work and subsequent operational testing on the "C" HPSI pump, the inspectors verified that the "A" and "B" HPSI pumps were correctly aligned for operation in accordance with Surveillance Procedure (SP) 2604E, "HPSI System Valve Alignment Check, Facility 1," Revision 016 and Drawing 25203-26015, Sheet 2. This system was selected because it was identified as risk significant in the licensee's risk analysis. During this inspection, the inspectors also assessed the material condition of system equipment and verified that identified discrepancies were properly captured in the licensee's corrective maintenance program.

b. Findings

No findings of significance were identified.

.2 Auxiliary Feedwater (AFW) System Complete System Alignment

a. Inspection Scope

The inspectors reviewed the availability of the motor driven AFW pumps during corrective maintenance on the steam admission line steam trap (ST-156) for the turbine driven auxiliary feedwater (TDAFW) pump that had been removed from service on August 27, 2001. The inspectors walked down the AFW system piping and valves, the condensate storage tank, and AFW control equipment using Piping and Instrumentation Drawings (P&IDs) for the AFW system and the steam supply to the TDAFW pump (P&IDs 25203-26005 and 25203-26002). The inspectors also reviewed the protective tagging orders (Clearance Numbers 2C14-2316X00-0005, 2C14-2322X51-0010, 2C14-2322X51-0011, 2C14-2316X70-0005, and 2C14-2316X70-0011) that isolated the portions of the AFW system under maintenance, and verified that the tags hung on

system components were consistent with the tagging orders. In addition, the inspectors verified that the isolation boundaries for the TDAFW pump did not interfere with the availability of the two motor driven pump trains remaining in service; and reviewed Operating Procedure (OP) 2322, "Auxiliary Feedwater System", Revision 24, Change 8 to ensure that the alternate source of water (fire water) was available to the motor driven pumps. Following the completion of maintenance on the TDAFW pump, the inspectors verified the AFW system was properly aligned for service in accordance with SP 2610C, "Auxiliary Feedwater System Lineup Verification", Revision 19, Change 4.

b. Findings

No findings of significance were identified.

1R05 Fire Protection

a. Inspection Scope

The inspectors reviewed the Millstone Unit 2 Fire Hazard Analysis and Appendix R Compliance Report for the following plant areas:

- Turbine Building (Zone T-1F), and
- Cable Vault (Zone T-5).

The inspectors toured these areas to verify the functionality of installed fire detection and suppression devices, where applicable; the consistency of existing fire barrier configurations relative to the credited configuration of the fire barriers; the availability of specified manual fire fighting equipment in these and adjacent areas; and the adequate control of transient combustible materials located in these areas.

b. Findings

No findings of significance were identified.

1R12 Maintenance Rule Implementation

a. Inspection Scope

The inspectors evaluated the licensee's implementation of the maintenance rule, 10 CFR 50.65, as it pertained to identified performance problems with the following equipment:

- Safety Injection Tanks,
- Reactor Building Component Cooling Water (RBCCW) System Equipment, and
- HPSI Pumps.

During this inspection, the inspectors evaluated the licensee's monitoring and trending of performance data, verified that performance criteria were established commensurate with safety, and verified that the equipment failures were appropriately evaluated in accordance with the maintenance rule. The inspectors also verified that scoping tables

associated with each system had appropriate performance criteria consistent with the plant configuration. The inspectors interviewed system engineers and the station's maintenance rule coordinator and reviewed the following procedures:

- Engineering Department Instruction 30710, "Maintenance Rule Functional Failures," Revision 1;
- Functional Administrative Procedure MP-24-MR-FAP700, "Maintenance Rule Unavailability Monitoring," Revision 0; and
- Guideline MP-24-MR-GDL700, "Determining Maintenance Rule, SSPI [Safety System Performance Indicators], NRC Performance Indicators, and PRA [Probabilistic Risk Assessment] Unavailability," Revision 0, Change 1.

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessments and Emergent Work Evaluation

.1 "A" AFW Pump Maintenance Risk Assessment

a. Inspection Scope

The inspectors reviewed the licensee's risk assessment for maintenance activities scheduled for August 14, 2001, on the "A" AFW pump. The inspectors verified that the initial "Red" risk classification (risk factor greater than 15 times the baseline core damage frequency) had been incorrectly calculated for the planned activities. The inspectors reviewed the licensee's guidance contained in procedure MP-20-WM-FAP02.1, "Conduct of On-Line Maintenance," Revision 4, which implemented the risk assessment requirements of the maintenance rule set forth in 10 CFR 50.65(a)(4). The inspectors verified that the licensee managed risk at an acceptably low level since it identified the incorrect risk assessment prior to the actual commencement of the work activity, adjusted the Equipment-Out-Of-Service risk model to include the appropriate work activities, and re-performed the risk assessment to correctly classify the work activities from an integrated risk perspective. The inspectors verified that the issue was entered into the licensee's corrective action program.

b. Findings

No findings of significance were identified.

.2 TDAFW Pump Governor Spring Replacement

a. Inspection Scope

The inspectors reviewed the licensee's evaluation of plant risk for planned maintenance to the governor on the TDAFW pump under work order M2-01-10570. The inspectors selected this maintenance activity because the AFW system is risk significant in the licensee's risk analysis. During this inspection, the inspectors assessed the operability of redundant train equipment and verified that the licensee's planning of the maintenance activities minimized the length of time that the plant was subject to increased risk. The inspectors interviewed operating and engineering personnel and reviewed procedure MP-20-WM-FAP02.1, "Conduct of On-Line Maintenance," Revision 4.

b. Findings

No findings of significance were identified.

.3 Steam Leak Repairs on Main Steam Line Steam Trap ST-156

a. Inspection Scope

The inspectors reviewed the licensee's risk assessment for emergent work on steam trap ST-156 located on the steam admission line to the TDAFW pump. On August 27, 2001, ST-156 developed a steam leak through its body-to-bonnet gasket and the TDAFW pump was removed from service to complete repairs.

The inspectors observed selected portions of the repairs and reviewed the following work orders:

- M2-01-10172, "Steam Trap Body-Bonnet Leak;"
- M2-01-04116, "Inspection/Replacement of Turbine Governor Manual Speed Adjustment Knob, Nylock Nut, Belleville Washers, and Clutch Spring;" and
- M2-99-13922, "Replace Degraded Leak-Off Piping Downstream from Turbine Trip Throttle Valve."

The inspectors reviewed the licensee's risk assessment to evaluate the affect on plant risk due to previously scheduled maintenance activities during the week of August 27, 2001. This review included an assessment of the licensee's deferral of work which included a periodic calibration and undervoltage testing on the reserve station service transformer and sequencer that would have placed the plant in an unacceptable risk condition.

b. Findings

The inspectors identified one Green finding. The licensee failed to implement effective corrective actions for a failed gasket affecting the steam supply to the TDAFW pump. This finding was dispositioned as a Non-Cited Violation.

The inspectors noted that the ST-156 body-to-bonnet gasket had previously failed in January 2000 because the licensee had used Garlock 3400 gasket material, which was not rated for continuous service at temperatures greater than 400 degrees Fahrenheit (°F). The temperature of the main steam supply to the TDAFW pump at normal system operating temperature and pressure is approximately 545°F. The licensee had originally used a compressed asbestos gasket in ST-156 that was suitable for continuous service at the normal main steam system operating temperature. However, in an effort to remove asbestos gaskets from plant systems, the steam trap manufacturer recommended replacement of asbestos gaskets with high temperature, spiral wound, flexitallic gaskets. When the licensee ordered replacement gaskets, the manufacturer provided Garlock 3400 as a substitute material, which the licensee then stocked in the site warehouse and subsequently installed in the flanges of ST-156 before the January 2000 gasket failure. The licensee documented the January 2000 gasket failure in Condition Report (CR) M2-00-0258 and initiated corrective actions.

The inspectors noted that the licensee had documented the corrective actions for the January 2000 gasket failure in CR M2-00-0258 as completed. The corrective actions included a change to the bill of material for the ST-156 gasket to specify future use of flexitallic gaskets. In addition, maintenance mechanics were advised on the importance of using the correct replacement gaskets in ST-156. However, the licensee did not subsequently purchase the flexitallic gaskets or stock them in the warehouse and the Garlock 3400 gaskets were not removed from stock. Consequently, a Garlock 3400 gasket was installed as a replacement when ST-156 was overhauled during the last Unit 2 refueling outage in April/May 2000. The inspectors concluded that the licensee did not effectively implement corrective actions to prevent recurrence of a condition adverse to quality by assuring that gasket material suitable for main steam system temperatures was installed in ST-156 following the January 2000 gasket failure. For the latest repair, a flexitallic gasket was not available in the warehouse and the licensee installed an asbestos gasket.

The inspectors reviewed this issue under the SDP and determined that this issue had a credible impact on safety because a steam leak in the TDAFW pump room could have prevented access to the room by plant personnel under emergency conditions. The inspectors also determined that this issue affected the availability of the TDAFW pump, which is a mitigating system train under the SDP, because the pump had to be taken out-of-service to repair the steam trap. The inspectors concluded that this finding was of very low safety significance (Green) because the size of the steam leak would not have prevented the TDAFW pump from achieving its required minimum flow under design basis conditions.

10 CFR Part 50, Appendix B, Criteria XVI, "Corrective Action," requires, in part, that measures shall be established to assure that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and nonconformances are promptly identified and corrected. Contrary to the above, the licensee failed to effectively implement corrective actions to prevent recurrence of a gasket failure on steam trap ST-156 in the main steam admission line to the TDAFW pump, a condition adverse to quality. The licensee's corrective actions specified in January 2000 to obtain and use gaskets rated for continuous main steam temperature were not correctly completed and resulted in the recurring failure of the TDAFW pump

steam trap body-to-bonnet gasket on August 21, 2001. This is considered to be a violation of 10 CFR Part 50, Appendix B, Criteria XVI. In accordance with Section VI.A.1 of the NRC Enforcement Policy, this violation is being treated as a Non-Cited Violation (**NCV 50-336/01-07-01**). This violation was entered into the licensee's corrective action program as CR 01-08552, CR 01-10308, and CR 01-10376.

1R14 Personnel Performance During Non-routine Plant Evolutions

.1 Unit 2 Automatic Reactor Trip Due to Loss of Cooling Water Flow to the "C" and "D" Main Condenser Waterboxes

a. Inspection Scope

On April 29, 2001, Unit 2 experienced an automatic reactor trip from full power due to a main turbine trip resulting from a loss of main condenser vacuum. This event was selected for review to determine if operator actions in response to a loss of cooling water flow to the "C" and "D" main condenser waterboxes were appropriate and in accordance with the response required by the licensee's emergency response procedures and training. The inspectors evaluated the operators' response to the reactor trip as well as the response of plant safety systems designed to mitigate the consequences of the transient. The inspectors reviewed the following documents:

- AOP 2574, "Loss of Condenser Vacuum," Revision 5;
- AOP 2517, "Circulating Water Malfunctions," Revision 0;
- CR 01-04614, "Unit 2 Automatic Reactor Trip Due to Loss of Condenser Vacuum," April 29, 2001;
- Licensee Event Report (LER) 50-336/2001-003-00, "Reactor Trip Resulting From Loss of 'C' Circulating Water Pump," June 26, 2001;
- Root Cause Investigation for CR 01-04614, "Unit 2 Reactor Trip Resulting From Loss of 'C' Circulating Water Pump," May 23, 2001;
- CR 01-0436, "Procedurally Required Manual Reactor Trip Was Not Performed," April 30, 2001; and
- CR 01-04619, "Auto Auxiliary Feed Initiated When Unit Tripped From 100% Power," April 29, 2001.

b. Findings

The inspectors reviewed the licensee's root cause evaluation of this event and noted that the licensee identified a violation of NRC requirements. The violation is documented in Section 4OA7 of this report.

1R15 Operability Evaluations

.1 Seal Leakage from the "A" RBCCW Pump

a. Inspection Scope

The inspectors reviewed operability determination (OD) MP2-082-01, which was initiated following the licensee's identification of leakage from the outboard seal of the "A" RBCCW pump. Loss of inventory could potentially affect the long-term post-accident cooling function of this system designed to mitigate the consequences of an accident. The inspectors evaluated the licensee's compensatory measures to address the degraded condition and verified that the condition did not render the involved equipment inoperable or result in an unrecognized increase in plant risk. The inspectors interviewed engineering and operations personnel and reviewed the applicable portions of the FSAR and Technical Specifications (TS).

b. Findings

No findings of significance were identified.

.2 "A" RBCCW Pump Operability

a. Inspection Scope

The inspectors evaluated the licensee's actions following the identification of approximately 50% water in the "A" RBCCW pump outboard bearing oil bubbler. The inspectors verified that the licensee appropriately declared the pump inoperable, and that the licensee restored operability of the RBCCW header with the available swing pump within the appropriate time frame established by the TS. The inspectors reviewed the oil analysis, inspected the bearings upon removal, verified that the licensee had adequately evaluated the cause of the water intrusion, and verified that the licensee adequately addressed the historical operability of the pump in post-accident conditions due to the water intrusion. The inspectors verified that the licensee had entered the water intrusion issue into its corrective action program for resolution.

b. Findings

No findings of significance were identified.

.3 TDAFW Pump Clutch Spring Degradation

a. Inspection Scope

The inspectors evaluated the adequacy of OD MP2-081-01, which was initiated following the licensee's identification that the clutch spring for the TDAFW pump was found in an unexpected configuration and potentially affected operability of the pump. Specifically, the inspectors reviewed the acceptability of the licensee's conclusion that the TDAFW pump was operable but degraded, based on the establishment of compensatory measures. The inspectors verified that the licensee had implemented the

compensatory measures that were discussed in the OD. The inspectors verified that the licensee had entered the clutch degradation into its corrective action program for resolution.

b. Findings

No findings of significance were identified.

1R17 Permanent Plant Modifications

a. Inspection Scope

The inspectors reviewed eleven selected risk-significant plant modification packages to verify that: (1) the design bases, licensing bases, and performance capability of risk significant SSCs had not been degraded through modifications; and, (2) modifications performed during increased risk configurations did not place the plant in an unsafe condition.

For the selected modifications, the inspectors reviewed the design inputs, assumptions, and design calculations, such as instrument set-point and uncertainty calculations, to determine the design adequacy. The inspectors also reviewed: (1) associated design change notifications (field changes) that were issued during installations to determine proper installations of the components, and (2) post-modification testing and instrument calibration records to determine the readiness for operations. For components that required seismic qualifications, the inspectors reviewed the seismic testing records to verify their qualifications. Finally, the inspectors reviewed the affected drawings and applicable FSAR sections to verify that the affected documents were appropriately updated.

For the accessible components associated with the modifications, the inspectors also walked down the systems to detect possible abnormal installation conditions.

The following modification packages were reviewed:

- M2-99046, "Nuclear Instrumentation Upgrade;"
- M2-99016, "Replace Wide Range and Low Range Containment Pressure Transmitters;"
- M2-99045, "Replacement of Reaction Protection System Cables;"
- M2-99066, "Removal of Reactor Protection System Calibration and Indication Panel Flow Dependent Set-point Selector Switch;"
- M2-99004, "Safety Injection Tank Nitrogen System Modification;"
- M2-97016, "RBCCW System Relief Valve Replacement - Phase 2;"
- M2-99029, "Chilled Water Pipe Support Modification;"
- M2-00007, "Spent Fuel Pool Cooling Analysis for 2R13 and Cycle 14;"
- M2-99056, "AFW Pump Bearing/Shaft Seal Modification;"
- M2-98067, "Hot Short Modifications for Motor-Operated Valves 2-MS-65A and 2-MS-65B;" and
- M2-99051, "'D' Reactor Coolant Pump Seal Replacement."

b. Findings

No findings of significance were identified.

1R19 Post Maintenance Testing

.1 "A" RBCCW Pump Seal Replacements

a. Inspection Scope

The inspectors reviewed post-maintenance test results following several attempts to address "A" RBCCW pump seal leakage. The inspectors reviewed these test results for adequacy, which were detailed in work order M2-01-07987, and verified the acceptability of applicable acceptance criteria contained in maintenance procedure MP 2703L6, "Chesterton 442 Split Mechanical Seal Installation And Replacement," Revision 2, Change 1. The inspectors verified that the post-maintenance tests adequately demonstrated the "A" RBCCW pump would continue to perform its required safety function. The inspectors' determination included pump operability reviews detailed in Section 1R15.2.

b. Findings

No findings of significance were identified.

.2 "C" HPSI Pump Breaker Maintenance

a. Inspection Scope

The inspectors observed breaker inspection activities and reviewed the associated post-maintenance test results associated with the "C" HPSI pump. The inspectors reviewed work order M2-99-12045 and the associated test data to determine whether the post-maintenance testing was adequate given the scope of the maintenance activities. Additionally, the inspectors reviewed the post-maintenance testing to verify that the testing provided adequate assurance that the "C" HPSI pump would continue to perform its required safety function.

b. Findings

No findings of significance were identified.

.3 Steam Trap ST-156 Post-Maintenance Testing

a. Inspection Scope

Following repairs to steam trap ST-156, as discussed in Section 1R13.3, the inspectors observed the licensee perform a post-maintenance test on the TDAFW pump in accordance with SP 2610B, "TDAFP Tests," Revision 13, Change 9. The inspectors verified that the test applied full steam pressure to the bonnet gasket on steam trap ST-156, and was adequate to ensure the TDAFW pump would be able to perform its design basis safety function.

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing

.1 "C" Charging Pump Inservice Testing

a. Inspection Scope

The inspectors evaluated the performance of inservice testing on the "C" centrifugal charging pump in accordance with SP 2601I, "Charging Pump Inservice Tests," Revision 1, Change 6, to verify that the testing demonstrated the equipment was capable of performing its intended function. The inspectors interviewed operations and engineering personnel, reviewed the completed test documentation and applicable portions of the FSAR and the TS.

b. Findings

No findings of significance were identified.

.2 "C" Charging Pump Operability Surveillance

a. Inspection Scope

The inspectors observed operability testing on September 12, 2001, and reviewed test results for the "C" charging pump that was conducted in accordance with SP 2601H, "Charging Pump Operability and Operational Readiness Tests, Facility 2," Revision 12, Change 1. The inspectors verified that test results for the operability surveillance was in accordance with the TS and surveillance test procedure acceptance criteria, and that performance of the test adequately demonstrated equipment operability.

b. Findings

No findings of significance were identified.

.3 Surveillance Testing of Engineered Safeguards Actuation System (ESAS) Components

a. Inspection Scope

The inspectors reviewed 2403BB, "Facility 2 ESAS UV [Undervoltage], RSST [Reserve Station Service Transformer] and Sequencer Calibration and Functional Test," Revision 2, Change 2, and attended the pre-job briefing held in the control room between instrument maintenance technicians conducting the test and control room operations personnel. The inspectors also reviewed work order M2-01-05177, observed portions of the test in the Unit 2 control room, and discussed portions of the test with an instrument maintenance supervisor at the job location.

b. Findings

No findings of significance were identified.

1EP2 Alert Notification System (ANS) Testing

a. Inspection Scope

An onsite review of the licensee's ANS was conducted to ensure prompt notification of the public to take protective actions. The inspector reviewed: (1) the licensee's design basis document submitted to the Federal Emergency Management Agency entitled, "The Design for Alerting Systems in Communities Around Millstone and Haddam Neck," June 1981; (2) siren testing data; and (3) maintenance records for correcting siren failures. In addition, the inspector interviewed the licensee's ANS program manager and reviewed the following procedures: (1) MP-26-EPA-FAP08, "Public Alert System Administration," Revision 0; (2) MP-26-EPA-FAP09, "Public Alerting System and Inspection," Revision 0; and (3) MP-26-EPA-FAP10, "Public Alerting Siren Test and Repair," Revision 0. The review was conducted in accordance with NRC Inspection Procedure 71114, Attachment 02, and the applicable planning standard, 10 CFR 50.47(b)(5) and its related 10 CFR 50, Appendix E requirements were used as reference criteria.

Two CRs were reviewed that were generated and entered into the corrective action program to address observations identified during the ANS portion of this inspection. These CRs are identified in Attachment 1 to this report.

b. Findings

No findings of significance were identified.

1EP3 Emergency Response Organization (ERO) Augmentation Testing

a. Inspection Scope

An onsite review of the licensee's Site Emergency Response Organization (SERO) augmentation staffing requirements and the process for notifying the SERO was conducted to ensure the readiness of key staff for responding to an event and timely facility activation. The inspector reviewed the licensee's Emergency Plan (E-Plan) qualification records for key SERO positions, procedures for initiating SERO call-in and monthly communication test records of the Emergency Notification & Response System (ENRS). Also, one 1999 unannounced off-hours augmentation call-in drill report was reviewed to determine if the licensee identified SERO augmentation deficiencies. The inspector observed two unannounced off-hours ENRS tests and reviewed two procedures entitled, COP 606, "Communications - Radiopaging and Callback Monthly Operability Test," Revision 004-02 and MP-26-EPI-FAP071, "Notifications and Communications," Revision 001-05. The review was conducted in accordance with NRC Inspection Procedure 71114, Attachment 03, and the applicable planning standard, 10 CFR 50.47(b)(2) and its related 10 CFR 50, Appendix E requirements were used as reference criteria.

Three CRs were also reviewed that were generated and entered into the corrective action program to address observations identified during the ERO augmentation portion of this inspection. These CRs are identified in Attachment 1 to this report.

b. Findings

The inspector noted that the licensee did not fully utilize the ENRS test data to assess the SERO's capability to respond and activate the emergency response facilities within 60 minutes of event notification. There were many instances where the SERO personnel's estimated time of arrival (ETA), when added to the time they called into the ENRS, could have resulted in exceeding the 60 minute activation requirement. The inspector trended the ETAs provided by the SERO responders and found that in every test conducted in 2000 and 2001 to date, the licensee would have had an average of 5-6 minimum staffing positions not filled within 60 minutes. Despite the large turnover of SERO staff in the last year, the licensee did not assess the ETAs from the perspective of being able to meet its augmentation commitments.

During the inspection, the inspector observed an unannounced communication test, in which the licensee took approximately 80 minutes to locate enough personnel to support initial activation. Five individuals that were designated "on-call" did not respond to the page. In addition, problems were found with the licensee's call out process which contributed to the delay of getting responders onsite in a timely manner. For example, once the ENRS is activated, there is a 30-minute wait period before the communicator attempts to locate responders not on-call to fill the vacated minimum-staff positions. In addition, the SERO were told in their annual response training that they had 60 minutes to arrive onsite but the licensee did not account for the time needed to report to their designated facility and prepare to activate.

The licensee conducted an unannounced call-in drill in 1999 where the SERO was required to respond to their assigned emergency facility. The licensee identified that they failed the drill based on not being able to get enough support staff because of ENRS problems and the shift manager delayed notifying the SERO once the emergency declaration was made. Although the associated CR stated the controllers were not able to assess activation of the facilities because of notification problems, the licensee believed they met the minimum staffing requirements. A few months later, the licensee conducted a remedial drill following additional training of the SERO and were successful in staffing the facilities in a timely manner.

The licensee acknowledged the communication tests were narrowly focused and the data was not fully evaluated. However, they believe some SERO personnel were not sensitive to the importance of recording a precise ETA and would enter an approximate time. This issue is considered an unresolved item pending the licensee's review of the data entered into the ENRS. Once that information is received, the NRC will review the issue and assess its potential safety significance. **(URI 50-336,423/01-07-02)**

1EP4 Emergency Action Level (EAL) and Emergency Plan Changes

a. Inspection Scope

A regional in-office review of revisions to the E-Plan, implementing procedures and EAL changes was performed to determine that the changes did not decrease the effectiveness of the Plan. The revisions covered the period from January through August 2001. The review was conducted in accordance with NRC Inspection Procedure 71114, Attachment 04, and the applicable requirements in 10 CFR 50.54(q) were used as reference criteria.

b. Findings

No findings of significance were identified.

1EP5 Correction of Emergency Preparedness Weaknesses and Deficiencies

a. Inspection Scope

The inspector reviewed corrective actions identified by the licensee pertaining to findings from drill/exercise reports for 2000 and 2001, Self-Assessment Report No. MP-SA-01-018 and from problems resulting from surveillances and actual events. Problem reports assigned to the Emergency Preparedness Department were also reviewed to determine the significance of the issues and to determine if repeat problems were occurring. In addition, the inspector reviewed Nuclear Oversight Audit Report Nos. MP-99-A27 and MP00-A17 and the associated audit checklists to determine if the licensee had met the 10 CFR 50.54(t) requirements and if any repeat issues were identified. This review was conducted according to NRC Inspection Procedure 71114, Attachment 05, and the applicable planning standard, 10 CFR 50.47(b)(14) and its related 10 CFR 50, Appendix E requirements were used as reference criteria.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES [OA]

4OA1 Performance Indicator Verification

.1 Emergency Preparedness (EP) Performance Indicator

a. Inspection Scope

The inspector reviewed the licensee's procedure for developing the data for the EP performance indicators which are: (1) Drill and Exercise Performance (DEP), (2) ERO Drill Participation and (3) ANS Reliability. The inspector also reviewed the licensee's drill/exercise reports, training records and ANS testing data from July 2000 to 2001 to verify the accuracy of the reported data. The review was conducted in accordance with NRC Inspection Procedure 71151. The acceptance criteria are 10 CFR 50.9 and NEI 99-02, Revision 1, Regulation Assessment Performance Indicator Guideline.

b. Findings

No findings of significance were identified.

.2 RETS/ODCM [Radioactive Effluents Technical Specifications/Off-site Dose Calculation Manual] Radiological Effluent Occurrence

Refer to NRC Inspection Report 50-423/01-07, Section 4OA1.2 for specific details.

.3 Safety System Unavailability Performance Indicators

a. Inspection Scope

The inspectors verified the following performance indicators:

- Safety System Unavailability - HPSI, and
- Safety System Unavailability - Residual Heat Removal.

The inspectors reviewed operating logs, maintenance history and surveillance test history for unavailability information for these systems from July 2000 to June 2001. The inspectors also verified the licensee's calculation of critical hours for both units and evaluated applicable safety system equipment unavailability against the performance indicator definition.

b. Findings

No findings of significance were identified.

4OA2 Identification and Resolution of Problems

a. Inspection Scope

The inspectors reviewed CRs associated with 10 CFR 50.59 issues and plant modification issues to ensure that the licensee was identifying, evaluating, and correcting problems associated with these areas and that the corrective actions for the issues were appropriate. The inspectors also reviewed the following administrative procedures to determine their adequacy:

- MP-16-MMM, "Corrective Actions," Revision 3; and
- MP-16-CAP-FAPO1.1, "Condition Report Screening and Review," Revision 3.

b. Findings

No findings of significance were identified.

4OA3 Event Follow-up

.1 Damage to Protected Area Fence due to Rail Cars

a. Inspection Scope

On August 29, 2001, five Amtrak railroad cars, which were parked on a railway spur that led into the Millstone site, accidentally rolled down the spur and penetrated a portion of the security fence surrounding the Millstone protected area. The cars were stopped by a concrete vehicle barrier positioned a few feet inside the protected area fence.

The inspectors immediately responded to the area and subsequently reviewed applicable security procedures to verify proper security response to the damaged fence. The inspectors also reviewed the licensee's emergency action level procedures for all three units to confirm that no emergency declaration was required. The licensee convened an Event Review Team (ERT) to further assess this incident, determine its cause, and evaluate lessons learned for future process improvements. The inspectors observed an ERT briefing of the preliminary investigation results on August 30, 2001. Based upon the most probable scenario involving the release of the railroad car braking system, the accidental nature of this event was confirmed.

The inspectors observed portions of the rail car removal from the protected area to confirm proper control of the activity to preclude further damage to the fence line and proper security compensation for the open boundary. The inspectors also verified the fence line was subsequently restored, no longer requiring compensatory measures.

b. Findings

No findings of significance were identified.

.2 (Closed) LER 50-336/2001-002-00: "Incomplete Post Maintenance Testing for Containment Isolation Valves." The licensee failed to perform a verification of isolation

time test for containment isolation valve 2-MS-220A following maintenance activities. The licensee reported this event as a condition prohibited by the plant's TS in accordance with 10 CFR 50.73(a)(2)(i)(B). The inspectors determined that this issue had a credible impact on safety because the licensee did not perform the required post maintenance testing to demonstrate that the valve would fulfill its design safety function. The inspectors concluded that this issue could have affected the integrity of the reactor containment; however, because the valve was not actually called upon to fulfill its safety function and there were no actual consequences, this issue was of very low safety significance (Green). See Section 4OA7 of this report. This LER is closed.

- .3 (Closed) LER 50-336/2001-002-01: "Incomplete Post Maintenance Testing for Containment Isolation Valves," Supplement 1. The licensee submitted Supplement 1 to LER 50-336/2001-002-00 to correctly identify valves that were not tested as required by the TS. The inspectors determined that the information provided in Supplement 1 to LER 50-336/2001-002-00 did not raise any new issues or change the conclusions of the initial review which is documented in Section 4OA7 of this report. This LER is closed.
- .4 (Closed) LER 50-336/2001-003-00: "Reactor Trip Resulting From Loss of 'C' Circulating Water Pump." The event described in this LER was initially reviewed in NRC Inspection Report 50-336/01-04 and determined to be a finding of very low safety significance (Green). In addition, the inspectors evaluated the performance of licensed operators during this event and documented the results in Section 1R14 of this report. The licensee reported this event as a condition that resulted in an automatic actuation of the reactor protection system and auxiliary feedwater system in accordance with 10 CFR 50.73(a)(2)(iv). The inspectors concluded that the information provided in LER 50-336/2001-003-00 did not change the original significance determination of the event. The inspectors reviewed the licensee's root cause evaluation and noted that the licensee identified a violation of NRC requirements. The violation is documented in Section 4OA7 of this report. This LER is closed.
- .5 (Closed) LER 50-336/2001-004-00: "Manual Reactor Trip Following 'B' Circulating Water Pump Trip." The event described in this LER was initially reviewed in NRC Inspection Report 50-336/01-04 and determined to be a finding of very low safety significance (Green). The licensee reported this event as a condition that resulted in a manual actuation of the reactor protection system in accordance with 10 CFR 50.73(a)(2)(iv). The inspectors concluded that the information provided in LER 50-336/2001-004-00 did not change the original significance determination of the event. The inspectors reviewed the licensee's root cause evaluation and noted that the licensee identified a violation of NRC requirements. The violation is documented in Section 4OA7 of this report. This LER is closed.
- .6 (Closed) LER 50-336/2001-005-00: "Turbine Driven Auxiliary Feedwater Pump Inoperable Without Meeting Action Statement Requirements." The underlying event described in this LER was initially reviewed and documented in NRC Inspection Report 50-336/2000-011 and determined to be a finding of low to moderate safety significance (White) involving the failure of the TDAFW pump. This LER was generated following additional analysis by the licensee in response to Unresolved Item (URI) 50-336/2001-03-01, which was documented in NRC Inspection Report 50-336/01-03. The licensee reported this event as a condition that resulted in the TDAFW pump being inoperable

greater than the allowed outage time established by TS in accordance with 10 CFR 50.73(a)(2)(i)(B). The NRC reviewed the licensee's corrective actions during the supplemental inspection, actions in response to URI 50-336/2001-03-01, and information regarding the pump's failure provided in LER 50-336/2001-005-00, and concluded that the LER can be closed. The inspectors also concluded that the information provided in LER 50-336/2001-005-00 did not change the original significance determination of the event. The underlying event was previously dispositioned by the NRC as a violation (EA-00-236) by letter and associated Notice of Violation to the licensee on December 6, 2000. This LER is closed.

40A5 Other

- .1 (Closed) Violation (VIO) 50-336/2000-011-01: Failure of Turbine-Driven Auxiliary Feedwater Pump. As detailed in NRC Inspection Report 50-336/01-03, the NRC conducted a supplemental inspection consistent with the actions required for a degraded cornerstone plant based on the Action Matrix under the NRCs' Reactor Oversight Process (ROP). Specifically, the NRC reviewed licensee actions for, and responses to, a White finding and associated violation following the failure of the TDAFW pump and associated corrective action deficiencies previously documented in NRC Inspection Report 50-336/2000-011. The inspectors concluded the licensee adequately addressed the root cause of the violation and the associated corrective action issues as evidenced by the following: (1) the licensee's adequate response to the Notice of Violation submitted to the NRC via letter dated January 5, 2001; (2) the NRC considered the supplemental inspection complete, effectively resolving the underlying issues that contributed to the issuance of VIO 50-336/2000-011-01 and the associated White finding; (3) no other violations similar to the cited violation 50-336/2000-011-01 have occurred since the issuance of the violation; (4) information was provided by the licensee to the NRC during the regulatory performance meeting conducted on May 22, 2001, regarding corrective action program deficiencies; and (5) the NRC concluded that no additional inspections beyond the baseline inspection program under the ROP were warranted as detailed in the annual assessment letter submitted to the licensee on May 31, 2001. This violation is closed.
- .2 (Closed) URI 50-336/2001-03-01: "Weak Evaluation of Past Operability for the TDAFW Pump." As discussed in Section 40A3.6, LER 50-336/2001-005-00 was submitted by the licensee in direct response to issues identified during a supplemental inspection which was documented in NRC Inspection Report 50-336/01-03. Specifically, URI 50-336/2001-03-01 was generated due to questions concerning the historical operability of the TDAFW pump and reportability of the TDAFW pump failure that occurred in August 2000. Since LER 50-336/2001-005-00 was generated as a result of this URI and closed in Section 40A3.6 of this report and because a violation was dispositioned for the underlying event as discussed in Section 40A5.1, this URI is closed.

40A6 Meetings, including Exit

- .1 Emergency Preparedness Exit Meeting Summary

The inspector presented the inspection results to the licensee at the conclusion of the inspection on August 24, 2001. Subsequently, a telephone exit was conducted on September 13, 2001, with Mr. P. Blasioli with regards to an outstanding issue identified during the inspection. The licensee acknowledged the findings presented and agreed with the accuracy of the facts supporting those findings.

.2 Engineering Exit Meeting Summary

The inspectors presented the inspection results to Mr. R. Necci and other members of licensee management at the conclusion of the inspection on September 21, 2001. The licensee acknowledged the inspection findings presented.

.3 Resident Exit Meeting Summary

The inspectors presented the inspection results to Mr. C. Schwarz and other members of licensee management at the conclusion of the inspection. The licensee acknowledged the findings presented.

The inspectors asked the licensee whether any material examined during this inspection should be considered proprietary. No proprietary information was identified.

4OA7 Licensee Identified Violations. The following findings of very low safety significance (Green) were identified by the licensee and are violations of NRC requirements which meet the criteria of Section VI of the NRC Enforcement Policy, NUREG-1600, for being dispositioned as Non-Cited Violations (NCVs).

NCV Tracking Number

Requirement Licensee Failed to Meet

NCV 50-336/01-04-01

Technical Specification 6.8.1.a requires, in part, that written procedures shall be established, implemented, and maintained covering the applicable procedures recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978. Appendix A of Regulatory Guide 1.33, Revision 2, February 1978, specifies other expected transients that may be applicable as an example of a procedure for combating emergencies and other significant events. The licensee established AOP 2517, "Circulating Water Malfunctions," Revision 0, as the implementing procedure for a loss of circulating water system cooling to the main condenser. Contrary to the above, on April 29, 2001, with the "C" and "D" circulating water pumps not operating, operators failed to manually trip the reactor and the turbine as required by AOP 2517, Step 3.1.b.1. This resulted in an automatic turbine trip and subsequent reactor trip. The licensee entered this violation into its corrective action program as CR 01-04636.

NCV 50-336/01-04-02

10 CFR 50.65(a)(4) requires, in part, that before performing maintenance activities (including but not limited to surveillances, post-maintenance testing, and corrective and preventive maintenance), the licensee shall assess and manage the increase in risk that may result from the proposed maintenance activities. Contrary to the above, on May 7, 2001, the licensee failed to adequately assess and manage the risk associated with preventive maintenance work performed in the Unit 2 "A" circulating water intake bay, in that, the potential consequences of non-safety related work management decisions were not properly evaluated with respect to causing an initiating event (i.e., a reactor trip). This resulted in the loss of cooling water flow to the "A" and "B" main condenser waterboxes and a subsequent manual reactor trip required by the licensee's response procedures. The licensee entered this violation into its corrective action program as CR 01-04910.

NCV 50-336/01-07-03

Technical Specification 4.6.3.1.1.b requires, in part, that each isolation valve testable during plant operation shall be demonstrated operable immediately 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 exercising each power operated valve through one complete cycle of full travel and measuring the isolation time. Contrary to the above, the licensee failed to complete a verification of isolation time test for containment isolation valve 2-MS-220A (a steam generator blowdown flow control valve) following maintenance activities performed on this valve on July 16, 1999. The licensee entered this violation into its corrective action program as CR 01-02062.

ATTACHMENT 1**SUPPLEMENTAL INFORMATION**a. List of Items Opened, Closed and DiscussedOpened

50-336,423/01-07-02	URI	Augmenting SERO in a timely manner (1EP3)
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Opened and Closed

50-336/01-04-01	NCV	Operators failed to initiate a procedurally required manual reactor and turbine trip (4OA7)
50-336/01-04-02	NCV	Licensee failed to adequately assess and manage the risk associated with preventive maintenance on the circulating water system (4OA7)
50-336/01-07-01	NCV	Ineffective corrective actions for TDAFW pump steam supply line steam trap gasket failure (1R13.3)
50-336/01-07-03	NCV	Licensee failed to complete a verification of isolation time test for containment isolation valve 2-MS-220A (4OA7)

Closed

50-336/2000-011-01	VIO	Failure of turbine driven auxiliary feedwater pump (4OA5.1)
50-336/2001-002-00	LER	Incomplete post maintenance testing for containment isolation valves (4OA3.2)
50-336/2001-002-01	LER	Incomplete post maintenance testing for containment isolation valves
50-336/2001-003-00	LER	Reactor trip resulting from loss of 'C' circulating water pump (4OA3.4)
50-336/2001-003-01	URI	Poor evaluation of past operability for the TDAFW pump (4OA5.2)
50-336/2001-004-00	LER	Manual reactor trip following 'B' circulating water pump trip (4OA3.5)
50-336/2001-005-00	LER	Turbine driven auxiliary feedwater pump inoperable without meeting action statement requirements (4OA3.6)

b. Partial List of Documents Reviewed**Emergency Preparedness Inspection**

SERO Standdown Briefing Sheet, dated August 28, 2001
 CR-01-08382, The testing process in place for the ANS Biases the ANS PI Data
 CR-01-08464, EPZ siren testing and maintenance procedures require clarity
 CR-01-08445, Second quarter EPZ siren system PI data submitted incorrectly
 CR-01-08395, ENRS system stopped working during monthly communication drill
 CR-01-08498, Conflicting priorities during emergency events
 CR-01-08472, Missed opportunities to improve SERO performance based upon the results from the monthly call-in communication tests.

Engineering InspectionPlant Modifications

M2-99046 Nuclear Instrumentation Upgrade, September 5, 2000.
 M2-99016 Replace Wide Range and Low Range Containment Pressure Transmitters, February 2, 1999.
 M2-99045 Replacement of RPS Cables, November 23, 1999.
 M2-99066 Removal of RPSCIP Flow Dependent Set-point Selector Switch, February 25, 2000.
 M2-99004 Safety Injection Tank Nitrogen System Modification, February 20, 1999.
 M2-97016 RBCCW System Relief Valve Replacement - Phase 2, July 1, 1998.
 M2-99029 Chilled Water Pipe Support Modification, July 9, 1999.
 M2-00007 Spent Fuel Pool Cooling Analysis for 2R13 and Cycle 14, May 17, 2000.
 M2-99056 AFW Pump Bearing/Shaft Seal Modification, Revision 0 (including 50.59 screening evaluation)
 M2-98067 Hot Short Modifications for MOVs 2-MS-65A and 2-MS-65B.
 M2-99051 'D' Reactor Coolant Pump Seal Replacement.

10 CFR 50.59 Safety Evaluations

S2-EV-99-0097 Nuclear Instrumentation Upgrade, August 31, 2000.
 S2-EV-99-0055 Replace Wide Range and Low Range Containment Pressure Transmitters, February 23, 1999.
 S2-EV-00-0027 Setpoint Change for PS-7985C A EDG AC and DC Starting Air Compressor Pressure Switch.
 S2-EV-00-0001 Removal of RPSCIP Flow Dependent Setpoint Selector Switch, February 25, 2000.
 S2-EV-00-0050 Replacement of Service Water Inspection Tee Cover Vent Assembly with a Blind Flange.
 S2-EV-99-0033 Safety Injection Tank Nitrogen System Modification.
 S2-EV-00-0001 Removal of RPS calibration and Indication Panel.
 S2-EV-00-0034 Containment Liner Minimum Wall Thickness Evaluation.
 SE-EV-99-0143 AFW Turbine Driven Pump Impeller Material Change, Revisions 1 and 2.
 S2-EV-97-007 'C' Reactor Coolant Pump Seal Replacement, Revision 0.

SE-EV-98-0071 Valve 2-CS-16.1A and B Pressure Locking Modifications, Revision 0.
 S2-EV-98-0238 Hot Short Modifications for MOVs 2-Ms-65A and 2-MS-65B

Screened-Out 10CFR50.59 Safety Evaluations

M2-99045 Replacement of RPS Cables, November 23, 1999.
 M2-01012 Installation of Automatic Control Element Drive Mechanism Timer Module for the Control Element Drive System, July 6, 2001.
 M2-98034 Replacement of Service Water Flow Instruments, March 14, 1998.
 M2-99033 Low Temperature Set-point Change for Vital Chilled Water Compressor X-169A, May 22, 1999.
 M2-99067 RPS Local Power Density Pre-trip Set-point Change, January 10, 2000.
 DM2-01-0326 Leak Repair of 2-FW-19B.
 DM2-00-0366 Installation Details for Welded & Bolted Limit Switch Bracket.
 DM2-00-0139-01 Replace Impellers of AFW pump P9B, dated May 5, 2001 and Upfront FSAR Change Request 01-MP2-6.
 M2-99056 AFW Pump Bearing/Shaft Seal Modification, Revision 0.
 M2-99051 "D" Reactor Coolant Pump Seal Replacement.
 DM2-00-0139-01 Replace Impellers of AFW pump P9B, dated May 5, 2001 and Upfront FSAR Change Request 01-MP2-6.

Condition Reports

M2-98-1737 Question About Foxboro Containment Pressure Transmitters in Enclosure Building Becoming leakage Path From Containment, June 16, 1998.
 M2-98-3267 Disposition Associated with the Reportability Determination for CR M2-98-1737 May be Incorrect, October 30, 1998.
 CR-01-07850 B Wide Range Nuclear Instrumentation Design Modification Project Failed to identify requirement for a Safety Evaluation for a Defeated Automatic Safety Function, August 5, 2001.
 M2-00-0535 The 10CRF 50.59 Safety Screening for MOD M2-99-028 Did not Identify that the Design Change would Impact a Figure within the FSAR.
 M2-00-1064 Temporary Modification 2-00-009 Installed and Service Water Piping in Screen House was Removed w/o Authorization from OPS.
 CR-01-04550 Some 2R14 Modifications will not Meet the OM-1 Schedule for Engineering Completion.
 CR-01-09275 Failure to Incorporate Required FSAR Changes Following Completion of Modification M2-99004.

Condition reports associated with Modifications Audit MP-00-A09:

M2-00-1542
 M2-00-1586
 M2-00-1185
 M2-00-1742
 M2-00-1761

Condition report associated with December 2000 Temporary Modifications Audit:

M2-00-3565

Procedures

DCM-03, "Design Changes," Revision 9
 MP-16-MMM, "Corrective Actions," Revision 3
 MP-16-CAP-FAPO1.1, "Condition Report Screening and Review," Revision 3.
 RAC 12, "50.59 Screens and Evaluations," Revision 3.
 WC 10, "Temporary Modifications," Revision 4.
 RAC 03, "Changes and Reviews to the Final Safety Analysis Report," Revision 1.
 EOP 2534, "Steam Generator Tube Rupture," Revision 20

c. List of Acronyms Used

°F	Degrees Fahrenheit
AFW	Auxiliary Feedwater
ANS	Alert and Notification System
AOP	Abnormal Operating Procedure
CFR	Code of Federal Regulations
COP	Common Operating Procedure
CR	Condition Report
DEP	Drill and Exercise Performance
DRS	Division of Reactor Safety
EAL	Emergency Action Level
EP	Emergency Preparedness
E-Plan	Emergency Plan
ENRS	Emergency Notification Response System
ERO	Emergency Response Organization
ERT	Event Review Team
ESAS	Engineered Safeguards Actuation System
ETA	Estimated Time of Arrival
FSAR	Final Safety Analysis Report
HPSI	High Pressure Safety Injection
IMC	Inspection Manual Chapter
LER	Licensee Event Report
NCV	Non-Cited Violation
NRC	Nuclear Regulatory Commission
OD	Operability Determination
OP	Operating Procedure
P&IDs	Piping and Instrumentation Drawings
PI	Performance Indicator
RBCCW	Reactor Building Closed Cooling Water
RETS/ODCM	Radioactive Effluents Technical Specifications/Off-site Dose Calculation Manual
RSST	Reserve Station Service Transformer
ROP	Reactor Oversight Process
SDP	Significance Determination Process
SERO	Site Emergency Response Organization
SP	Surveillance Procedure
SSCs	Structures, Systems and Components
TDAFW	Turbine Driven Auxiliary Feedwater

TS	Technical Specifications
URI	Unresolved Item
UV	Undervoltage
VIO	Violation

ENCLOSURE 2

**U.S. NUCLEAR REGULATORY COMMISSION
REGION I**

Docket No.: 50-423

License No.: NPF-49

Report No.: 50-423/01-07

Licensee: Dominion Nuclear Connecticut, Inc.

Facility: Millstone Power Station, Unit 3

Location: P. O. Box 128
Waterford, CT 06385

Dates: August 12, 2001 - September 29, 2001

Inspectors: A. C. Cerne, Senior Resident Inspector, Unit 3
B. E. Siemel, Resident Inspector, Unit 3
B. J. Kemker, Acting Senior Resident Inspector, Unit 2
P. C. Cataldo, Resident Inspector, Unit 2
J. C. Jang, Senior Health Physicist, Division of Reactor Safety (DRS)
N. T. McNamara, Emergency Preparedness Specialist, DRS

Approved by: Curtis J. Cowgill, Chief
Projects Branch 6
Division of Reactor Projects

SUMMARY OF FINDINGS

IR 05000423-01-07; on 08/12-09/29/01; Dominion Nuclear Connecticut, Inc., Millstone Power Station; Unit 3. Licensee Identified Violations.

The inspection was conducted by resident and regional inspectors. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using IMC 0609 "Significance Determination Process" (SDP). The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described at its Reactor Oversight Process website at <http://www.nrc.gov/NRR/OVERSIGHT/index.html>. Findings for which the SDP does not apply are indicated by "No Color" or by the severity level of the applicable violation.

A. Inspector Identified Findings

No findings of significance were identified.

B. Licensee Identified Violations

A finding of very low significance which was identified by the licensee has been reviewed by the inspector. Corrective actions taken or planned by the licensee appear reasonable. This violation is listed in Section 4OA7 of this report.

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Report Details

SUMMARY OF UNIT 3 STATUS

The plant operated at approximately 100 percent power throughout the inspection period.

1. REACTOR SAFETY (Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity)

1R04 Equipment Alignment

d. Inspection Scope

Following planned testing on the “A” train of the auxiliary building filtration system, the inspector verified the correct alignment of the safety-related charging pump area and reactor building closed cooling water area portions of the ventilation equipment. The inspector performed the partial walkdown by comparing actual equipment alignment to approved licensee piping and instrumentation diagrams and system operating procedures.

The inspector also conducted a complete walkdown of the high pressure safety injection systems outside containment that are required to be realigned and function as part of the emergency core cooling system (ECCS) in support of several emergency operating procedures (EOPs); i.e., 35 ES-1.3, 35 ECA-1.1, 35 FR-C.1, and 3506. The ECCS flow paths were inspected with respect to the applicable piping and instrumentation drawings for normal valve lineup and component configuration during power operations. The changes to the valve positions that would be required as delineated in the EOP steps were also checked to confirm certain design features, including interlocks, cross-train connection and isolation capabilities, and ECCS recirculation flow without diversion.

In addition to verifying the current and potential system alignments, as noted above, the inspector confirmed that the identified equipment tags and trouble reports did not represent conditions that could adversely affect system functionality. Selected pipe support installation details were spot-checked against the design details illustrated in the applicable engineering and design coordination reports and design change notice drawings. As necessary, system and design engineers and licensed operations personnel were interviewed with regard to field observations and EOP questions (e.g., CR-01-09057 & CR-01-09910) relating to the ECCS flow requirements, component conformance with design details, and equipment operability.

e. Findings

No findings of significance were identified.

1R05 Fire Protection

a. Inspection Scope

The inspector performed walkdowns of two fire areas (CB-13 and CB-14) at the upper elevation of the control building. Both areas contained safe-shutdown equipment, including control building ventilation components, air conditioning units and cooling pumps, and the control room pressurization system. The inspector examined the common wall between these two adjacent fire areas, checking that the piping and electrical penetrations, as well as the door configuration, conformed with the fire-rated design/construction requirements. The inspector also verified that the fire detector units, hose stations and other suppression equipment, located within or in proximity to these areas, were as specified in the Millstone Unit 3 Fire Protection Evaluation Report (FPER). The cognizant licensee fire protection engineers were interviewed with regard to the availability of equipment to support the fire-fighting strategies and the documentation supporting the design and analysis of the fire barriers separating all adjacent areas.

Additionally, the inspector conducted a tour of the Appendix R Storage Cage, located in the Millstone Warehouse No. 4, to examine the emergency equipment (e.g., portable generator, ventilation fans, power and grounding cables) planned for use by the Site Fire Brigade in response to certain EOP scenarios. The use of this equipment was verified to be procedurally controlled (e.g., System Operating Procedure OP 3314J) and access controls were also checked to verify component maintenance and availability, as required, on an around-the-clock basis. Fire Brigade personnel were interviewed regarding the location, control, and responsibility for use of this emergency equipment.

During the tour of the two fire areas and equipment storage cage, the inspector checked for degraded component conditions, transient combustible materials, and any storage or configuration details that would adversely affect the capability of the fire brigade to respond to and appropriately deal with potential fire scenarios. The provisions of the Unit 3 Technical Requirements Manual (TRM) regarding fire protection systems were reviewed, as applicable, to determine if the noted field conditions and fire area observations (e.g., CR-01-10024) were consistent with the Unit 3 FPER and in compliance with TRM requirements.

b. Findings

No findings of significance were identified.

1R07 Heat Sink Performance

a. Inspection Scope

Based upon the risk significance of the emergency diesel generators, the inspector observed the performance of special procedure (SPROC) 95-3-26, 3EGS*E1A/2A/1B/2B Thermal Performance Test, for the "A" diesel intercooler water and jacket water heat exchangers. This test collects the necessary data for the evaluation of the heat exchangers' heat transfer capability under design basis conditions

and is performed in accordance with the licensee's program implemented in response to NRC Generic Letter 89-13. The inspector confirmed performance of the test in accordance with the SPROC and "A" diesel generator operability test. The inspector reviewed the test results documented in technical evaluation M3-EV-01-0042 to confirm the data supported acceptable heat exchanger performance to conclude the heat exchangers are capable of meeting their minimum performance requirements until the next retest.

b. Findings

No findings of significance were identified.

1R12 Maintenance Rule Implementation

a. Inspection Scope

The inspector reviewed licensee actions taken in response to the following condition reports (CRs) with respect to the maintenance rule.

- CR-01-04391 Replacement of safety injection pump discharge valve to eliminate leakage from "C" accumulator was removed from 3RFO7
- CR-01-06327 "B" Control building chiller will not start following maintenance
- CR-01-07292 Spurious "A" train control building isolation actuated due to unexplained spike in many radiation monitors

For each CR identified, the inspector discussed the related issues with the applicable system engineer, and reviewed the applicable system's maintenance rule scoping document, corrective actions taken in response to the equipment problem, and maintenance rule functional failure determination. The inspector confirmed that the licensee appropriately tracked the occurrences against the systems' performance criteria, both for functional failures and unavailability time.

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessments and Emergent Work Evaluation

a. Inspection Scope

The inspector noted a "yellow" online risk condition was calculated on a day when both the "B" motor-driven auxiliary feedwater pump and the "D" service water pump were scheduled to be out-of-service. The inspector discussed this condition with the operations manager and the online risk reviewer to confirm common understanding that the online risk was "yellow" independent of the status of the service water pump. The inspector confirmed that the components were taken out of service in series, lowering the degree to which the plant was in an elevated risk condition with the auxiliary feedwater pump out-of-service.

The inspector also assessed the maintenance risk associated with three other work activities - one which represented corrective maintenance work and the other two performed in parallel as planned maintenance activities. The planned maintenance involved removing one of the train "B" service water (SWP) system pumps (3SWP*P1D) from service for an overhaul at the same time the "B" reactor plant component cooling water (CCP) system was inoperable for heat exchanger tube inspections in accordance with automated work order (AWO) M3-01-10693. The inspector verified that both of these work activities were operationally controlled by provisions in the Unit 3 Technical Requirements Manual (TRM). The inspector evaluated the implementation of the tagout for the "B" CCP components with the spare "C" CCP system fulfilling the train "B" cooling function. Additional TRM controls for aligning the in-service charging pump with the same electrical power train as that of the unaffected "A" SWP train were confirmed for proper implementation in the control room during the 3SWP*P1D pump outage work.

With respect to the corrective maintenance, a packing leak was identified on a manual feedwater isolation valve, 3FWS*V118, in a small-bore line to a local pressure indicator for the "A" feedwater piping outside containment, located between the containment isolation valve and the containment wall. Based upon both the location and non-isolable nature of the leak, the inspector discussed the priority for repairs with the licensee operators on shift and the system engineering personnel. The inspector confirmed that valve repairs were planned and scheduled and subsequently verified that leak injection of the valve V118 packing gland had been performed (AWO M3-01-15153). A field inspection also confirmed that these repairs were effective in stopping the leak and that the valve had been re-opened and the pressure indicator placed back in service.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations

a. Inspection Scope

The following operability determinations (ODs) were reviewed. The inspector verified that the engineering justification for operability was sound, any compensatory actions required were in place, and all applicable technical specifications and technical requirements manual actions were met. For the last OD listed below, the inspector also observed the site operations review committee (SORC) meeting at which the OD conclusion of service water system operability was approved and discussed the technical details supporting such operability with the cognizant design engineer who presented this position to the SORC.

- MP3-056-01 The accident flow rates for several safety related check valves were incorrectly documented in an in-service testing (IST) calculation used in the IST program to verify the open function of the check valves.
- MP3-062-01 Non-QA instrument fittings providing pressure boundary integrity for the refrigerant side of the "A" control building chiller (3HVK*CHL1A) due to a leaking service valve.

- MP3-065-01 Fluid transient hydraulic forcing function loads, larger than were assumed in the original system design, were postulated to occur for service water column rejoin events at the discharge of the recirculation spray system coolers.

b. Findings

No findings of significance were identified.

1R19 Post Maintenance Testing

a. Inspection Scope

The inspector reviewed the completed documentation for post maintenance testing (PMT) performed in accordance with the following AWOs.

- M3-99-14007 Preventive Maintenance (PM) for auxiliary building filter electrical control panel
- M3-99-19415 "B" quench spray pump breaker PM and dole testing
- M3-00-23678 Replace "B" charging pump shaft driven lube oil pump coupling
- M3-01-08638 Replace accumulator relief valve assembly for feedwater isolation valve 3FWS*CTV41A

The PMT documentation for the quench spray pump breaker was discussed with the system engineer, work planning, and preventive maintenance personnel. The inspector reviewed the scope of the work activities and verified that the PMTs planned and performed were appropriate to restore the operability of the associated systems.

The inspector also observed the field activities in progress for the replacement of the relief valve assembly for the feedwater isolation valve. In addition to the document package review for the specified PMT activities, the inspector discussed with the system engineer and maintenance supervisor the valve reassembly calibration requirements and witnessed their implementation. Subsequent to the restoration of valve 3FWS*CTV41A to an operable status, the inspector also checked the post maintenance conditions of the work area, the field condition of the valve, and the status of the related control room instrumentation.

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing

a. Inspection Scope

The inspector reviewed licensee performance related to the following surveillance tests:

- SP 3616A.1 Main Steam System Valve Operability Tests (Sections 4.3-4.5)
- SP 3626.14 RSS Heat Exchanger SW Supply Piping Flush
- SP 3646A.1 Emergency Diesel Generator "A" Operability Test
- SP 3646A.8 Slave Relay Testing - Train A

The emergency diesel generator system is a significant contributor to the prevention of core damage in design-basis accident scenarios. The main steam system valves could initiate a transient on the plant if they did not operate properly.

The diesel and main steam valve tests and pre-job briefings were observed in the control room to confirm performance of the tests in accordance with approved procedures. In addition, the inspector independently confirmed local diesel generator readings in the diesel enclosure. The IST valve stroking requirements for the atmospheric relief valves were discussed with the IST coordinator to confirm testing in accordance with the description in the final safety analysis report. The data sheets were reviewed for all tests to verify the equipment met procedural acceptance criteria and was operable consistent with technical specification requirements.

The inspector witnessed that portion of the Train "A" slave relay testing in which two of the relays that actuate certain containment isolation (Phase A) features were verified. Since this testing isolated the chilled water system from the containment structure, efficient control of the test sequence and duration was required to ensure that the containment pressure was maintained within the limits delineated in Technical Specification (TS) 3.6.1.4.

For the service water supply piping flush, the inspector evaluated the licensee controls for the use of electrical jumpers to defeat certain valve interlocks, thus creating a system configuration similar to a plant post-accident condition without the need for generation of an engineered safety features (ESF) actuation signal. Given the abnormal service water system lineup, the inspector confirmed that proper operational entry into TS 3.7.4 was implemented and that adequate cooling for the systems supporting normal full power operations was maintained.

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications

a. Inspection Scope

The inspector reviewed Temporary Modification (TM) 3-01-028, approved by licensee engineering in August 2001, to provide a temporary supply of water to the condensate system with the condensate storage tank (CST) removed from service for leak repairs. While the CST does not perform a safety-related function at Unit 3, it provides a backup source of water to the auxiliary feedwater (FWA) system. The CST is credited in TS 3.7.1.3 to provide an available volume of water to supplement the demineralized water storage tank (DWST), i.e., the safety-related supply of FWA cooling water; thus permitting a greater allowed outage time for DWST inoperability.

The inspector evaluated the documented licensee engineering disposition for each screening question, providing justification why a formal 10 CFR 50.59 evaluation was not required. In addition to the noted TS impact, the inspector verified that the licensee had appropriately considered related provisions in the Unit 3 TRM and the affected design system features discussed in the Final Safety Analysis Report. The inspector conducted interviews with system engineers, operations personnel, and project management personnel to determine whether adequate interdisciplinary reviews and liaison had been implemented.

Near the end of this inspection period, the drain-down of the CST commenced. The inspector confirmed the expected main control board alarms, as well as licensed operator cognizance that the CST volume was no longer capable of being credited as a TS source of backup water to the DWST. The inspector also verified the conduct of routine plant equipment operator rounds of the temporary tanks to check the water supply for condensate system makeup needs, given that the TM provided no remote level instrumentation capability for the control room operators. The TM controls for repair of the CST remained in progress at the end of the inspection period.

b. Findings

No findings of significance were identified.

Emergency Preparedness [EP]

1EP2 Alert Notification System Testing

Refer to NRC Inspection Report 50-336/01-07, Section 1EP2 for specific details.

1EP3 Emergency Response Organization Augmentation Testing

Refer to NRC Inspection Report 50-336/01-07, Section 1EP3 for specific details.

1EP4 Emergency Action Level and Emergency Plan Changes

Refer to NRC Inspection Report 50-336/01-07, Section 1EP4 for specific details.

1EP5 Correction of Emergency Preparedness Weaknesses and Deficiencies

Refer to NRC Inspection Report 50-336/01-07, Section 1EP5 for specific details.

1EP6 Drill Evaluation

a. Inspection Scope

The inspector observed a Unit 3 based emergency preparedness (EP) training drill and the subsequent player and lead controller critiques. The licensee had preselected the drill notifications and protective action recommendation (PAR) results to be included in the EP drill performance indicator (PI). The inspector reviewed the licensee's Emergency Planning Services Department Instruction 18, "Administration of NRC Performance Indicators", and industry guidance provided by NEI 99-02, "Regulatory Assessment Performance Indicator Guideline", and discussed the performance expectations and results with the drill manager and simulator and emergency operations facility controllers to confirm correct implementation of the PI program. The drill evaluation report was also reviewed to verify proper documentation of results, which included two successful notifications, one successful PAR, and one unsuccessful notification.

b. Findings

No findings of significance were identified.

2. RADIATION SAFETY

Public Radiation Safety [PS]

2PS1 Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems

a. Inspection Scope (71122.01)

The inspector reviewed the following documents to evaluate the effectiveness of the licensee's radioactive gaseous and liquid effluent control programs. The requirements of the radioactive effluent controls are specified in the Unit 3 TSs, the Radiological Effluent Monitoring Manual, and the Unit 3 Offsite Dose Calculation Manual (TS/REMM/ODCM).

- the 1999 and 2000 Radiological Annual Effluent Release Reports including projected public dose assessments;
- Radiological Effluent Monitoring Manual (REMM, Revision 21, January 26, 2001) and Unit 3 ODCM (Revision 21, January 26, 2001);

- technical justifications for REMM and Unit 3 ODCM and Unit 3 Radiological Effluent Controls changes made;
- selected 2000 and 2001 analytical results for charcoal cartridge, particulate filter, and noble gas samples;
- implementation of the compensatory sampling and analysis program when the effluent radiation monitoring system (RMS) is out-of-service;
- selected 2000 and 2001 radioactive liquid and gaseous release permits;
- associated effluent control procedures, including analytical laboratory procedures and Procedure COP 200.11 Operation of a Cross Contaminated System (implementation of the IE 80-10);
- annual calibration records for Unit 3 chemistry laboratory measurements equipment (gamma and liquid scintillation counters);
- implementation of the measurement laboratory quality control program, including quarterly effluent split/spike samples comparisons and control charts;
- implementation of the interlaboratory comparisons performed by Unit 3 Chemistry;
- contractor laboratory's (Environmental Laboratory, Duke Engineering and Services) Laboratory Quality Assurance Plan, Manual 100, Rev. 2, July 2001;
- contractor laboratory's 2000 Semi-Annual QA Status Reports, including interlaboratory comparisons;
- self-assessment;
- Unit 3 Condition Reports and corrective actions;
- the 2000 NQA Audit (Audit No. MP-00-A14, RETS/REMP/ODCM) for the REMM and ODCM implementations, including the Field Observation No. MPS-OP-01-011-02, and the Final Followup Closure of Audit Findings (MPS-OP-01-005);
- Most recent Channel Calibration and Analog Channel Operational Test results for the radioactive liquid and gaseous effluent radiation monitoring system (RMS) and its flow measurement devices which are listed in the ODCM Tables V.C-2 and V.C-4:

RMS

- Liquid Waste Monitor
- Waste Neutralization Sump Monitor-Condensate Polishing Facility
- Turbine Building Floor Drains Monitor
- Steam Generator Blowdown
- Unit 3 Ventilation Vent Stack (Turbine Building) Noble Gas Activity Monitor
- Millstone Stack Noble Gas Activity Monitors (Low and High Range)
- Engineered Safeguards Building Noble Gas Activity Monitor
- Warehouse No. 5 Vent Noble Gas Monitor

Flow Rate Measuring Device

- Waste Neutralization Sump Effluents
- Liquid Waste Effluent Line
- Steam Generator Blowdown Effluent Line
- Millstone Stack Process Flow Rate Monitor
- Unit 3 Ventilation Vent Stack Flow Rate Monitor
- Engineered Safeguards Building Discharge Flow Rate Monitor

- Most recent surveillance testing results (visual inspection, delta P, in-place tests for high efficiency particulate air and charcoal filters, air capacity test, and laboratory test for iodine collection efficiency) for the following air treatment systems:
 - TS 3/4.6.6 Supplementary Leak Collection and Release System;
 - TS 3/4.7.7 Control Room Emergency Ventilation System;
 - TS 3/4.7.9 Auxiliary Building Filter System; and
 - TS 3/4.9.12 Fuel Building Exhaust Filter System;

The inspector also toured and observed the following activities to evaluate the effectiveness of the licensee's radioactive gaseous and liquid effluent control programs.

- walk-down for determining the availability of radioactive liquid/gaseous effluent RMS and for determining the equipment material condition;
- walk-down for determining operability of air cleaning systems and for determining the equipment material condition; and
- observed radioactive filter and charcoal cartridge sampling and preparing for gamma spectrometry measurements.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES [OA]

4OA1 Performance Indicator Verification

.1 Emergency Preparedness Performance Indicator

Refer to NRC Inspection Report 50-336/01-07, Section 4OA1 for specific details.

.2 RETS/ODCM Radiological Effluent Occurrence

a. Inspection Scope (71151)

The inspector reviewed the following documents to ensure the licensee met all requirements of the performance indicator from the first quarter 2000 to the second quarter 2001 for all units:

- monthly projected dose assessment results due to radioactive liquid and gaseous effluent releases;
- quarterly projected dose assessment results due to radioactive liquid and gaseous effluent releases; and
- associated procedures.

The information contained in these records was compared against the criteria contained in NEI 99-02, "Regulatory Assessment Performance Indicator Guideline", Revision 1, to

verify that all conditions that met the NEI criteria were recognized, identified, and reported as a Performance Indicator.

b. Findings

No findings of significance were identified.

4OA3 Event Follow-up

.1 Damage to Protected Area Fence due to Rail Cars

Refer to NRC Inspection Report 50-336/01-07, Section 4OA3.1 for specific details.

.2 (Closed) Licensee Event Report (LER) 50-423/2001-002-00: “Incomplete Post Maintenance Testing for Containment Isolation Valves.” The licensee failed to perform a verification of isolation time test for containment isolation valve 3CCP*MOV45A following maintenance activities. The licensee reported this event as a condition prohibited by the plant's Technical Specifications in accordance with 10 CFR 50.73(a)(2)(i)(B). The inspector determined that this issue had a credible impact on safety because the licensee did not perform the required post maintenance testing to demonstrate that the valve would fulfill its design safety function. The inspector concluded that this issue could have affected the integrity of the reactor containment; however, because the valve was not actually called upon to fulfill its safety function and there were no actual consequences, this issue was of very low safety significance (Green). See Section 4OA7 of this report. This LER is closed.

.3 (Closed) LER 50-423/2001-002-01: “Incomplete Post Maintenance Testing for Containment Isolation Valves,” Supplement 1. The licensee submitted Supplement 1 to LER 50-423/2001-002-00 to correctly identify valves that were not tested as required by the Technical Specifications. The inspector determined that the information provided in Supplement 1 to LER 50-423/2001-002-00 did not raise any new issues or change the conclusions of the initial review which is documented in Section 4OA7 of this report. This LER is closed.

4OA6 Meetings, including Exit

.1 Emergency Preparedness Exit Meeting Summary

The inspector presented the inspection results to the licensee at the conclusion of the inspection on August 24, 2001. Subsequently, a telephone exit was conducted on September 13, 2001, with Mr. P. Blasioli with regards to an outstanding issue identified during the inspection. The licensee acknowledged the findings presented and agreed with the accuracy of the facts supporting those findings.

.2 Resident Exit Meeting Summary

The inspectors presented the inspection results to Mr. C. Schwarz and other members of licensee management at the conclusion of the inspection. The licensee acknowledged the findings presented.

The inspectors asked the licensee whether any material examined during this inspection should be considered proprietary. No proprietary information was identified.

4OA7 Licensee Identified Violations. The following finding of very low safety significance (Green) was identified by the licensee and is a violation of NRC requirements which meets the criteria of Section VI of the NRC Enforcement Policy, NUREG-1600, for being dispositioned as a Non-Cited Violation (NCV).

NCV Tracking Number

Requirement Licensee Failed to Meet

NCV 50-423/01-07-04

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.

ATTACHMENT 1**SUPPLEMENTAL INFORMATION**a. List of Items Opened, Closed and DiscussedOpened

50-336,423/01-07-02 URI Augmenting SERO in a timely manner (1EP3)

Opened and Closed During this Inspection

50-423/01-07-04 NCV Failure to complete a verification of isolation time test for containment isolation valve following maintenance (4OA7)

Closed

50-423/2001-002-00 LER Incomplete Post Maintenance Testing for Containment Isolation Valves (4OA3.2)

50-423/2001-002-01 LER Incomplete Post Maintenance Testing for Containment Isolation Valves, Supplement 1 (4OA3.3)

b. List of Acronyms Used

AWO	Automated Work Order
CCP	Reactor Plant Component Cooling Water
CRs	Condition Reports
CST	Condensate Storage Tank
DWST	Demineralized Water Storage Tank
ECCS	Emergency Core Cooling System
EOPs	Emergency Operating Procedures
EP	Emergency Preparedness
ESF	Engineered Safety Features
FPER	Fire Protection Evaluation Report
FWA	Auxiliary Feedwater
IST	In-Service Testing
LER	Licensee Event Report
NCV	Non-Cited Violation
NEI	Nuclear Energy Institute
ODs	Operability Determinations
ODCM	Offsite Dose Calculation Manual
PAR	Protective Action Recommendation
PI	Performance Indicator
PM	Preventive Maintenance
PMT	Post Maintenance Testing
QA	Quality Assurance
REMM	Radiological Effluent Monitoring Manual
RMS	Radiation Monitoring System

SORC	Site Operations Review Committee
SPROC	Special Procedure
SWP	Service Water
TM	Temporary Modification
TRM	Technical Requirements Manual
TS	Technical Specification
URI	Unresolved Item