Mr. J. Alan Price, Site Vice President -
Nuclear Technical Services/Millstone
C/O Mr. D. A. Smith, Manager,
Regulatory Affairs
Dominion Nuclear Connecticut, Inc.
Rope Ferry Road
Waterford, Connecticut 06385

SUBJECT: MILLSTONE POWER STATION UNITS 2 AND 3 - NRC INSPECTION REPORTS 50-336/02-03 AND 50-423/02-03

Dear Mr. Price:

On May 11, 2002, the NRC completed inspections at your Millstone Units 2 & 3 reactor facilities. The enclosed reports document the inspection findings which were discussed on May 23, 2002 with Mr. S. Scace 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.

No findings of significance were identified.

Immediately following the terrorist attacks on the World Trade Center and the Pentagon, the NRC issued an advisory recommending that nuclear power plant licensees go to the highest level of security, and all promptly did so. With continued uncertainty about the possibility of additional terrorist activities, the Nation's nuclear power plants remain at the highest level of security and the NRC continues to monitor the situation. This advisory was followed by additional advisories, and although the specific actions are not releasable to the public, they generally include increased patrols, augmented security forces and capabilities, additional security posts, heightened coordination with law enforcement and military authorities, and more limited access of personnel and vehicles to the sites. The NRC has conducted various audits of your response to these advisories and your ability to respond to terrorist attacks with the capabilities of the current design basis threat (DBT). On February 25, 2002, the NRC issued an Order to all nuclear power plant licensees, requiring them to take certain additional interim compensatory measures to address the generalized high-level threat environment. With the issuance of the Order, we will evaluate Dominion Nuclear Connecticut, Inc.'s compliance with these interim requirements.

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/reading-rm/adams.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 50-336/02-03
Attachment 1: Supplemental Information

(2) NRC Inspection Report 50-423/02-03
Attachment 1: Supplemental Information

cc w/encl:
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W. R. Matthews, Vice President and Senior Nuclear Executive - Millstone
S. E. Scace, Director, Nuclear Engineering
G. D. Hicks, Director, Nuclear Station Safety and Licensing
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DATE	06/12/02		06/13/02					

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ENCLOSURE 1

U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Docket No.:	50-336
License No.:	DPR-65
Report No.:	50-336/02-03
Licensee:	Dominion Nuclear Connecticut, Inc.
Facility:	Millstone Power Station, Unit 2
Location:	P. O. Box 128 Waterford, CT 06385
Dates:	March 31, 2002 - May 11, 2002
Inspectors:	S. M. Schneider, Senior Resident Inspector, Unit 2 P. C. Cataldo, Resident Inspector, Unit 2 L. S. Cheung, Senior Reactor Inspector, Division of Reactor Safety (DRS) J. C. Jang, Senior Health Physicist, DRS K. M. Jenison, Senior Project Engineer, Division of Reactor Projects (DRP) T. A. Moslak, Health Physicist, DRS
Approved by:	Curtis J. Cowgill, Chief Projects Branch 6 Division of Reactor Projects

SUMMARY OF FINDINGS

IR 05000336-02-03; on 03/31-05/11/02; Dominion Nuclear Connecticut, Inc., Millstone Power Station; Unit 2; Resident Inspection.

The inspection was conducted by resident and regional inspectors. No findings of significance were identified. 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/reactors/operating/oversight.html

A. Inspector Identified Findings

No findings of significance were identified.

B. Licensee Identified Violations

A violation of very low safety 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 2 STATUS

At the beginning of this inspection period, the licensee had initiated a reactor and plant startup from refueling outage RF-14. On April 5, 2002, the licensee commenced a plant shutdown due to degraded seals on the "A" reactor coolant pump, and on April 19, 2002, the unit tripped due to a failed turbine stator temperature instrument. The unit achieved 100% power on April 25, 2002, and operated at essentially 100% power for the remainder of the inspection period.

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

1R04 Equipment Alignment

a. Inspection Scope

The inspectors performed a partial system alignment check on the "B" motor-driven auxiliary feedwater (AFW) pump while the licensee performed preventive maintenance activities on the "A" motor-driven AFW pump. The inspectors verified that the "B" motor-driven AFW pump was correctly aligned for operation in accordance with Surveillance Procedure (SP) 2604C, Ops Form 2604C-002, "Auxiliary Feedwater System Lineup Verification," and system piping and instrumentation diagram (P&ID) 25203-26005, Sheet 3, "Condensate Storage & Aux. Feed".

b. Findings

No findings of significance were identified.

1R05 Fire Protection

.1 "B" High Pressure Safety Injection (HPSI) Pump Room, Fire Area A-1

a. Inspection Scope

The inspectors performed a walkdown of the "B" High Pressure Safety Injection (HPSI) pump room to assess licensee control of transient combustibles and ignition sources, the material condition of reactor plant fire protection systems and features, and the material condition and operational status of fire barriers. The inspectors reviewed the following licensee documents:

- Unit 2 Fire Hazards Analysis for Fire Area A-1, Appendix R Area R-1
- Fire Hazard Analysis Boundary Drawing Auxiliary and Containment - EL.(-)45'-6"
- FP-EV-98-0006, Technical Evaluation of the Partial Suppression and Partial Detection in Appendix R Fire Area R-1
- FP-EV-98-0012, Technical Evaluation for the Lack of Fire Dampers in Ductwork Penetrating the Appendix R Boundaries Between the South LPSI Pump Room and the HPSI Pump Room

- FP-EV-98-0017, Technical Evaluation for The Existence of a Removable Concrete Block Wall Section in the Appendix R Wall Separating the South LPSI Pump Room and the HPSI Pump Room
- CR-02-04809, Questions/Issues Raised by Resident NRC Inspectors Pertaining to Fire Protection Program and Systems

b. Findings

No findings of significance were identified.

.2 Turbine Building Elevation 31'-6", Fire Area T-1C

a. Inspection Scope

The inspectors reviewed the Millstone Unit 2 Fire Hazard Analysis and Appendix R Compliance Report for the Turbine Building 31'-6" general area elevation, Fire Area T-1C. The inspectors toured the area to assess the condition of installed fire detection and suppression devices, where applicable; the availability and condition 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.

1R07 Heat Sink Performance

a. Inspection Scope

The inspector reviewed the licensee's program and processes for ensuring that safety-related heat exchangers were properly maintained and capable of performing their designed functions. The below listed safety related heat exchangers were selected for review:

- Emergency Diesel Generator (EDG) Jacket Water Coolers X-45A, B; EDG Lube Oil Coolers X-53A, B; and EDG Air Coolers X-83A, B; and
- Reactor Building Closed Cooling Water (RBCCW) Heat Exchangers (HX) X-18A, B, and C

The inspector reviewed the licensee's methods used to ensure heat removal capabilities for the selected HXs and compared them to the commitments made in their response (Correspondence B15696 dated June 21, 1996) to Generic Letter 89-13, "Service Water System Problems Affecting Safety-Related Equipment." The heat exchanger inspection, cleaning, and maintenance methods and frequencies (inspection and cleaning of RBCCW HXs every three months, and the EDG HXs every six months) were reviewed with the system engineer to determine if they were consistent with expected degradation trends and with the industry practice. The HX design calculations, performance
evaluations, and tube plugging calculations were reviewed with design and HX performance engineers to determine if they were consistent with the required HX design capabilities.

The licensee's service water chemical treatment program (sodium hypochlorite system) was reviewed and discussed with the system engineer to verify that potential bio-fouling mechanisms had been identified, treatments were appropriately conducted, and results were monitored for effectiveness.

The inspector reviewed HX inspection and cleaning and Eddy current test records to verify that the results were properly evaluated to ensure adequate heat transfer capabilities and good HX tubing conditions. The inspector reviewed HX plugging limit calculations (10% for RBCCW HXs and 5% for the EDG coolers), to verify that they were incorporated into the HX inspection and maintenance procedures. The inspector also reviewed the results of the April 2000 thermal performance test of RBCCW HX and the associated analysis to determine if the testing was consistent with industry standards, if test instrument accuracies were properly considered, if the test acceptance criteria were consistent with design basis values and if the test conditions properly reflected the differences between testing and design conditions. In addition, the inspector also reviewed the results of intake bay inspection and cleaning, and service water pump performance testing, to determine whether the integrity of the ultimate heat sink was properly maintained and whether the service water pumps function properly.

Further, the inspector reviewed a sample of condition reports (CRs) related to HX and heat sink performance to verify that identified problems were appropriately resolved. The inspector also reviewed two operability determinations (OD) that resulted from two of the CRs reviewed. Finally, the inspector conducted a walk-down of the service water intake structure and the selected HXs to assess material condition.

b. Findings

No findings of significance were identified.

1R12 Maintenance Rule Implementation

.1 Unit 2 Reactor Trip

a. Inspection Scope

The inspectors reviewed licensee implementation of the maintenance rule, 10 CFR 50.65, in response to identified performance issues associated with the following condition report (CR):

- CR-02-04632 Unit 2 Reactor Trip Due to Turbine Trip

The inspectors reviewed the condition described within the CR to determine if the component was accurately scoped within the Millstone Unit 2 Maintenance Rule Program as a non-safety related structures, systems and components (SSC) whose failure causes a reactor scram or actuates safety systems. The inspectors also assessed the licensee's functional failure characterization of the instrumentation which resulted in the turbine and subsequent reactor trip. The following documents were reviewed:

- Millstone Maintenance Rule Scope Report
- NUMARC 93-01, "Nuclear Energy Institute Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants"
- MP-24-MR-FAP710, Revision 0, "Maintenance Rule Functional Failures & Evaluations"

b. Findings

No findings of significance were identified.

.2 Chilled Water System Cross-tie Valve Failure-to-close

a. Inspection Scope

The inspectors reviewed licensee implementation of the maintenance rule, 10 CFR 50.65, in response to identified performance issues associated with the following condition report (CR):

- CR-02-04732 2-CHW-13, Chilled Water Supply Header Cross-tie Valve, Failed to Fully Close During Surveillance Testing

During this inspection, the inspectors verified that the failure was appropriately evaluated against applicable maintenance rule functional failure criteria, as set forth in Functional Administration Procedure MP-24-MR-FAP710, "Maintenance Rule Functional Failures & Evaluations." The inspectors also discussed the issue with the system engineer and verified that the issue was appropriately tracked against the system's performance criteria.

b. Findings

No findings of significance were identified.

.3 Main Steam - Atmospheric Dump Valve (ADV)

a. Inspection Scope

The inspectors reviewed licensee implementation of the maintenance rule, 10 CFR 50.65, in response to identified performance issues associated with the following condition reports (CRs):

- CR-02-04580 Engineering Assistance Required to Replace Obsolete GEMAC Controllers
- CR-00-3170 Main Steam System - ADV Opening

The inspectors reviewed applicable system maintenance rule (MR) scoping documents, corrective actions taken in response to equipment problems, and MR functional failure determinations associated with the Main Steam (MS) system. The inspectors confirmed

that the licensee appropriately tracked a sample of occurrences against the selected systems' performance criteria, both for functional failures and unavailability time.

In addition, the system health report for the MS system was reviewed for outstanding maintenance activities, preventive maintenance, performance trending information, and performance indicator (PI) data submitted by the licensee to the NRC. Finally, the inspectors reviewed the current and revision 1, MS system a(1) action plan (2316) and discussed equipment failures with the MS system engineer to confirm proper unavailability tracking for the system. In support of this inspection, the inspectors reviewed the following licensee documents:

- M2-EV-00-0058 Maintenance Rule Functional Failure Performance Criteria
- MP-24-MR-FAP720 Maintenance Rule Scoping Table - Main Steam (MS)
- MP-24-MR-GDL650 System Engineer System Health Report - Main Steam
- CR-00-2102 Main Steam System - GEMAC Controller
- CR-00-0113 Main Steam System - Engineering Review
- CR-02-02434 TIS-9371A Failure

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessments and Emergent Work Evaluation

a. Inspection Scope

The inspectors verified the conduct and accuracy of an emergent risk assessment for plant conditions affected by the failure of the "C" Charging Pump while the "B" Charging Pump was undergoing maintenance and the "B" Emergency Diesel Generator experienced a service water leak. The inspectors utilized the Equipment Out of Service (EOOS) quantitative risk assessment tool to evaluate the risk of the plant configuration and compared the result to the licensee's stated risk. The inspectors also reviewed the licensee's EOOS Model for the impact of the loss of two charging pumps on emergency boration and other functions.

b. Findings

No findings of significance were identified.

1R14 Personnel Performance During Non-routine Plant Evolutions

a. Inspection Scope

The inspectors reviewed operations personnel performance in coping with non-routine evolutions and transients. Specifically, the inspectors reviewed operations personnel response to a loss of a Vital 480 Volt AC Bus Power Supply to a Motor Control Center

(MCC22-2F), response to an inadvertent condensate pump auto start, and response to a loss of the Plant Process Computer. The inspectors reviewed operator logs, plant computer data, and response procedures. The inspectors reviewed the following licensee documents:

- Sequence of Events Log dated April 11, 2002
- AOP-2503F, Revision 003-01, Loss of Vital 480VAC Buss 22F
- Shift Managers Log Entries, dated April 11, 2002
- AOP-2518, Revision 000, Loss of Plant Process Computer

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations

.1 Charging System Operability Following the Failure of the "C" Charging Pump

a. Inspection Scope

The inspectors evaluated the operability of the charging system following the unexpected loss of the "C" charging pump due to a coupling failure on April 15, 2002. Additionally, the inspectors reviewed the licensee's response relative to technical specification requirements due to the unavailability of the "B" charging pump when the loss of the "C" charging pump occurred. The inspectors verified that the licensee had entered the issue into its corrective action program for resolution as CR-02-04484.

b. Findings

No findings of significance were identified.

.2 "B" Emergency Diesel Generator (EDG) Operability Following the Identification of a Service Water Piping Leak

a. Inspection Scope

The inspectors evaluated the adequacy of the licensee's reasonable expectation of continued operability (RECO) MP2-009-02, which was initiated following the identification of a through wall leak in the common service water discharge piping from the "B" EDG. The inspectors reviewed the RECO to determine the acceptability of the licensee's conclusion that the "B" EDG continued to be operable with the presence of a leak in the piping. The inspectors reviewed the adequacy of the licensee's engineering analysis that formed the basis for the conclusion of continued operability, which was performed in accordance with through-wall evaluation methodology contained in NRC Generic Letter 90-05, "Guidance For Performing Temporary Non-Code Repair Of ASME Code Class 1, 2, and 3 Piping." The inspectors verified that the licensee had entered this issue into its corrective action program for resolution as CR-02-04483.

b. Findings

No findings of significance were identified.

1R19 Post Maintenance Testing

.1 "B" Charging Pump Relief Valve Replacement

a. Inspection Scope

The inspectors reviewed work order M2-01-05756, which detailed the replacement of discharge relief valve 2-CH-325 for the "B" Charging Pump. The inspectors verified that the selected post-maintenance tests adequately demonstrated that the "B" Charging Pump would continue to perform its required safety function. The inspectors also verified that the selected post-maintenance tests were appropriate for the maintenance activity as set forth in MP-20-WP-GDL40, "Pre-and Post-Maintenance Test." The inspectors verified that identified deficiencies were entered into the licensee's corrective action program for resolution.

b. Findings

No findings of significance were identified.

.2 Vital Chilled Water Pump P122B Corrective Maintenance

a. Inspection Scope

The inspectors reviewed work order M2-01-04967, which detailed the mechanical seal replacement of Pump P122B, the vital chilled water system pump. The inspectors verified that the selected post-maintenance tests adequately demonstrated that Pump P122B would continue to perform its required safety function. The inspectors also verified that the selected post-maintenance tests were appropriate for the maintenance activity as set forth in MP-20-WP-GDL40, "Pre-and Post-Maintenance Test." The inspectors verified that identified deficiencies were entered into the licensee's corrective action program for resolution.

b. Findings

No findings of significance were identified.

1R20 Refueling and Outage Activities

a. Inspection Scope

The inspectors evaluated the licensee's restart activities from refueling outage 14 on Millstone Unit 2. The inspectors reviewed the Estimated Critical Position calculation and control room reactivity control, observed control room activities during the startup and heatup in various modes, reviewed reactor startup and low power physics training and procedures, and conducted tours of various plant areas during startup and mode changes. The inspectors also reviewed outage activities for replacement of the "A" reactor coolant pump (RCP) seal package following the plant shutdown on April 5, 2002

and subsequent restart. The following licensee documents were reviewed as part of these activities:

- MP-2 Reactor Startup and Low Power Physics Testing Cycle 15 licensee training package
- OP-2202, Revision 019-07, Reactor Startup
- OP-2203, Revision 015-07, Plant Startup
- Plant Startup Schedule
- OP-2301C, Revision 016-03, RCP Operation
- CR-02-03847, "A" RCP Middle Seal Pressure Degrading
- RCP "A" Seal Package Replacement Outage Schedule
- OP-2207, Revision 024-02, Plant Cooldown
- CR-02-04359, Miscalculation on Transient Temperature and Pressure Verification Data Sheet
- OP-2310, Revision 022-09, Shutdown Cooling System

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing

a. Inspection Scope

The inspectors reviewed licensee performance of surveillance testing of risk significant structures, systems, and components to ensure these systems are capable of performing their intended safety functions and to ensure reactivity controls systems and related technical specification (TS) requirements are met. The following surveillance tests were reviewed as part of this activity:

- SP-21011, Revision 10, Moderator Temperature Coefficient
- SP-21056, Revision 0, Shutdown Margin Determination Following Refueling
- SP-21010, Revision 009-01, CEA Drop Times
- SP-2401E, Revision 012-03, Calibration of Excore Nuclear Instruments to Incore (Test Computer Method)

The inspectors attended test briefs, verified selected prerequisites and precautions, and verified the tests were performed in accordance with the procedural steps. The inspectors also reviewed completed data sheets and verified that TS requirements were met. The inspectors also reviewed the following related licensee documents:

- Unit 2 Reactor Engineering Form for SP-21011, Moderator Temperature Coefficient - MTC
- Core Operating Limits Report, Cycle 15
- Unit 2 Shutdown Margin Calculation Sheets
- Safety Analysis Report, Millstone Unit 2, Cycle 15
- Unit 2 Reactor Engineering Form for SP-21010, CEA Drop Times
- Unit 2 Technical Specifications

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 (71122.03)

The inspector reviewed the following documents to ensure that the licensee met the requirements specified in the Technical Specifications (TS), Radiological Effluent Monitoring Manual (REMM), and Offsite Dose Calculation Manual (ODCM):

- the 2000 and 2001 Annual Radiological Environmental Monitoring Program (REMP) Reports, including public dose assessment results which are required by 40 CFR 190;
- the most recent REMM/ODCM (Revision 23, January 8, 2002) and technical justifications for REMM/ODCM changes, including sampling locations;
- the most recent calibration results (acceptance criteria contained in Safety Guide 23, Onsite Meteorological Programs) of the primary and backup meteorological monitoring instruments for wind direction, wind speed, and temperature;
- operability of the meteorological monitoring instruments;
- the most recent calibration results for all TS air samplers (5 samplers);
- the licensee's quality control (QC) evaluation of the interlaboratory comparison program and the corrective actions for any deficiencies;
- implementation of the environmental thermoluminescent dosimeters (TLDs) program, including QC evaluation;
- Condition Reports (CRs) and corrective actions (CR-02-02244, CR-02-03057, and CR-01-12189);
- REMP Self-assessment Reports (MP-SA-01-47 and MP-SA-01-090);
- the 2001 Quality Assurance (QA) Audit for the contractor laboratory (Duke Engineering & Services, Environmental Laboratory);
- review of analytical contractor laboratory in the areas of QA/QC and 2001 Semi-Annual QA Status Reports (January-June and July-December 2001);
- the Land Use Census procedure and the 2001 results, including identification of the highest D/Q (deposition factor);
- associated REMP procedures, including vendor's analytical procedures.

The inspector also toured and observed the following activities to evaluate the effectiveness of the licensee's REMP:

- observation for the licensee's environmental laboratory practices, including the preparation of spike samples for the contractor laboratory;
- charcoal cartridge and filter sampling techniques;
- surface water sampling techniques (grab and automatic water samples); and

- walkdown for determining whether air samplers, milk farms, and 25%TLDs were located as described in the ODCM (including control and indicator stations) and for determining the equipment material condition.

b. Findings

No findings of significance were identified.

2PS2 Radioactive Material Processing and Transportation

.1 System Walkdown

- Inspection Scope

The inspector walked down accessible portions of the Unit 2 and Unit 3 radioactive liquid and solid waste collection/processing systems, and storage locations to determine if: systems and facilities were consistent with descriptions contained in the Updated Final Safety Analysis Report (UFSAR); to evaluate their general material conditions; and to identify changes to the systems. Areas visually inspected in Unit 2 included the Aerated Liquid Radwaste and Clean Liquid Radwaste systems. Areas inspected in Unit 3 included the High and Low Level Waste Drain Tanks, the Reactor Plant Aerated Waste Drain system, the ground water under-drain storage tank, Boron Test Tanks, and the Engineered Safeguard Features Building porous concrete ground water sump.

Also inspected were the station's Radwaste Storage Bunker, Warehouse No. 9, the Millstone Radwaste Reduction Facility, and mixed radwaste storage area in the Condensate Polishing Facility. The inspector reviewed the following:

- the status of any non-operational waste process equipment and the adequacy of administrative and physical controls for those systems;
- changes made to radioactive waste processing systems and potential radiological impact including safety evaluations of the changes;
- current processes for transferring radioactive waste resin and sludge to shipping containers and the mixing and sampling of the waste;
- radioactive waste/material storage and handling practices;
- sources of radioactive waste at the station; and
- the general condition of facilities and equipment.

The review was against the criteria contained in the respective unit's UFSAR, 10 CFR 20, 10 CFR 61, 10 CFR 71, the Process Control Program (PCP), applicable Branch Technical Positions, and licensee procedures.

b. Findings

No findings of significance were identified.

.2 Waste Characterization and Classification

a. Inspection Scope

The inspector reviewed the following matters:

- radio-chemical sample analysis results for radioactive waste streams;
- the development of scaling factors for difficult to detect and measure radionuclides;
- methods and practices to detect changes in waste streams;
- classification and characterization of waste relative to 10 CFR 61.55 and 10 CFR 61.56;
- implementation of applicable Branch Technical Positions on waste classification, concentration averaging, waste stream determination, and sampling frequency;
- current waste streams and their processing relative to descriptions contained in the UFSAR and the station's PCP; and
- current processes for transferring radioactive waste resin and sludge discharges into shipping/disposal containers to determine the adequacy of sampling.

The review was against the criteria contained in the respective unit's UFSAR, 10 CFR 20, 10 CFR 61, 10 CFR 71, the PCP, applicable Branch Technical Positions, and licensee procedures.

- Findings

No findings of significance were identified.

.3 Shipment Records and Documentation

- Inspection Scope

The inspector selected and reviewed records associated with seven non-excepted shipments of radioactive material made since the previous inspection of this area. The shipments were Nos. 01-069-03, 01-048-3, 01-071-3, 01-007-2, 01-006-2, 02-058-2 and 02-004. The following aspects of the radioactive waste packaging and shipping activities were reviewed.

- implementation of applicable shipping requirements including completion of waste manifests;
- implementation of the specifications in applicable Certificates of Compliance, for the approved shipping casks including limits on package contents;
- classification and characterization of waste relative to 10 CFR 61.55 and 61.56;
- implementation of 10 CFR 20 Appendix G;
- implementation of specific radioactive material shipping requirements;
- labeling of containers;
- placarding of transport vehicles;
- conduct of vehicle checks;
- providing of driver emergency instructions;
- completion of shipping paper/disposal manifest;
- conformance with procedures for cask loading, closure, and use requirements;
- observation of vehicular checks and driver briefing for shipment no. 02-058-2; and

- review of recent correspondence between the State of South Carolina and the licensee regarding restrictions on the transferring of certain waste types to the Barnwell site for burial.

The review was against criteria contained in 10 CFR 20; 10 CFR 61; 10 CFR 71; applicable Department of Transportation requirements, as contained in 49 CFR 170-189; station procedures; and applicable disposal site licenses and related correspondence.

The inspector also reviewed the Millstone Station Annual Radioactive Effluent Release Report, relative to the types and quantities of radioactive waste shipped offsite during calendar year 2001.

b. Findings

No findings of significance were identified.

.4 Identification and Resolution of Problems

a. Inspection Scope

The inspector reviewed assessments of the radioactive waste handling, processing, storage, and shipping programs including the Process Control Program. The inspector also reviewed selected corrective action program documents, relating to the control of radioactive material, written since the previous inspection. The following documents were reviewed:

- Condition Report Nos. 02-03753, 02-03543, 02-00168, 01-0013, 01-0094, 01-00437, 01-01651, 01-11638, 01-11642, and 01-11933;
- Audit MP-01-A06, Process Control/Radwaste;
- Nuclear Oversight Verification Program Presentation;
- Quarterly Quality Assurance Summary Reports for 2001 and 2002;
- Self-Assessment MP-SA-01-090, Unconditional Release of Liquids and Bulk Materials.

The review was against the criteria contained in 10 CFR 20 Appendix G, 10 CFR 71.101, and applicable station audit and field observation procedures.

- Findings

No findings of significance were identified.

.5 Unrestricted Release of Material from the Radiologically Controlled Area

a. Inspection Scope

The inspector reviewed the following documents to ensure the licensee met the requirements, which is the unrestricted release of material from the Radiologically Controlled Area (RCA), specified in the licensee's program for Units 2 and 3:

- the most recent calibration results for the radiation monitoring instrumentation (SAM-11and SAM-9), including the (a) alarm setting, (b) response to the alarm, and (c) the sensitivity;
- the licensee's criteria for the survey and release of potentially contaminated material using a gamma spectroscopy (calibrations efficiency for bulk sample analyses);
- the methods used for control, survey, and release from the RCA; and
- observed monitor calibration and records to verify for the lower limits of detection for bulk sample analyses. The inspector reviewed the following documents and licensee activities to ensure that the licensee's surveys and controls were adequate to prevent the inadvertent release of licensed material to the public domain.

The review was against criteria contained in 10CFR20, NRC Circular 81-07, NRC Information Notice 85-92, NUREG/CR-5569, Health Position Data Base (Positions 221 and 250), and the licensee's procedures.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES [OA]

4OA1 Performance Indicator Verification (71151)

a. Inspection Scope

The inspectors reviewed implementation of the licensee's Performance Indicator (PI) Program as implemented for one safety related system. Specifically, the inspectors reviewed CRs and associated documents, for occurrences involving the Emergency Diesel Generator system unavailability and safety system functional failures. This inspection reviewed the PIs against the criteria specified in Nuclear Energy Institute (NEI) 99-02, "Regulatory Assessment Performance Indicator Guideline," to verify that all occurrences that met the NEI criteria were identified, tabulated, tracked and reported.

b. Findings

No findings of significance were identified.

4OA5 Other

(Closed) LERs 50-336/2000-012-00 and 01: Vital Chillers. On July 24, 2000, Unit 2 personnel identified a historical issue concerning the air binding of the vital chill water system. Air migrated into the vital chill water system as a result of a maintenance activity that was conducted on a non-vital chiller. The air bound system was discovered through the performance of routine surveillance activities that were conducted when the unit was in Mode 5.

The inspectors verified that the root cause(s) of the event were adequately addressed by the licensee in CR ACR 6361, dated 12/8/01. The inspectors coordinated with the

Region I, Senior Risk Analyst (SRA) to determine the significance and potential for this postulated event, using the NRC Significance Determination Process. The inspectors' on-site review and the evaluation of the Region I SRA identified a non-cited violation in NRC Inspection Report 50-336/2000-008, which documented the event described in the subject LERs.

No other findings of significance were identified.

4OA6 Meetings, including Exit

.1 Public Radiation Safety Exit Meeting

The inspectors presented the inspection results to licensee management and other staff at the conclusion of the public radiation safety inspection on April 26, 2002. 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.

.2 Heat Sink Performance Exit Meeting

The inspector presented the inspection results to licensee management and other staff at the conclusion of the heat sink performance inspection on April 5, 2002. The licensee acknowledged the findings presented.

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

.3 Resident Exit Meeting Summary

The inspectors presented the inspection results to Mr. S. Scace 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 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).

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 this inspection report, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001;

with copies to the Regional Administrator, Region 1; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 205555-0001; and the NRC Resident Inspector at the Millstone facility.

NCV Tracking Number	Requirement Licensee Failed To Meet
50-336/02-03-01	10 CFR 20.1501 requires, in part, that licensees make radiation surveys that are necessary to comply with 10 CFR Part 20. Contrary to this requirement, an inadequate survey of a contaminated tool resulted in the tool being inappropriately released from the site and received by an off-site vendor on 3/27/2002. The vendor determined that the tool had fixed contamination levels of approximately 300 counts per minute over a small area. No significant dose resulted to a member of the public from this activity. The tool was subsequently returned to the licensee. The issue involving this matter was addressed by various corrective actions and entered into the corrective action process as Condition Report 02-03753. This issue is being treated as a Non-Cited Violation.

ATTACHMENT 1

SUPPLEMENTAL INFORMATION

a. List of Items Opened, Closed and Discussed

Opened and Closed During this Inspection

50-336/02-03-01	NCV	Inadequate survey of a contaminated tool resulted in the tool being inappropriately released from the site and received by an off-site vendor (4OA7)

Closed

50-336/2000-012-00	LER	HISTORICAL LER: Work on Non-Vital Chiller Caused Vital Chillers to be Inoperable (4OA5)
50-336/2000-012-01	LER	HISTORICAL LER: Work on Non-Vital Chiller Caused Vital Chillers to be Inoperable (4OA5)

b. Partial List of Documents Reviewed

HEAT SINK PERFORMANCE

Calculations:

006-ST-97-C-019	RBCCW Peak Temperature Analysis for Millstone Unit 2, Dated January 18, 2000, Attachment 1 for 10% tube plug limit
94-DES-1111-M2	MP2 SWS Maximum Allowable Temperature to the EDG Heat Exchangers with Less than 5% Tubes Plugged in Each Unit, Revision 0
M2-EV-99-0103	MP2 Service Water System Operability for Increase in Ultimate Heat Sink Temperature to 77°F, Revision 3
00-067	Analysis of X-18A and X18-B Thermal Test Results, Revision A, June 9, 2000

Procedures:

MP 2701J	Preventive Maintenance (for Heat Exchangers), Revision 11
OP 2328A	Sodium Hypochlorite System, Revision 14-02
SP 2612A	"A" Service Water Pump Test, January 30, 2002
PD 04388	Record of Eddy Current Inspection of RBCCW HXs 18A, B, C, November 10, 2000
No Number	GL 89-13 Heat Exchanger Thermal Performance Testing Program for RBCCW Heat Exchangers X18A.B,C, dated March 1, 2000

System Health Reports:

Service Water System (SWS), Fourth Quarter, 2001, dated January 15, 2002

Inspection/Cleaning Records:

WO M2-99-11943	Inspection and Cleaning of Intake Structure Bay "A", Performed May 7, 2001
WO M2-99-06184	Inspection and Cleaning of Intake Structure Bay "B", Performed July 13, 2001
WO M2-99-12381	Inspection and Cleaning of Intake Structure Bay "C", Performed April 14, 2001
AWO M2-00-19156	Inspection and Cleaning of RBCCW HX 18A, Performed October 8, 2001
AWO M2-00-20920	Inspection and Cleaning of RBCCW HX 18B, Performed October 15, 2001
AWO M2-00-20245	Inspection and Cleaning of RBCCW HX 18C, Performed October 22, 2001
AWO M2-01-14692	Inspection and Cleaning of RBCCW HX 18A, Performed January 2, 2002
AWO M2-01-14694	Inspection and Cleaning of RBCCW HX 18B, Performed January 9, 2002
AWO M2-01-14698	Inspection and Cleaning of RBCCW HX 18C, Performed February 19, 2001
AWO M2-00-14337	Inspection and Cleaning of "A" EDG HX, Performed June 20, 2001
AWO M2-00-18298	Inspection and Cleaning of "B" EDG HX, Performed August 29, 2001
AWO M2-01-06160	Inspection and Cleaning of "A" EDG HX, Performed March 6, 2001
AWO M2-01-16162	Inspection and Cleaning of "B" EDG HX, Performed January 14, 2002
AWO M2-00-14337	Inspection and Cleaning of "A" EDG HX, Performed June 20, 2001

Condition Reports:

CR-01-10141	While Restoring from SP 2612F-2, "B" Service Water Pump IST, Facility 1, Valve 2-SW-231A Failed to Close, October 21, 2001
CR-01-11416	While Restoring from SP 2612D-1, Valve 2-SW-231B Failed to Close, November 25, 2001
CR-02-03882	Valve 2-SW-89A Failed Surveillance 2612C-2 Stroke Time, April 1, 2001
M2-00-0077	While performing 2612A-1 "A" Service Water Pump Failed to Meet the Acceptable Pump Head Flow Relationship, January 10, 2000
CR-01-10466	Fouling of X18C RBCCW Heat Exchanger, October 22, 2001

M2-00-2395	"C" RBCCW HX was noticed to have Over 100 psig on the Service Water Side, Several Hours After Being Isolated, Indicating A Tube Leak, August 29, 2000

Operability Determination:

MP2-008-02	Operability Determination for Condition Report 02-03882, April 1, 2002
MP2-086-01	Operability Determination for Condition Reports 01-10141 and 01-11416, December 13, 2001

RADIOACTIVE MATERIAL PROCESSING AND TRANSPORTATION

Procedures:

RW 46016, Shipment of Radioactive Waste - Waste Processing Facility
RW 46052, Rev 4, Packaging Dry Active Waste
RW 46066, Rev 4, Vehicle Loading Procedure - Vans and Flatbed Trailers
RPM 4.7.3, Rev 5, Small Articles Monitor Operation

FSAR Change Requests:

DCR M3-01002, Installation of In-line Filtration for LWS High Level Waste Drain Tanks
DCR M2-01009, Installation of Additional Liquid Radwaste Secondary Demin, T-23B

Process Control Program:

MP-24-RWQA-FAP01, Radioactive Waste Process Control Program Implementation

Shipping Manifests:

01-069-3, Dewatered Unit 3 resin, LSA II,
02-004-2, Contaminated Water , LSA II
01-048-3, Dewatered Resin, LSA II
01-071-3, Dewatered Resin, LSA II,
01-007-2, Dewatered Resin, LSA II,
01-006-2, Dewatered Resin, LSA II,
02-058-2, Assorted DAW, LSA II/SCOII,

Condition Reports:

CR-02-03753
CR-02-03543
CR-02-00168
CRM3-01-0013

CR-01-0094
CR-01-00437
CR-01-01651
CR-01-11638
CR-01-11642
CR-01-11933

Nuclear Oversight Audits/Assessments:

MP-01-A06, Process Control/Radwaste, 8/03/01
NOVP Presentation for the period 12/00-1/14/01
Quality Assurance Report, First Quarter 2002

c. List of Acronyms

ADV	atmospheric dump valve
AFW	auxiliary feedwater
CR	condition report
EDG	emergency diesel generator
EOOS	equipment out of service
HPSI	high pressure safety injection
HX	heat exchanger
MR	maintenance rule
MS	main steam
NCV	non-cited violation
NEI	Nuclear Energy Institute
OD	operability determination
ODCM	offsite dose calculation manual
P&ID	piping and instrumentation diagram
PCP	process control program
PI	performance indicator
QA	quality assurance
QC	quality control
RBCCW	reactor building closed cooling water
RCA	radiologically controlled area
RCP	reactor coolant pump
RECO	reasonable expectation of continued operability
REMM	Radiological Effluent Monitoring Manual
REMP	Radiological Effluent Monitoring Program
SP	surveillance procedure
SRA	senior risk analyst
SSC	structures, systems and components
TLD	thermoluminescent dosimeter
TS	technical specification
UFSAR	Updated Final Safety Analysis Report

ENCLOSURE 2

U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Docket No.: 50-423

License No.: NPF-49

Report No.: 50-423/02-03

Licensee: Dominion Nuclear Connecticut, Inc.

Facility: Millstone Power Station, Unit 3

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

Dates: March 31, 2002 - May 11, 2002

Inspectors: A. C. Cerne, Senior Resident Inspector, Unit 3
B. E. Sienel, Resident Inspector, Unit 3
G. V. Cranston, Reactor Inspector, Division of Reactor Safety (DRS)
J. C. Jang, Senior Health Physicist, DRS
K. M. Jenison, Senior Project Engineer, Division of Reactor Projects (DRP)
T. A. Moslak, Health Physicist, DRS

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

SUMMARY OF FINDINGS

IR 05000423-02-03; on 03/31-05/11/02; Dominion Nuclear Connecticut, Inc., Millstone Power Station; Unit 3; Resident Inspection.

The inspection was conducted by resident and regional inspectors. No findings of significance were identified. 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/reactors/operating/oversight.html

A. Inspector Identified Findings

No findings of significance were identified.

B. Licensee Identified Violations

No licensee violations were identified.

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Report Details

SUMMARY OF UNIT 3 STATUS

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

The plant operated at approximately 100 percent power from the beginning of the inspection period, on March 31, 2002, through May 9. On May 9, operators reduced reactor power to 92% to allow repair of a leaking suction bellows on the "A" fourth point heater drain pump. Following the repairs, operators restored the reactor to 100% power on the evening of May 10, where it remained on the last day of the inspection period, May 11.

1R04 Equipment Alignment

a. Inspection Scope

The inspector conducted partial walkdowns of the Train "A" Quench Spray and Train "A" Residual Heat Removal systems. The applicable sections of the Final Safety Analysis Report, piping and instrumentation diagrams (P&IDs) and related system descriptions for both of these systems were reviewed, as were the relevant operating and surveillance procedures and a sample of specific engineering procedures. These reviews were performed to verify system flow paths, measurements and performance monitoring. In addition to verifying the proper status, position, and condition of the system equipment, the inspector examined several equipment supports and other system components for structural integrity and evidence of long term degradation.

The inspector examined the control room panel indications and reviewed a sample of applicable alarm response procedures with the operators on shift, to confirm system operations in accordance with the design criteria and established operating limits. The inspector also reviewed the licensee's corrective actions for a sample of condition reports involving the two systems of interest. The inspector confirmed that neither the reviewed CRs, nor any in-process work activities, adversely affected either system's operability. The applicable requirements of the technical specifications were also verified.

The inspector also performed a partial walkdown of the steam generator blowdown system by comparing actual equipment alignment to approved licensee P&IDs and operating procedures. The inspector examined several equipment supports and other passive system components (e.g., penetrations) for structural integrity and evidence of long term degradation.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification

d. Inspection Scope

The inspector observed a simulator session conducted as part of licensed operator requalification training. The inspector observed operator use of emergency and abnormal operating procedures in response to a failed feedwater pressure transmitter followed by a design basis steam generator tube rupture. The inspector discussed the scenario and training objectives with training personnel and attended the trainees' critique following the scenario.

e. 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).

- CR-01-07239 Site fire system jockey pump hand switch found in off
- CR-01-11506 Unexpected loss of backup power supply to rackgroup 3
- CR-01-11693 Hydrogen recombiner instrumentation setpoint allowable limits are too restrictive

For each CR identified, the inspector 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 reviewed the immediate operations response and work planning activities for an emergent work item identified in CR-02-05368. This CR documented a leak in the suction side expansion joint for the "A" fourth point heater drain pump. The inspector discussed the degraded equipment condition with operations personnel and observed an emergent work planning meeting to coordinate the maintenance plan with operations,

maintenance, work planning, and system engineering personnel. The inspector also observed the pre-job brief for and a portion of the down power to 92% reactor power to effect the removal of the pump from service to repair the expansion joint.

The inspector reviewed work planning activities, priority assignments, and corrective actions for the emergent work items documented in CR-02-05265, 05135, 05137, 05247, and 05249 all related to the meteorological tower emergency electrical generator. In addition, TRM 3.3.3.4 and SP 600.12, Meteorological Tower Generator Monthly Test, were reviewed. Operators on shift were interviewed and immediate response actions were reviewed.

The inspector also reviewed the corrective actions taken in response to a failed surveillance test for the diesel fire pump engine battery, as documented in CR-02-04274. The installation of new battery cells, maintenance activities on the battery charger, and the appropriate testing controls were all verified, as was the post-maintenance condition and restoration of the diesel fire pump to an operable status.

b. Findings

No findings of significance were identified.

1R14 Personnel Performance During Non-routine Plant Evolutions

a. Inspection Scope

The inspector reviewed operator actions and other associated activities related to a minor Unit 3 power transient that was caused by a frequency variation on the grid. At 2248 on May 5, 2002, the Unit 3 main turbine electro hydraulic control system responded to a change in grid frequency. The operators responded appropriately, took manual control of the turbine and generated CR-02-05274. The inspector also reviewed and/or observed several operator responses to an intermittent ground that occurred on one or more electrical buses during this inspection period.

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.

- MP3-118-98 Quench Spray System pump stopped due to unexpected rate of decrease in oil reservoir level

- MP3-001-02 Loose Parts Monitor (LPM) alarmed on channel 753 (Reactor Vessel Lower)

OD MP3-001-02 was initiated following the receipt of a LPM alarm in the lower reactor vessel region. The inspector noted that several ODs were written over the last year for the same channel alarming on the LPM. The inspector reviewed the OD and discussed the condition with the system engineer to confirm that no adverse trend was developing which indicated an actual loose part existed in the reactor coolant system. The inspector determined that the reactor vessel and internals and LPM remained operable based on the licensee's determination that the alarm was caused by thimble tube vibration.

The inspector noted that a Quench Spray System (QSS) pump test was aborted this inspection period because the oil levels in both the inboard and outboard oil reservoirs decreased at an unexpected rate. The inspector discussed this issue with the system engineer and reviewed the historical QSS OD, which addressed this issue, against the criteria in Generic Letter 91-18, "Resolution of Degraded and Non-Conforming Conditions," and NRC Inspection Manual Part 9900, "Operable/Operability-Ensuring the Functional Capability of a System or Component." The criteria in these documents were used to determine that the identified condition did not adversely affect safety system operability or plant safety.

b. Findings

No findings of significance were identified.

1R19 Post Maintenance Testing

a. Inspection Scope

Post maintenance testing (PMT) activities which related to the following automated work orders (AWOs) or included in the following tests were reviewed.

- AWO M3-02-04109 Install "B" Quench Spray System (QSS) site glass level gauge and new bubbler
- AWO M3-00-23550 Refurbish "B" QSS Pump discharge cross connection valve seat
- SP 3609.2 "B" Quench Spray Pump 3QSS*P3A Operational Readiness Test
- AWO M3-01-20838 "A" reactor plant component cooling water pump motor inboard slinger ring not rotating properly
- C SP 600.8 Diesel Fire Pump M7-7 Monthly Operability Demonstration
- SP 3610A.2 Residual Heat Removal Pump 3RHS*PIB Operational Readiness Test

The inspector reviewed the scope of the work activities and verified that the PMTs planned and performed were in accordance with the requirements of licensee procedure MP-20-WP-GDL40, Pre- and Post-Maintenance Testing, and were appropriate to

restore the operability of the system. For those activities directly observed, the inspector confirmed the PMT was performed in accordance with approved procedures.

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 3446B12 Train “B” Solid State Protection System Operational Test
- SP 3622.3 Auxiliary Feed Pump 3FWA*P1B Operational Readiness Test
- SP 3646A.1 Emergency Diesel Generator "A" Operability Test
- SP 3646A.8 Slave Relay Testing - Train “A” (Section 4.24)

In the case of the Train “B” solid state protection system test, the inspector confirmed the appropriate and timely application of technical specification (TS) actions as the allowed outage time for the surveillance activity expired. The implementation of adequate corrective measures, the subsequent system restoration, and documentation of the testing problems in CR-02-04648 were evaluated by the inspector with regard to the acceptability of the completed surveillance.

The last three surveillances were observed in the control room to confirm performance of the tests in accordance with approved procedures. The completed data sheets were reviewed for the tests to verify the equipment met procedural acceptance criteria and was operable consistent with TS requirements.

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

Refer to NRC Inspection Report 50-336/02-03, Section 2PS1, for specific details.

2PS2 Radioactive Material Processing and Transportation

.1 System Walkdown

Refer to NRC Inspection Report 50-336/02-03, Section 2PS2.1, for specific details.

.2 Waste Characterization and Classification

Refer to NRC Inspection Report 50-336/02-03, Section 2PS2.2, for specific details.

.3 Shipment Records and Documentation

Refer to NRC Inspection Report 50-336/02-03, Section 2PS2.3, for specific details.

.4 Identification and Resolution of Problems

Refer to NRC Inspection Report 50-336/02-03, Section 2PS2.4, for specific details.

.5 Unrestricted Release of Material from the Radiologically Controlled Area

Refer to NRC Inspection Report 50-336/02-03, Section 2PS2.5, for specific details.

4. OTHER ACTIVITIES [OA]

4OA1 Performance Indicator Verification

a. Inspection Scope

The purpose of this inspection was to confirm the information presented in the licensee's March 2002 Unplanned Power Changes per 7000 Hours Critical performance indicator was complete and accurate. The inspector reviewed selected operator logs, plant process computer data, and licensee monthly operating reports for the period April 1, 2001, through March 31, 2002. This time frame was selected as the last confirmation of this PI was performed for data through March 31, 2001.

b. Findings

No findings of significance were identified.

4OA2 Identification and Resolution of Problems

a. Inspection Scope

The inspector reviewed the licensee's response to the NRC non-cited violation (NCV 50-423/01-06-01), the root cause analyses, and the corrective actions associated with the event described in CR-01-06186 (Entry to Technical Specifications 3.0.3 Due to No Operable Charging Pumps), regarding air binding in the charging pump lube oil cooling system. This is a followup inspection of the event described in Inspection Report 50-423/01-06, dated September 10, 2001, and in Inspection Report 50-423/01-11, dated October 15, 2001.

Additionally, the inspector reviewed the licensee's response to the NRC non-cited violation (NCV 50-423/01-05-01) and the corrective actions associated with the issues described in CR-01-05427 (regarding plant startup with an existing leak in American Society of Mechanical Engineers (ASME) Class 3 service water [SW] piping), CR-01-00785, CR-01-01623, and CR-01-02175 (regarding SW piping leaks at brazed joints), and in Functional Administrative Procedure MP-24-ENG-FAP947, "Non-Code Repairs in Safety Class 3 Piping." This is a followup inspection to the issues described in Inspection Report 50-423/01-02, dated May 4, 2001, and in Inspection Report 50-423/01-05, dated August 2, 2001.

b. Findings

No findings of significance were identified.

Regarding the review of the air binding of the charging pump lube oil cooling system heat exchanger, the inspector found that the Management Review Team comments appropriately resulted in the root cause analysis root causes and contributing causes being revised to better identify the root causes of the event, the required corrective actions, and the work practice weaknesses of the associated department. Corrective actions to address extent of condition, generic implications, and the root and contributing causes, which included training and procedure changes, were adequately identified and implemented.

Regarding the review of the plant ventilation system service water brazed joint leaks, the inspector found that, even though the scope of work identified for corrective action in the initial condition report was reduced (regarding total replacement of brazed joints with welded fittings and replacing the copper nickel pipe with monel pipe, for example), the reduced scope focused on key areas of concern and was consistent with ASME code, ASME code cases, and NRC requirements. Additionally, the licensee made procedure changes to programmatically address when code repairs to leaking pipe joints are required.

4OA5 Other

.1 (Closed) FIN 50-423/01-05-02: The finding addressed a short period during which the turbine driven auxiliary feedwater pump was not operable. The condition was evaluated in NRC Inspection Report 50-423/01-05 using the NRC Significance Determination Process and was determined to be of very low safety significance and not a violation of NRC requirements. The inspector verified that the licensee adequately addressed corrective actions in CR-01-06369. Therefore, this Finding is administratively closed.

.2 (Closed) FIN 50-423/01-012-01: The finding identified that there were insufficient compensatory measures for the removal of cable spreading room CO2 from the fixed suppression system. The inspector verified that the corrective actions addressed in CR-01-11921 and 01-10375 were adequate to address the issues identified in this Finding. The enforcement aspects of this Finding were addressed in NRC Inspection Report 50-423/01-012. Therefore, this Finding is administratively closed.

4OA6 Meetings, including Exit

.1 Identification and Resolution of Problems Exit Meeting

The inspector presented the inspection results to Mr. D. Dodson at the conclusion of the problem identification and resolution followup inspection on April 4, 2002. The licensee acknowledged the findings presented.

The inspector asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

.2 Resident Exit Meeting Summary

The inspectors presented the inspection results to Mr. S. Scace 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

ATTACHMENT 1

SUPPLEMENTAL INFORMATION

a. List of Items Opened, Closed and Discussed

Closed

50-423/01-05-02	FIN	Improper work control review for a temporary modification resulted in turbine-driven auxiliary feedwater system inoperability (4OA5.1)
50-423/01-012-01	FIN	Insufficient compensatory measures for removal of cable spreading room CO2 suppression system (4OA5.2)

b. Partial List of Documents Reviewed

IDENTIFICATION AND RESOLUTION OF PROBLEMS

Condition Reports:

M3-CR-01-00785
M3-CR-01-01623
M3-CR-01-02036
M3-CR-01-02157
M3-CR-01-02175
M3-CR-01-05427
M3-CR-01-06186

Procedures:
OP-3330D, Charging Pump Cooling, Rev. 006-01.
MP-24-ENG-FAP947, Non-Code Repairs in Safety Class 3 Piping, Rev. 000-01.

Other Documents:
Root Cause Investigation, Charging Pump Cooling System (CCE) “3CCE*E1A” Heat Exchanger Air Entrapment, Rev. 0, July 18, 2001.
Root Cause Investigation, Charging Pump Cooling System (CCE) “3CCE*E1A” Heat Exchanger Air Entrapment, Rev. 1, August 22, 2001.
Root Cause Investigation, Charging Pump Cooling System (CCE) “3CCE*E1A” Heat Exchanger Air Entrapment, Rev. 2, February 19, 2002.
Engineering Work Request, EWR-M3-01012, Redesign of SW Return Piping from HVR Air Conditioning Units, October 2, 2000.
Engineering Work Request, EWR-M3-01013, Redesign of SW Supply Piping to HVR Air Conditioning Units, October 2, 2000.
Engineering Work Request, EWR-M3-00003, Removal of 3SWP*MOV130A&B and Relocation of 3SWP*RO133A&B, March 28, 2001.
Design Change Notice DM3-00-0258-01, Remove Service Water 3SWP*MOV130A and Relocate of 3SWP*RO133A, April 2, 2002.

c. List of Acronyms Used

ASME	American Society of Mechanical Engineers
AWOs	automated work orders
CRs	condition reports
LPM	loose parts monitor
ODs	operability determinations
NCV	non-cited violation
P&IDs	piping and instrumentation diagrams
PI	performance indicator
PMT	post maintenance testing
QSS	quench spray system
SW	service water
TRM	technical requirements manual
TS	technical specification should be considered proprietary. No proprietary information was identified.