November 7, 2005

Mr. David A. Christian
Sr. Vice President and Chief Nuclear Officer
Dominion Resources
5000 Dominion Boulevard
Glenn Allen, VA 23060-6711

SUBJECT: MILLSTONE POWER STATION UNIT 2 AND UNIT 3 - NRC INTEGRATED INSPECTION REPORT 05000336/2005004 AND 05000423/2005004

Dear Mr. Christian:

On September 30, 2005, the U.S. Nuclear Regulatory Commission (NRC) completed inspections at your Millstone Power Station Unit 2 & Unit 3. The enclosed integrated inspection report documents the inspection findings, which were discussed on October 20, 2005, with Mr. J. Alan Price and other members of your staff.

The 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.

This report documents two NRC-identified findings of very low safety significance (Green). One of these findings was determined to involve a violation of NRC requirements. However, because of the very low safety significance and because it was entered into your corrective action program, the NRC is treating this issue as Non-Cited Violation (NCV), in accordance with Section VI.A.1 of the NRC's Enforcement Policy. If you contest these NCVs, you should provide a response within 30 days of the date of these inspection reports, with the basis for your denial, 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 Power Station.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosures, and your response (if any) will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of NRC's

document system (ADAMS). ADAMS is accessible from the NRC Website at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

/RA/

Paul G. Krohn, Chief
Projects Branch 6
Division of Reactor Projects

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

Enclosure: Inspection Report 05000336/2005004 and 05000423/2005004
w/Attachment: Supplemental Information

cc w/encl:
J. A. Price, Site Vice President, Millstone Station
C. L. Funderburk, Director, Nuclear Licensing and Operations Support
D. W. Dodson, Supervisor, Station Licensing
L. M. Cuoco, Senior Counsel
C. Brinkman, Manager, Washington Nuclear Operations
J. Roy, Director of Operations, Massachusetts Municipal Wholesale Electric Company
First Selectmen, Town of Waterford
R. Rubinstein, Waterford Library
B. Sheehan, Co-Chair, NEAC
E. Woollacott, Co-Chair, NEAC
E. Wilds, Director, State of Connecticut SLO Designee
J. Buckingham, Department of Public Utility Control
G. Proios, Suffolk County Planning Dept.
R. Shadis, New England Coalition Staff
G. Winslow, Citizens Regulatory Commission (CRC)
S. Comley, We The People
D. Katz, Citizens Awareness Network (CAN)
R. Bassilakis, CAN
J. M. Block, Attorney, CAN
P. Eddy, Electric Division, Department of Public Service, State of New York
P. Smith, President, New York State Energy Research and Development Authority
J. Spath, SLO Designee, New York State Energy Research and Development Authority

Distribution w/encl **(VIA E-MAIL)**:
S. Collins, RA
M. Dapas, DRA
S. Lee, RI OEDO
D. Roberts, NRR
V. Nerses, NRR
G. Wunder, NRR
R. Ennis, NRR
S. Schneider, Senior Resident Inspector
E. Bartels, Resident OA
P. Krohn, RI
S. Barber, RI
ROPreports@nrc.gov
Region I Docket Room (with concurrences)

SISP Review Complete:___PGK_____ (Reviewer's Initials)

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REGION I

Docket No.:	05000336, 05000423
License No.:	DPR-65, NPF-49
Report No.:	05000336/2005004 and 05000423/2005004
Licensee:	Dominion Nuclear Connecticut, Inc.
Facility:	Millstone Power Station, Unit 2 and Unit 3
Location:	P. O. Box 128 Waterford, CT 06385
Dates:	July 1, 2005 - September 30, 2005
Inspectors:	S. M. Schneider, Senior Resident Inspector, Division of Reactor Projects (DRP) J. C. Benjamin, Resident Inspector, DRP S. R. Kennedy, Resident Inspector, DRP G. S. Barber, Senior Project Engineer, DRP A. C. Cerne, Consultant, Division of Reactor Safety (DRS) L. S. Cheung, Senior Reactor Inspector, DRS J. M. D'Antonio, Operations Engineer, DRS G. X. Johnson, Reactor Inspector, DRS G. J. Malone, Resident Inspector-Salem, DRP T. A. Moslak, Health Physicist, DRS S. M. Pindale, Senior Reactor Inspector, DRS D. L. Werkheiser, Reactor Inspector, DRS
Approved by:	Paul G. Krohn, Chief Projects Branch 6 Division of Reactor Projects

Enclosure

CONTENTS

SUMMARY OF FINDINGS iii

REACTOR SAFETY 1
1R01 Adverse Weather Protection 1
1R04 Equipment Alignment 1
1R05 Fire Protection 3
1R06 Flood Protection Measures 5
1R11 Licensed Operator Requalification Program 5
1R12 Maintenance Effectiveness 7
1R13 Maintenance Risk Assessments and Emergent Work Evaluation 7
1R14 Personnel Performance During Non-Routine Plant Evolutions and Events 8
1R15 Operability Evaluations 13
1R16 Operator Work-Arounds 17
1R17 Permanent Plant Modifications 18
1R19 Post-Maintenance Testing 18
1R20 Refueling and Outage Activities 19
1R22 Surveillance Testing 20
1R23 Temporary Plant Modifications 21
1EP6 Drill Evaluation 21

RADIATION SAFETY 22
2PS1 Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems. 22

OTHER ACTIVITIES [OA] 24
4OA2 Identification and Resolution of Problems 24
4OA3 Event Followup 27
4OA4 Cross Cutting Aspects of Findings 27
4OA5 Other Activities 28
4OA6 Meetings, Including Exit 31

SUPPLEMENTAL INFORMATION A-1
KEY POINTS OF CONTACT A-1
LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED A-2
LIST OF DOCUMENTS REVIEWED A-3
LIST OF ACRONYMS A-12

SUMMARY OF FINDINGS

IR 05000336/2005-004, 05000423/2005-004; 07/01/2005 - 09/30/2005; Millstone Power Station, Unit 2 and Unit 3; Personnel Performance During Non-Routine Plant Evolutions and Events, Operability Evaluations.

The report covered a 3-month period of inspection by resident inspectors and announced inspections by regional inspectors. One NCV was identified. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process" (SDP). Findings for which the SDP does not apply may be Green or be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 3, dated July 2000.

A. NRC-Identified and Self-Revealing Findings

Cornerstone: Mitigating Systems

Unit 2

- Green. The inspectors identified a non-cited violation of Technical Specification (TS) 3.8.1.1, "AC Sources," since Dominion did not perform the required TS action (TS 3.8.1.1.b.3) after they discovered the "B" emergency diesel generator (EDG) was inoperable on May 18, 2005. Specifically, Dominion failed to verify that the steam-driven auxiliary feedwater pump was operable after declaring the "B" EDG inoperable. In addition, Dominion did not identify in the Licensee Event Report (LER) documenting this occurrence that TS 3.0.5, "Limiting Conditions for Operation," was also not entered during the time that the "B" EDG was inoperable. Dominion has entered this condition into their corrective action program (CR-05-11468) and updated the LER to reflect TS 3.0.5 applicability.

  This finding was more than minor because it affected the human performance attribute and the availability, reliability, and capability objective of the Mitigating System cornerstone. Specifically, Dominion did not verify the steam-driven auxiliary feedwater pump was operable upon the discovery that the "B" EDG was inoperable. This finding was determined to be of very low safety significance (Green) since the steam-driven auxiliary feedwater pump was subsequently determined to have been available to perform its function. This finding is related to the cross-cutting area of Human Performance in that operations personnel did not perform the required actions of TS 3.8.1.1.b.3 after they declared the "B" EDG inoperable on May 18, 2005. (Section 1R14.2)

- Green. The inspectors identified a finding where Dominion did not adequately implement their Operability Determination (OD) procedure on three occasions which affected the basis for operability for degraded conditions identified on safety-related systems. Dominion has initiated corrective actions to conduct an assessment of their

current operability determination process, evaluate the assessment results, and implement corrective actions to improve their process. Specifically;

- Dominion did not perform a prompt operability determination for approximately 8 days to evaluate whether a fence installed over the Unit 2 turbine-driven auxiliary feedwater pump (TDAFWP) cubicle high energy line break blowout panel adversely impacted the panel's ability to perform its design function. After investigation, Dominion determined that a supporting engineering evaluation did not exist, declared all three auxiliary feedwater pumps inoperable, and took prompt action to reroute the fencing around the blowout panel.

- Dominion did not revise an operability determination on the Unit 2 charging system when new information discovered during system troubleshooting showed that the basis for the operability determination was in question. Dominion ultimately decided to close the operability determination to previous troubleshooting and maintenance activities associated with the degraded condition.

- Dominion described as the basis for operability in a condition report (CR) that a technical evaluation existed that showed that a Unit 3 high pressure safety injection (SIH) pump could meet its mission time with an oil leak of up to six drops per minute. The referenced technical evaluation however, did not discuss mission time, but calculated the time to deplete a high pressure safety injection pump oil reservoir in the presence of a four drop per minute and six drop per minute leak.

This finding was more than minor because it affected the equipment performance attribute and the availability, reliability, and capability objective of the Mitigating System cornerstone. Specifically, Dominion did not adequately evaluate the availability of Mitigating Systems with degraded conditions to ensure their availability to perform the intended safety function. This finding was determined to be of very low safety significance (Green) since there was not a loss of function for the TDAFW and charging system examples and since the SIH pump would have completed its safety function within the Probabilistic Risk Assessment 24 hour evaluation time. This finding is related to the cross-cutting area of Problem Identification and Resolution (PI&R) because of the failure to conduct timely and adequate evaluations of degraded and non-conforming conditions. (Section 1R15)

B. Licensee-Identified Violations

None.

REPORT DETAILS

Summary of Plant Status

Unit 2 operated at or near 100 percent power for the duration of the inspection period.

Unit 3 began this inspection period operating at approximately 100 percent power. A manual reactor trip was initiated on September 29, 2005, due to intake structure conditions caused by high winds and waves which resulted in the trip of both the “A” and “B” circulating water pumps. Due to the proximity of the Unit 3 3R10 refueling outage, Dominion decided to remain shutdown. The unit was in Mode 4 at the end of this inspection period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R01 Adverse Weather Protection (71111.01 - One Unit 2 Sample and One Unit 3 Sample)

a. Inspection Scope

System Inspection

The inspectors reviewed one sample each of the readiness of the Unit 2 and Unit 3 service water systems for extreme weather conditions, specifically; hurricanes, high winds, high tides, ultimate heat sink temperature changes, and other severe weather events. The inspection was intended to ensure that the indicated equipment, its instrumentation, and its supporting structures were configured in accordance with Dominion procedures and that adequate controls were in place to ensure functionality of the system. The inspectors reviewed licensee procedures and walked down the system. Documents reviewed during the inspection are listed in the Attachment.

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment (71111.04)

a. Inspection Scope

Partial System Walkdowns (71111.04Q - Three Unit 2 Samples and Three Unit 3 Samples)

The inspectors performed six partial system walkdowns during this inspection period. The inspectors reviewed the documents listed in the Attachment to determine the correct system alignment. The inspectors conducted a walkdown of each system to verify that the critical portions of selected systems were correctly aligned in accordance with these procedures and to identify any discrepancies that may have had an effect on operability. The inspectors verified that equipment alignment problems that could cause

initiating events, impact mitigating system availability or function, or affect barrier functions were identified and resolved. The following systems were reviewed based on their risk significance for the given plant configuration:

Unit 2

- Partial equipment alignment of motor-driven auxiliary feedwater (MDAFW) system during maintenance on the TDAFW system, July 11, 2005;
- Partial equipment alignment of reactor building closed cooling water (RBCCW), July 25, 2005; and
- Partial equipment alignment of "A" high pressure safety injection (HPSI) train during an "A" train protected work week, July 26, 2005.

Unit 3

- Partial equipment alignment of "A" train engineered safeguard features air conditioning, August 13, 2005;
- Partial equipment alignment of "B" service water, August 17, 2005; and
- Partial equipment alignment of the charging pump cooling system, with one cooling pump (3CCE*P1A) in operation on September 22, 2005, supporting the operation of two running charging pumps.

b. Findings

No findings of significance were identified.

Complete System Walkdown (71111.04S - One Unit 2 Sample and One Unit 3 Sample)

a. Inspection Scope

Unit 2

The inspectors completed a detailed review of the alignment and condition of the Unit 2 Charging System. The inspectors conducted a walkdown of the system to verify that the critical portions, such as valve positions, switches, and breakers, were correctly aligned in accordance with procedures to identify any discrepancies that may have had an effect on operability.

The inspectors also conducted a review of outstanding maintenance work orders to verify that the deficiencies did not significantly affect the charging pump system function. In addition, the inspectors discussed system health with the system engineer and reviewed the CR database to verify that equipment alignment problems were being identified and appropriately resolved. Documents reviewed during the inspection are listed in the Attachment.

Unit 3

The inspectors conducted a detailed review, field walkdown, and configuration inspection of the high pressure safety injection (HPSI) system outside of the containment building. During normal plant operations, this emergency core cooling system (ECCS) is in standby, with the charging pump(s) operating as part of the chemical and volume control system (CVCS). While this inspection was conducted, the CVCS was configured for maximum letdown flow, in preparation for the upcoming refueling outage, and two charging pumps were in operation to support the flow requirements.

The inspectors reviewed the ECCS system design requirements documented in the Millstone 3 Updated Final Safety Analysis Report and evaluated the field alignment of the HPSI system components against the system operating procedures and applicable piping and instrumentation diagram details. The inspectors also examined the operational readiness of the ECCS equipment, in standby, along the flow path from the refueling water storage tank. The material condition of the system equipment was examined and certain components (e.g., snubbers, relief valves) were verified to have been properly maintained and tested as part of the approved in-service testing program.

All the CRs generated for the CVCS system for the past year were reviewed and a sample selected for more complete followup of licensee corrective action implementation. The inspectors examined maintenance work orders and surveillance test results, and interviewed cognizant operations and engineering personnel, as necessary, to confirm the adequate implementation of system operability and programmatic test requirements. Documents reviewed during the inspection are listed in the Attachment.

b. Findings

No findings of significance were identified.

1R05 Fire Protection (71111.05)

Quarterly Sample Review (71111.05Q - Six Unit 2 Samples and Seven Unit 3 Samples)

a. Inspection Scope

The inspectors performed thirteen walkdowns of fire protection areas during the inspection period. The inspectors reviewed Dominion's fire protection program to determine the required fire protection design features, fire area boundaries, and combustible loading requirements for the selected areas. The inspectors walked down those areas to assess Dominion's control of transient combustible material and ignition sources. In addition, the inspectors evaluated the material condition and operational status of fire detection and suppression capabilities, fire barriers, and any related compensatory measures. The inspectors then compared the existing conditions of the inspected fire protection areas to the fire protection program requirements to ensure all

program requirements were being met. Documents reviewed during the inspection are listed in the Attachment. The fire protection areas reviewed included:

Unit 2

- Auxiliary Building Cable Vault, 25'6" Elevation (Fire Area A-24);
- “A” DC Switchgear Room, 14'6" Elevation (Fire Area A-20);
- “B” DC Switchgear Room, 14'6" Elevation (Fire Area A-21);
- 480V Load Center Room, 36'6" Elevation (Fire Area A-28);
- Auxiliary Building East Battery Room, 14'6" Elevation (Fire Area A-22); and
- Auxiliary Building West Battery Room, 14'6" Elevation (Fire Area A-23).

Unit 3

- Electrical Equipment Room, West Switchgear Area, 3'8" Elevation (Fire Area CB-16);
- Electrical Equipment Room, East Switchgear Area, 3'8" Elevation (Fire Area CB-17);
- Battery Room 1, 3'8" Elevation (Fire Area CB-3);
- Battery Room 2, 3'8" Elevation (Fire Area CB-4);
- Battery Room 4, 3'8" Elevation (Fire Area CB-6);
- Battery Room 5, 3'8" Elevation (Fire Area CB-7); and
- Auxiliary Building, West Floor Area, 24'-6" Elevation (Fire Area AB-1, Zone D).

b. Findings

No findings of significance were identified.

Annual Fire Drill Observation (71111.05A - One Unit 2 Sample)

a. Inspection Scope

Unit 2

The inspectors observed personnel performance during a fire brigade drill on August 22, 2005, to evaluate the readiness of station personnel to prevent and fight fires. The drill simulated a fire in the Unit 2 Intake Structure. The inspectors observed the fire brigade members using protective clothing, turnout gear, and self-contained breathing apparatus and entering the fire area in a controlled manner. The inspectors also observed the fire fighting equipment brought to the fire scene to evaluate whether sufficient equipment was available to effectively control and extinguish the simulated fire. The inspectors evaluated whether the permanent plant fire hose lines were capable of reaching the fire area and whether hose usage was adequately simulated. The inspectors observed the fire fighting directions and communications between fire brigade members. The inspectors verified that the pre-planned drill scenario was followed and observed the post-drill critique to evaluate if the drill objectives were satisfied and ensure any drill weaknesses were discussed.

b. Findings

No findings of significance were identified.

1R06 Flood Protection Measures (71111.06 - One Unit 3 Sample)

Internal Flooding Inspection

a. Inspection Scope

The inspectors reviewed one sample of flood protection measures for equipment in the safety-related room listed below. This review was conducted to evaluate Dominion's protection of the enclosed safety-related systems from internal flooding conditions. The inspectors performed a walkdown of the area and reviewed the FSAR, the internal flooding evaluation and related documents. The inspectors compared the as-found equipment and conditions to ensure that they remained consistent with those indicated in the design basis documentation, flooding mitigation documents, and risk analysis assumptions. Documents reviewed during the inspection are listed in the Attachment.

Unit 3

- "B" and "D" Service Water Pump Cubicle.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification Program (71111.11)

.1 Requalification Activities Review by Resident Staff (71111.11Q - One Unit 2 Sample and One Unit 3 Sample)

a. Inspection Scope

The inspectors observed one sample of Unit 2 licensed operator requalification training on August 24, 2005 and one sample of Unit 3 licensed operator requalification training on August 24, 2005. The inspectors verified that the training evaluators ensured applicable training objectives had been achieved. The inspectors reviewed Unit 2 Training Feedback 2005-00000024 which addressed the operator response to the change in radiation monitor re-modeling. The inspectors also verified the Appendix R modification to install control lockout switches in the Unit 3 control room was replicated in the Unit 3 simulator. Documents reviewed during the inspection are listed in the Attachment.

b. Findings

No findings of significance were identified.

.2 Biennial Review by Regional Specialist (71111.11B - One Unit 3 Sample)

a. Inspection Scope

The following inspection activities were performed using NUREG-1021, Revision 8, "Operator Licensing Examination Standards for Power Reactors," Inspection Procedure Attachment 71111.11, "Licensed Operator Requalification Program," and NRC Manual Chapter 0609, Appendix I, "Operator Requalification Human Performance Significance Determination Process (SDP)," as acceptance criteria.

The inspectors reviewed documentation of operating history since the last requalification program inspection. The inspectors also discussed facility operating events with the resident staff. Documents reviewed included NRC inspection reports and eleven Dominion CRs to ensure that operational events were not indicative of possible training deficiencies. The inspectors also reviewed Dominion corrective actions and CR resolutions for issues related to the April 17, 2005 event involving a reactor trip and inadvertent safety injection. This review included an evaluation of the adequacy of training conducted to remedy deficiencies in operator knowledge and performance ascertained from review of the event and verification that all operators had received the training.

The inspectors observed the administration of operating examinations to one crew. The operating examination consisted of two simulator scenarios and one set of five job performance measures administered to each individual.

On September 28, 2005, the inspectors conducted an in-office review of the Dominion requalification exam results. These results included the annual operating test only (i.e., the comprehensive written exam was administered last year). The inspection assessed whether pass rates were consistent with the guidance of NRC Manual Chapter 0609, Appendix I, "Operator Requalification Human Performance Significance Determination Process." The inspectors verified that:

- Crew failure rate on the dynamic simulator was less than 20 percent. (Failure rate was 0 percent.)

- Individual failure rate on the dynamic simulator test was less than or equal to 20 percent. (Failure rate was 0 percent.)

- Individual failure rate on the walk-through test (JPMs) was less than or equal to 20 percent. (Failure rate was 2 percent.)

- Individual failure rate on the comprehensive biennial written exam was less than or equal to 20 percent. (N/A - this exam was not administered this exam cycle)

- More than 75 percent of the individuals passed all portions of the exam (98 percent of the individuals passed all portions of the exam).

b. Findings

No findings of significance were identified.

1R12 Maintenance Effectiveness (71111.12 - Two Unit 2 Samples and Two Unit 3 Samples)

Routine Maintenance Effectiveness Inspection (71111.12Q)

a. Inspection Scope

The inspectors reviewed four samples of Dominion's evaluation of degraded conditions, involving safety related structures, systems and/or components for maintenance effectiveness during this inspection period. The inspectors reviewed licensee implementation of the Maintenance Rule (MR), 10 CFR 50.65, and verified that the conditions associated with the referenced CRs were appropriately evaluated against applicable MR functional failure criteria as found in licensee scoping documents and procedures. The inspectors also discussed these issues with the system engineers and maintenance rule coordinators to verify that they were appropriately tracked against each system's performance criteria and that the systems were appropriately classified in accordance with MR implementation guidance. Documents reviewed during the inspection are listed in the Attachment. The following conditions were reviewed:

Unit 2

- Multiple Charging Pump Low Pressure Trip Signal (CR-05-07933); and
- Degraded “A” ESF Room Cooler (CR-05-08546).

Unit 3

- “B” Service Water Discharge Strainer Trip (CR-05-08722); and
- FME Discovered in 3HVQ*ACU2A (CR-05-08623).

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessments and Emergent Work Evaluation (71111.13 - Five Unit 2 Samples and Four Unit 3 Samples)

a. Inspection Scope

The inspectors reviewed nine samples of the adequacy of maintenance risk assessments of emergent and planned activities during the inspection period. The inspectors utilized the Equipment-Out-of-Service quantitative risk assessment tool to evaluate the risk of the plant configurations and compared the results to Dominion's stated risk. The inspectors verified that Dominion entered appropriate risk categories and implemented risk management actions as necessary. Documents reviewed during

the inspection are listed in the Attachment. The inspectors verified the conduct and adequacy of scheduled maintenance risk assessments for plant conditions affected by the conduct of the following maintenance and testing activities:

Unit 2

- Risk assessment for scheduled work week beginning July 25, 2005;
- "Power Watch" for Southwest Connecticut, July 27, 2005;
- Risk assessment for scheduled work week beginning August 8, 2005;
- Risk assessment for scheduled work week beginning August 22, 2005; and
- Risk assessment for scheduled work week beginning September 12, 2005.

Unit 3

- "Power Watch" for Southwest Connecticut, July 27, 2005;
- Risk assessment for scheduled work week beginning August 22, 2005;
- Emergent Risk Assessment Following Declaration of the "A" Service Water Train Inoperable, August 29, 2005; and
- Risk assessment for work scheduled on September 21, 2005.

b. Findings

No findings of significance were identified.

1R14 Personnel Performance During Non-Routine Plant Evolutions and Events (71111.14 - Three Unit 2 Samples (including 2 LERs) and Four Unit 3 Samples)

a. Inspection Scope

The inspectors reviewed seven samples of events that demonstrated personnel performance in coping with non-routine evolutions and transients. The inspectors observed operations in the control room and reviewed applicable operating and alarm response procedures, TSs, plant process computer indications, and control room shift logs to evaluate the adequacy of Dominion's response to these events. The inspectors also verified the events were entered into the corrective action program to resolve identified adverse conditions. The inspectors also evaluated two licensee event reports (LERs) which described personnel performance issues as a causal factor. Documents reviewed during the inspection are listed in the Attachment.

Operator Performance During Non-Routine Plant Evolutions and Events

Unit 2

- On August 4, 2005, control room operators received a "Control Element Assembly (CEA) Motion Inhibit" and "CEA Group Deviation Backup" alarms for CEA #47 during steady state operating conditions. Control Element

Assembly #47 position was erratic for approximately two seconds then returned to its normal pre-alarming condition. Operators entered abnormal operating procedure (AOP) 2556, “CEA Malfunction,” for this condition and entered the applicable TS limiting condition of operations (LCOs). Operators verified expected positions of the remaining CEA position indications. In addition, no changes in reactor power and reactor coolant system temperature were noticed by the control room personnel. Operators determined that this condition was only an indication abnormality and not an unexpected CEA movement. The cause of the alarming CEA condition was determined to be a sticking reed switch. The CEA was subsequently retested and the applicable TS LCOs exited. Dominion entered this condition into their corrective action program (CR-05-08843).

Unit 3

- On July 5, 2005, Operations personnel responded to a fire in the “A” generator leads cooling fan motor, located in the turbine building. The operators secured the affected “A” fan motor and started the “B” fan motor and entered Emergency Operating Procedure (EOP) 3509, Revision 018-00, “Fire Emergency.” The fire brigade was mobilized. The fire was extinguished using a portable carbon dioxide extinguisher. A fire watch was established and the affected motor was safety-tagged out. The fire did not affect safety-related equipment and was extinguished in approximately eleven minutes. Operators walked-down affected areas with no additional issues identified and the EOP was exited. The cause of the fire was a phase short in the fan motor winding.

- On July 13, 2005, Maintenance personnel observed a low freon pressure condition on the “B” train air-conditioning unit (3HVQ*ACU1B) that supports the “B” train residual heat removal, safety injection, and quench spray systems. The control room responded and entered the appropriate TSs, maintained the “A” train ECCS in a protected line-up, and took actions for an apparent freon leak. Repairs were completed and normal system line-ups were restored. Additionally, Dominion took appropriate actions to minimize risk to the plant while the affected air-conditioning unit was unavailable.

- On August 3, 2005, Dominion determined that a post-maintenance test (PMT) activity to conduct a leak rate test following maintenance on a containment pressure boundary airlock shaft seal had been missed in 2001 and 2003. Operations personnel conducted a reasonable assurance of continued operability for containment integrity and determined that the shaft seal was operable but not fully qualified.

  Additionally, Operations personnel entered TS 4.0.3., Surveillance Requirements, since the Unit 3 TS bases listed 10 CFR 50, Appendix J, "Primary Reactor Containment Leakage Testing for Water Cooled Power Reactors," as a condition based surveillance under TS 4.0.3. The inspectors noted that TS 4.0.3 would not require an operability determination, would not apply to a missed PMT

activity, and that operability would need to be immediately assessed without delay. In this circumstance, Operations personnel did assess the immediate operability issue, concluding that even with the worst case shaft seal leak rates, the overall containment integrated leakage rate would still be less than the regulatory limit. Operations personnel, however, considered that TS 4.0.3 still applied. The inspectors consulted with Nuclear Reactor Regulation technical staff and determined that TS 4.0.3 would allow a delay in conducting a missed periodic surveillance activity and that TS 4.0.3 would also assume operability was not affected by a missed periodic surveillance.

In the circumstances of August 3, 2005, the activity was a missed airlock shaft seal PMT that was intended to establish operability upon its completion, not a periodic surveillance activity that had been missed. Missing the PMT was not more than minor since the overall containment integrated leakage rate, assuming worst-case seal leakage, remained less than regulatory requirements. The missed PMT and the action to enter TS 4.0.3 was entered into the licensee's corrective action program as CR 05-08286, "Missed Surveillance for MPS3 Equipment Hatch."

- On September 29, 2005, operations personnel performed a manual reactor trip from 100 percent power in response to a lowering vacuum in the main condenser. Lowering vacuum in the main condenser occurred after the “A” and “B” circulating water pumps automatically tripped as the result of high traveling screen differential pressure. Since two circulating water pumps tripped, the main condenser was isolated and the steam generator atmospheric dump valves were initially used to remove decay heat and control primary plant temperature. Plant systems responded as expected and the main condenser was restored approximately one hour later. Following the reactor trip Unit 3 entered a planned refueling outage (3R10).

Licensee Event Reports (LERs) Associated With Personnel Performance Issues

Unit 2

.1 (Closed) LER 05000336/2005-001-00, Non Conformance With Surveillance Requirements

On February 7, 2005, Training personnel discovered that a manual operator on a Unit 2 shutdown cooling total flow control valve was not pinned as intended and required by Technical Specification (TS) 4.5.2.b, Emergency Core Cooling Systems. This resulted in the manual operator not being attached to the valve shaft. Dominion installed the pin correctly and documented the issue in CR-05-01147. The LER was reviewed by the inspectors and no findings of significance were identified. This LER is closed.

.2 (Closed) LER 05000336/2005-003-00, 01, Non-Compliance With Technical Specifications Due to Installation Of Unqualified Test Equipment

a. Inspection Scope

On May 18, 2005, Operations personnel responded to a non-safety related test instrument which was discovered installed and connected across the voltage sensing potential transformer of the Unit 2 “B” EDG. The subject test instrument was used while testing the EDG approximately five days earlier. The subject test equipment was not provided with a qualified isolation device used to provide the necessary separation from the safety related equipment. Although the test equipment was still installed, the “B” EDG was incorrectly declared operable while in Mode 5 on May 13, 2005, following completion of testing. The LER was reviewed by the inspectors and found that one of the affected Technical Specification (TS) 3.0.5, Limiting Conditions of Operation, was not identified in the original LER to add reference to the missed TS entry. The inspectors interviewed Dominion personnel and reviewed this LER with its associated CRs (CR-05-05660, CR-05-05517, and CR-05-05884) to verify that the root cause and corrective actions related to the event described in the LER were adequate. Dominion revised the LER. In addition, as a result of this review, a Green NCV was developed. This LER is closed.

b. Findings

Introduction. A Green non-cited violation (NCV) was identified for the failure to recognize and take action directed by Technical Specification (TS) 3.8.1.1.b.3 upon the discovery that the “B” EDG was inoperable.

Description. On May 18, 2005, Dominion determined that the “B” EDG was incorrectly declared operable following surveillance testing performed on May 13, 2005. Restoration efforts following the May 13, 2005, surveillance did not remove a non safety-related piece of test equipment attached to the “B” EDG. One of the test equipment leads was connected across the “B” EDG voltage sensing potential transformer. This instrumentation was not provided with a qualified isolation device to provide the necessary separation from the safety-related “B” EDG equipment. Dominion determined that the test equipment was not removed following the surveillance due to an inadequate shift turnover.

Dominion determined this issue to be reportable under 10 CFR 50.73(a)(2)(i)(B) since the “B” EDG was not operable when Dominion entered Mode 4 on May 15, 2005, until the test equipment was removed and operability restored, on May 18, 2005. Dominion initially determined that the TSs affected were TS 3.8.1.1 Actions b.1, b.2, and b.3, and TS Surveillance requirements 4.0.5, 4.8.1.1.1, 4.8.1.1.2.a.2, and 4.4.9.3.1.a.

During the review of the LER, the inspectors identified that Dominion did not verify that the steam-driven auxiliary feedwater (SDAFW) pump was operable once they recognized that the “B” EDG was inoperable on May 18, 2005, as required by TS 3.8.1.1.b.3. Dominion subsequently restored the “B” EDG operability by removing the

test equipment leads from the “B” EDG approximately 30 minutes after the condition was discovered.

In addition, the inspectors identified that Dominion did not document a violation of TS 3.0.5, Limiting Conditions for Operation, even though “A” train equipment was taken out of service while the “B” EDG was inoperable. Specifically;

- On May 17, 2005, in Mode 3, 2-FW-43A failure mode testing occurred which rendered the “A” auxiliary feedwater (AFW) pump inoperable.

- On May 17, 2005, in Mode 3, the “A” HPSI pump was declared inoperable during HPSI alignment configuration changes.

Dominion subsequently updated the LER to reflect that they were not in compliance with TS 3.0.5 in addition to the TSs mentioned in the initial LER. The inspectors determined that Dominion’s failure to verify the SDAFW pump was available after they determined the “B” EDG was inoperable to be a performance deficiency. In addition, Dominion did not identify in the LER documenting this occurrence, that TS 3.0.5 was also not entered during the time that the “B” EDG was inoperable.

Analysis. Traditional enforcement does not apply for this finding because it did not have any actual safety consequences or the potential for impacting the NRC’s regulatory function and was not the result of any willful violations of NRC requirements. This finding was more than minor because it affected the human performance attribute and the availability, reliability, and capability objective of the Mitigating System cornerstone. This finding was determined to be of very low safety significance (Green) in accordance with Inspection Manual Chapter (IMC) 0609, Appendix A, “Determining the Significance of Reactor Inspection Findings for At-Power Situations.” Specifically, the SDAFW pump was subsequently verified to have been operable during the time the “B” EDG was unavailable. This finding is related to the cross-cutting area of Human Performance in that operations personnel failed to perform the required actions of TS 3.8.1.1.b.3 after they declared the “B” EDG inoperable on May 18, 2005.

Enforcement. TS 3.8.1.1.b.3, “A. C. Sources,” requires, in part, that in Modes 1, 2, 3, and 4, the steam driven AFW pump be verified OPERABLE with one EDG inoperable. Contrary to this requirement, on May 18, 2005, Dominion did not to take this TS action with the “B” EDG inoperable in Mode 1. This issue was determined to be of very low safety significance (Green) and was entered into Dominion’s corrective action program (CR-05-11468). Dominion also updated the LER to reflect TS 3.0.5 applicability. This violation is being treated as an NCV, consistent with Section VI.A of the NRC Enforcement Policy (**NCV 05000336/2005004-01**).

1R15 Operability Evaluations (71111.15 - Five Unit 2 Samples and Six Unit 3 Samples)

a. Inspection Scope

The inspectors reviewed eleven operability determinations associated with degraded or non-conforming conditions to ensure that operability was justified and that mitigating systems or those affecting barrier integrity remained available and no unrecognized increase in risk had occurred. The inspectors also reviewed compensatory measures to ensure that the measures were in place and were appropriately controlled. The inspectors reviewed licensee performance to ensure all related TS and FSAR requirements were met. The inspectors reviewed the following degraded or non-conforming conditions:

Unit 2

- Thermal Margin/Low Pressure Pre-Trip (CR-05-07988);
- Reactor Building (RB)-50A/RB-50B Found Out of Position (CR-05-07917);
- Upper 4160 Switchgear Cooling F-134 Out of Service (CR-05-09337);
- 2-FW-43B Maintenance (CR-05-05259); and
- Intermittent “A” and “B” Charging System Low Pressure Trip Alarms (OD MP2-012-05).

Unit 3

- Degraded Rubber Liner Identified on 3SWP*V040 (CR-05-07099);
- Equipment Hatch Man-Way Shaft Seals Were Replaced Without a Post Maintenance Test (CR-05-08272);
- “B” EDG 2 Percent Water in Rocker Arm Lube Oil (CR-05-07466);
- “A” Service Water Pipe Support Significantly Corroded (CR-05-09162);
- “B” Service Water Pump Strainer Blowdown Line Pinhole Leak (CR-05-09317); and
- “A” HPSI Pump Lube Oil Leak (CR-05-10013 and CR-05-10257).

b. Findings

Unit 2/Unit 3

Introduction. The inspectors identified a finding where Dominion did not adequately implement their Operability Determination (OD) procedure on three occasions which affected the basis for operability for degraded conditions identified on safety-related systems. Specifically;

- Dominion did not perform a timely assessment of operability when the inspectors questioned whether a fence installed over the Unit 2 turbine-driven auxiliary feedwater (TDAFW) pump cubicle high energy line break (HELB) blowout panel could adversely impact the blowout panel’s ability to perform its design function.

- Dominion did not evaluate new information that called into question the technical basis of an OD on the Unit 2 charging system.

- Dominion indicated that a technical evaluation existed that showed that a Unit 3 safety injection high (SIH) pump could meet its mission time with an oil leak of up to six drops per minute as a basis for operability. The referenced technical evaluation, however, did not discuss mission time, but calculated the time to deplete a SIH pump oil reservoir in the presence of a four drop per minute and six drop per minute oil leak. In addition, Dominion did not revise this operability basis when the inspectors identified to Operations that the referenced technical evaluation did not support the operability basis.

Description. On June 27, 2005, the inspectors identified that a security fence was built directly over the Unit 2 TDAFW pump cubicle HELB blowout panel. The purpose of this panel is to prevent a complete loss of the auxiliary feedwater (AFW) function if a steam rupture were to occur in the TDAFW pump room by allowing the steam to relieve into the turbine building rather than into the adjacent MDAFW pump room. The inspectors notified Dominion engineering and operations staff and questioned the operability of the HELB blowout panel with the security fence installed. The inspectors were informed that a technical evaluation existed which had evaluated this condition and found it acceptable. On June 28, June 29, and June 30, 2005, the inspectors requested the technical evaluation from Dominion engineering staff. On July 5, 2005, Dominion determined that they were unable to find the technical evaluation and subsequently declared all three AFW pumps inoperable. Dominion entered TS 3.7.1.2.c, “Auxiliary Feedwater Pumps,” and took immediate action to remove the section of fencing installed over the blowout panel. On August 10, 2005, Dominion issued a technical evaluation which concluded that the HELB blowout panel would have performed its function with the security fence installed. Dominion procedure RP-5, “Operability Determinations,” Revision 004-01, requires, in part, that “Upon notification of a degraded or non-conforming condition, the Shift Manager must perform an immediate determination of the impact of the deficiency on the operability or functionality of the SSC [Structure, System, or Component]”. In addition, RP-5 requires that a timely and adequate OD should be initiated whenever the ability of a SSC to perform its specified safety or support function is called into question. When the inspectors identified this condition to Dominion on June 27, 2005, neither operations nor engineering personnel recognized that the technical evaluation did not exist and that there was a need to determine the impact of this fence on the operability of the HELB blowout panel and its affect on the AFW system.

On July 26, 2005, the Unit 2 “A” charging pump received multiple low pressure trip alarms in the control room. Operators took action to start and align the non-running “B” charging pump to the “A” train and secured the “A” charging pump. Dominion concluded that this condition did not effect operability since the charging low pressure trip alarm is by-passed on a safety injection actuation signal (CR-05-07933). On July 29, 2005, at the “B” charging pump received similar multiple low pressure trip alarms and operators took action to declare it inoperable. On July 30, 2005, the

“A” charging pump received a brief intermittent low pressure trip alarm which cleared without additional operator action.

Dominion subsequently performed an OD to provide reasonable assurance that the “A” charging pump was operable but not fully qualified. The charging pump is included as an ECCS subsystem required by TS 3.5.2. An OD was not written to address the “B” charging pump which exhibited a similar condition. The cause of the multiple low pressure alarms was believed to be due to a combined effect of gas in the charging pumps low pressure trip sensing lines and the failure to have charging pump suction stabilizer heaters energized. The suction stabilizer heaters were believed to reduce the peak to peak pressure of the charging positive displacement pumps. To ensure that a common cause condition did not exist for the “C” charging pump, a Site Operations Review Committee (SORC) reviewing this matter recommended venting the “C” charging pump shortly after the condition presented itself on the “A” and “B” charging pumps. The inspectors identified that this was not performed until several weeks after the SORC recommendation. Dominion provided interim compensatory measures to ensure that periodic venting of the low pressure switches and to perform shiftly checks to ensure that at least one suction stabilizer remained energized.

On August 30, 2005, during troubleshooting, Dominion determined that the current OD could not be validated from the actual data obtained from the troubleshooting (i.e., the air in the instrumentation lines and the suction stabilizer heaters OD basis could no longer be supported as a basis for operability). On August 31, 2005, the inspectors questioned Dominion engineering staff on what impact this new information had on the current charging pump OD. On September 1, 2005, the inspectors discussed the new information with Dominion operations staff indicating that it appeared that the OD would need to be revised to address this new information. On September 2, 2005, the inspectors noted that Dominion engineering and operations staff were aware of the new information, however, they had not revised the OD nor did they intend to evaluate the OD for revision until the following week. The inspectors informed Dominion operations and engineering management who recognized the need to reflect the new information into the OD basis in a more timely manner. On September 3, 2005, Dominion closed the OD to actions already taken. When the basis of operability cannot be confirmed, Dominion’s OD procedure, RP-5, requires operators to declare the component inoperable and enter the TS action statement or implement appropriate procedural guidance. In this circumstance, operators did not declare the component inoperable nor did they revise the OD to provide a different basis for operability when the new information called into question the existing basis for operability.

On September 22, 2005, Dominion discovered an oil leak on the “A” intermediate head safety injection pump. The leak was determined to be approximately 4 drops per minute. Dominion determined that this degraded condition did not affect operability. Dominion’s basis for this determination was that a previous evaluation (Technical Evaluation M3-EV-04-0039, “Safety Injection Pump Oil Reservoir Volume and Depletion Time”) had determined that the safety injection pump could perform for it’s designed mission time with an oil leak of up to six drops per minute. The inspectors reviewed M3-EV-04-0039 and determined that this technical evaluation established estimated run

times for two specific leak rates, however, it did not discuss SIH pump mission time or whether the SIH pump mission time could be met in the presence of these leak rates. Dominion has stated that they could not locate an SIH mission time in the design basis (FSAR), however, the inspectors noted that the SIH system is used in conjunction with the recirculation spray system and charging systems for the long term recirculation function. Dominion's operability procedure (DNAP 1408) requires an adequate basis (based on design basis documents and the current licensing basis) to support operability once a degraded or non-conforming condition is identified. Contrary to this, operators referenced a technical evaluation that did not support this assertion of SIH pump operability. In addition, Dominion did not revise this operability basis when the inspectors pointed out that the subject technical evaluation did not support the operability basis statements in the CR.

The performance deficiency was that Dominion did not adequately implement their OD procedure on three separate occasions which affected both Units as described above. In each circumstance, the operability of safety-related equipment with degraded conditions was not adequately evaluated and an operability basis was not adequately defined to ensure the availability of the affected equipment to perform the intended safety function.

Analysis. Traditional enforcement does not apply for this finding because it did not have any actual safety consequences or the potential for impacting the NRC's regulatory function and was not the result of any willful violations of NRC requirements.

This finding was more than minor since it was associated with the mitigating systems cornerstone attribute of equipment performance and affected the cornerstone objective to ensure the availability and reliability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). This finding was determined to be of very low safety significance (Green) for the TDAFW and charging system examples by using Phase 1 of Inspection Manual Chapter (IMC) 0609, "Significance Determination Process." Specifically, this finding affected only the mitigating system's cornerstone and did not result in a loss of function per Generic Letter 91-18 once further evaluation of each condition was conducted.

In addition, a Phase 2 assessment was conducted to determine the significance of the SIH issue since the SIH pump oil reservoir would have depleted prior to the completion of the long term recirculation function which is a loss of the design function of the SIH system. Since the probabilistic risk assessment evaluation time for a Phase 2 assessment was 24 hours and the SIH pump was not expected to fail for approximately 15 days under the oil leak rate value, the Phase 2 assessment determined that the SIH issue was of very low safety significance (Green). This finding was related to the Problem Identification and Resolution cross-cutting area because of the failure to conduct timely and adequate evaluations of degraded and non-conforming conditions.

Enforcement. No violation of regulatory requirements occurred. Dominion's failure to adequately implement their OD procedure on three occasions to ensure that the operability of safety-related equipment with degraded conditions was adequately evaluated and an operability basis was adequately defined, was considered a Finding of very low safety significance (Green) (**FIN 05000336,423/2005004-02**). These issues have been entered into Dominion's corrective action program as CR-05-08141, CR-05-07367, and CR-05-10257.

1R16 Operator Work-Arounds (71111.16)

.1 Selected Operator Work-arounds (One Unit 2 Sample and One Unit 3 Sample)

a. Inspection Scope

The inspectors reviewed one risk significant operator work-around (OWA) for Unit 2 and one risk significant OWA for Unit 3 during the inspection period. The inspectors evaluated the conditions to determine if there were any effects on human reliability in responding to an initiating event or any adverse effects on the function of mitigating systems. The work-arounds were also reviewed to ensure compliance with licensee documents which administratively control OWAs. Documents reviewed during the inspection are listed in the Attachment.

Unit 2

- Flanders Line Power Supply

Unit 3

- Service Water Strainer does not Auto Blowdown

b. Findings

No findings of significance were identified.

.2 Cumulative Effects of Operator Work-Arounds (One Unit 2 Sample and One Unit 3 Sample)

a. Inspection Scope

The inspectors reviewed the current listing of active OWAs for Millstone Unit 2 and Unit 3. The review was conducted to verify that Dominion procedures and practices provided the necessary guidance to plant personnel, that the cumulative effects of the known OWAs were addressed, and that the overall impact on the affected systems was assessed by Dominion. The inspectors independently assessed the cumulative impact of known OWAs to determine if they adversely affected the ability of plant operators to implement emergency procedures, respond to plant transients, or perform normal functions within the expectations of the established Dominion risk models. In support of

this assessment, the inspectors reviewed various CRs regarding OWAs and verified that OWAs were being identified, tracked, and resolved in Dominion's corrective action program.

b. Findings

No findings of significance were identified.

1R17 Permanent Plant Modifications (71111.17A - One Unit 3 Sample)

a. Inspection Scope

The inspectors reviewed one sample of a permanent plant modification on Unit 3. The modification was implemented in June 2005 to resolve a fire protection issue that spurious hot shorts during a control room fire could potentially open the main steam pressure relieving bypass valves for more than the analyzed duration of six minutes. The modification involved adding four two-position switches (one for each valve) to the control circuitry of the four valves such that a spurious short across the valve open switch would cause the control fuse to blow instead of opening the affected valve. The inspectors performed a walkdown of installed switches in the control room and reviewed the applicable FSAR sections, licensing and design basis documents, calculations, construction and modification specifications and standards, implementing procedures, licensee inspection and closeout procedures, contractor and vendor documentation, seismic, Institute of Electrical and Electronic Engineers and other national standards and the Dominion 50.59 process. These reviews were conducted to ensure (1) the modified components, structures and systems remained consistent with the assumptions indicated in the design basis documents, (2) that system availability, reliability, functional capability and safety function were maintained, and (3) no unrecognized conditions that significantly affected risk were introduced into the plant as a result of the modifications. Documents reviewed during the inspection are listed in the Attachment.

Unit 3

- Hot Short Modification for Main Steam Pressure Relieving Bypass Valves MOVu74A,B,C,D (DCR M3-04002).

b. Findings

No findings of significance were determined.

1R19 Post-Maintenance Testing (71111.19 - Five Unit 2 Samples and Five Unit 3 Samples)

a. Inspection Scope

The inspectors reviewed ten post-maintenance tests (PMT) samples during this inspection period. The inspectors reviewed these activities to determine whether the

PMT adequately demonstrated that the safety-related function of the equipment was satisfied given the scope of the work specified and that operability of the system was restored. In addition, the inspectors evaluated the applicable test acceptance criteria to verify consistency with the associated design and licensing bases, as well as TS requirements. The inspectors also verified that conditions adverse to quality were entered into the corrective action program for resolution. Documents reviewed during the inspection are listed in the Attachment. The following maintenance activities and their post-maintenance tests were evaluated:

Unit 2

- TDAFW Trip Throttle Valve (M2-05-06300);
- AFW 43B Retest (M2-05-02844);
- CEA Motion Prohibit Primary Power Supply Replacement (M2-00-14807);
- Permanently Wire Diagnostic Testing Equipment to the “B” EDG (M2-00-08406); and
- “A” ESF Air Cooler Cleaning (M2-01-15633).

Unit 3

- MDAFW Pump Motor Bearing Oil (M3-04-13687);
- “C” RPCCW Refurbishment (M3-05-0076);
- “B” EDG Service Water Heat Exchanger Cleaning (M3-04-15490);
- 3SWP*052 Removal/Reinstallation following FME Removal on August 14, 2005 (M3-04-12068); and
- Containment Equipment Hatch LLRT (M3-05-10794).

b. Findings

No findings of significance were identified.

1R20 Refueling and Outage Activities (71111.20 - 1 Unit 3 Sample)

a. Inspection Scope

Dominion began a Unit 3 refueling outage (3R10) on September 29, 2005. The inspectors evaluated the outage plan and outage activities to confirm that Dominion had appropriately considered risk, had developed risk reduction and plant configuration control methods, had considered mitigation strategies in the event of loss of safety functions, and had adhered to license and Technical Specification requirements. The inspectors observed portions of the shutdown and cooldown processes. Additionally, the inspectors conducted an initial containment walkdown to evaluate the as-found condition of the containment to ensure no loose material or debris which could be transported to the containment sump were present. The inspectors verified that conditions adverse to quality were entered into the corrective action program for resolution. Inspector activities related to this refueling outage performed after

September 30, 2005, will be documented in NRC Inspection Report 05000336,423/2005005. Some of the specific activities observed included:

- Shutdown Risk Assessment;
- Decay Heat Removal System Monitoring;
- Shutdown Procedure; and
- Main Steam Code Safety Valve Surveillance Testing.

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing (71111.22 - Five Unit 2 Samples and Six Unit 3 Samples)

a. Inspection Scope

The inspectors reviewed eleven surveillance activity samples to determine whether the testing adequately demonstrated equipment operational readiness and the ability to perform the intended safety-related function. The inspectors attended pre-job briefs; verified that selected prerequisites and precautions were met; and verified that the tests were performed in accordance with the procedural steps. Additionally, the inspectors evaluated the applicable test acceptance criteria to verify consistency with associated design bases, licensing bases and Technical Specification requirements, and that the applicable acceptance criteria were satisfied. The inspectors also verified that conditions adverse to quality were entered into the corrective action program for resolution. Documents reviewed during the inspection are listed in the Attachment. The following surveillance activities were evaluated:

Unit 2

- TDAFW Pump Flow Verification In-Service Testing (SP-2610BO-002);
- AFW Logic Flow Testing (SP-2402M);
- ESF Air Flow Testing (SP-2613G);
- RCS Unidentified Leakage (SP-2602A-005); and
- “B” EDG Manual Fast Start (SP-2613B).

Unit 3

- HVQ-ACU2A Flow Test on August 12, 2005 (SP-3628.3);
- “B” AFW Pump Surveillance (SP-3622.2);
- “B” Recirculation Spray System Containment Isolation Valve Stroke Test (CIV) (SP-3606.9);
- Reactor Coolant System Water Inventory Measurement (SP 3601F.6);
- Perform Local Leak Rate Testing (SP-3601f.6); and
- “A” EDG Manual Fast Start (SP-3346A).

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications (71111.23 - One Unit 2 Sample and One Unit 3 Sample)

a. Inspection Scope

The inspectors reviewed two temporary modification samples to verify that the modifications did not affect the function of important safety systems. The inspectors reviewed the temporary modifications and their associated 10 CFR 50.59 screening against the Final Safety Analysis Report and Technical Specifications to ensure the modifications did not affect system operability or availability. Documents reviewed during the inspection are listed in the Attachment.

Unit 2

- "A" RCP Vibration Monitor (DM2-00-0374-05)

Unit 3

- Control Building Service Water Enclosure Tube Closure Plate Control Room Habitability Seal (MP3-05-001)

b. Findings

No findings of significance were identified.

Cornerstone: Emergency Preparedness [EP]

1EP6 Drill Evaluation (71114.06 - Two Unit 2 Samples and One Unit 3 Sample)

a. Inspection Scope

The inspectors observed one sample of the conduct of Unit 2 licensed operator simulator training and one sample of the conduct of Unit 3 licensed operator simulator training on August 24, 2005. The inspectors evaluated the Operations crew activities related to evaluating the scenario and making proper classification determinations. Additionally, the inspectors assessed the ability of Dominion's evaluators to adequately address operator performance deficiencies identified during the exercise.

The inspectors observed one sample of the conduct of Unit 2 licensed operator training emergency planning drill on July 28, 2005. The inspectors observed the operating crew performance at the simulator and emergency response organization performance at the site emergency operations center and technical support center. The inspectors verified that the classification, notification and protective action recommendations were accurate and timely. Additionally, the inspectors assessed the ability of Dominion's evaluators to

adequately address operator performance deficiencies identified during the exercise. Documents reviewed during the inspection are listed in the Attachment.

b. Findings

No findings of significance were identified.

2. RADIATION SAFETY

Cornerstone: Public Radiation Safety [PS]

2PS1 Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems (71122.01 - Ten Unit 2 Samples and Ten Unit 3 Samples)

a. Inspection Scope (10 Samples)

During the period August 29 - September 1, 2005, the inspector conducted the following activities to verify Dominion was properly maintaining the gaseous and liquid effluent processing systems to ensure that radiological releases were properly mitigated, monitored, and evaluated with respect to public exposure. Implementation of these controls was reviewed against the criteria contained in the 10 CFR Parts 20 and 50, Dominion's Radiological Effluent Monitoring & Offsite Dose Calculation Manual (REMODCM), and Dominion's procedures. This inspection activity represents completion of ten (10) samples relative to this inspection area.

The inspector reviewed the 2004 Annual Radiological Effluent Release Report to verify that the effluents program was implemented as required by the REMODCM.

The inspector walked down the major components of the Unit 2 and Unit 3 gaseous and liquid release systems, with the cognizant system engineers and the Instrument & Control supervisor, to verify the system configurations complied with the FSAR description, and to evaluate equipment material condition. Effluent monitors examined included:

Unit 2

- RM-8132 - Vent Monitor;
- RM-8169-1 - Millstone Stack Monitor;
- CND-RIY-245 - Waste Neutralization Sump;
- RM-4262 - Steam Generator Blowdown;
- RM-9116 -RB Component Cooling Water;
- RM-9049 - Clean Liquid Monitor; and
- RM 9095 - Waste Gas Discharge Monitor.

Unit 3

- HVR-10A/B - Ventilation Vent High & Normal Range Stack Monitor;
- HVQ-RE49 - Engineered Safeguards Building Ventilation;
- HVR-19A/B - Millstone Stack via SLCRS High and Normal Range;
- SSR-RIY08 - Steam Generator Blowdown;
- LWS-RIY70 - Liquid Waste Monitor;
- DAS-RIY50 - Turbine Building Sump Monitor; and
- CND-07- Waste Neutralization Sump Monitor;

The inspector observed the implementation of a temporary sampling procedure (OPS-SP3670, Rev 11-04) that would be used if the supplementary leak collection and release system monitor (HVR-19B) became inoperable. The inspector attended the pre-job briefing and observed chemistry technicians taking field samples.

The inspector reviewed the relevant surveillance procedures (SP) and observed technicians collecting weekly air particulate & iodine samples. Airborne particulate and iodine samples were taken from the Main Station Stack, using SP-2815, and from the Unit 2 Enclosure Building roof vent, using SP-2814A.

The inspector reviewed the most current Unit 2 and Unit 3 liquid and gaseous effluent monitor quarterly functional test results and calibration records to verify that associated pumps/isolation valves or fans/isolation dampers, respectively, were operable. The inspector evaluated the current effluent radiation monitor set-point for agreement with the REMODCM requirements.

The inspector evaluated the preparation of a Unit 3 liquid discharge permit no. 5884, by observing the technician taking a liquid sample from the Unit 3 B-Waste Test Tank, using Chemistry Procedure CP-3804A, and preparing the associated records.

The inspector reviewed monthly and quarterly dose projections for liquid and gaseous effluents performed during the past 12 months to verify that the effluent was processed and released in accordance with REMODCM requirements.

The inspector reviewed administrative changes made to the REMODCM since March 11, 2004, to determine if the changes affected Dominion's ability to maintain effluent doses as low as reasonably achievable.

The inspector reviewed monthly, quarterly, and annual dose calculations for calendar year 2004 through July 2005 to ensure that Dominion properly calculated the offsite dose from effluent releases and to determine if any performance indicator (criteria contained in Appendix I to 10 CFR 50) was exceeded.

The inspector reviewed liquid discharge permits for Unit 2 (Nos. 2055, 2054, 2043, 2040) and Unit 3 (Nos. 5819, 5810, 5787, 5777) to evaluate the adequacy of dilution flow, radioactive content, and overall accuracy of the documented data.

The inspector reviewed the air cleaning systems surveillance test results for the high efficiency particulate and charcoal filtration systems installed in Unit 2 and Unit 3. The inspector confirmed that the air flow rates were consistent with the FSAR values.

The inspector reviewed the calibration records and quality control records for counting room instrumentation (Unit 2 detectors - Nos. 2, 3, & 4; Unit 3 detectors - Nos. 11, 12, & 13) used to characterize and quantify effluent samples.

The inspector reviewed the results of Dominion's inter-laboratory comparison program to verify the accuracy of effluent sample analyses performed by Dominion.

The inspector reviewed and discussed with Dominion the validation and verification results for the effluent software (DOSAIR and DOSLIQ) to ensure the software currently in use provides accurate dose calculations.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES [OA]

4OA2 Identification and Resolution of Problems (71152)

.1 Daily Review of Problem Identification and Resolution

a. Inspection Scope

As required by Inspection Procedure 71152, "Identification and Resolution of Problems," and in order to help identify repetitive equipment failures or specific human performance issues for followup, the inspectors performed a daily screening of items entered into Dominion's corrective action program. This review was accomplished by reviewing summary lists of each CR, attending screening meetings, and accessing Dominion's computerized CR database.

b. Findings

No findings of significance were identified.

.2 Annual Sample Review (Two Unit 2 Samples and One Unit 3 Sample)

Unit 2

Main Steam Code Safety Valve Lifting

a. Inspection Scope

The inspectors selected CRs and supporting documents associated with corrective actions for NCV 05000336/2004007-03, Unit 2 main steam safety valve (MSSV) lift following uncomplicated turbine trips/reactor trips from 100 percent power. The CR and CR history was reviewed to ensure that the full extent of the issue was identified, an appropriate evaluation was performed, and appropriate corrective actions were specified, prioritized, and implemented. The inspectors evaluated the reports against the requirements of Dominion's corrective action program. The inspectors reviewed Dominion's engineering analysis, MSSV Lifting Study calculation (S-04129S2), which was used to model the existing phenomena and investigate solutions. Interviews were conducted with engineering and operations personnel to assess development and implementation of corrective actions.

b. Findings and Observations

No findings of significance were identified.

The CRs reviewed were associated with review of events that caused MSSVs to lift from an uncomplicated trip from 100 percent, their investigation, and corrective actions. Dominion's initial efforts were focused on identifying the cause, which was determined to be the steam dump system operating at a lower capacity than originally designed. Dominion performed sensitivity studies and accessed operating experience information from similar plants. Dominion determined that the most effective corrective action was to permanently reduce average coolant temperature, which reduced initial steam generator pressure. Inspector review of Dominion's study supported this conclusion. An adequate corrective action plan was developed and is on schedule to be fully implemented by the end of Cycle 17 (Fall of 2006) via modification DCR M2-05-001, which was in draft at the time of this review. For the interim, average coolant temperature is administratively controlled at the lower end of the existing control band, which realizes the calculated margin and was verified by reviewing the Shift Turnover Report. The inspectors noted that the engineering analysis identified additional actions that had an additive effect to prevent MSSV lift, but were not to be implemented in this DCR.

Safety Injection Tank (SIT) Leakage

a. Inspection Scope

The inspectors selected CRs and supporting documents associated with corrective actions for Unit 2 NCV 05000336/2004002-02, Failure to Correct SIT Leakage. The

reports were reviewed to ensure that the full extent of the issue was identified, an appropriate evaluation was performed, and appropriate corrective actions were specified, prioritized, and implemented. The inspectors evaluated the reports against the requirements of Dominion's corrective action program. The inspectors also reviewed operator logs, computer point trend graphs, and selected work orders to evaluate the present condition of the plant with regard to SIT leakage. Cognizant engineering and operations personnel were interviewed with respect to the effectiveness of the implementation of corrective measures.

b. Findings and Observations

No findings of significance were identified.

The initial CR (CR-04-01854) and its apparent cause investigation sufficiently documented the cause and evaluation of SIT leakage but did not specify corrective actions to address all elements of the NCV. Dominion identified this deficiency after initial investigation and management review and initiated an additional CR (CR-04-06173) to address this issue and supplement corrective actions to CR-04-01854. The inspectors confirmed continuity of corrective actions between the two reports and resolution of this deficiency. An adequate corrective action plan was developed and implemented for SIT leakage and completed during this past refueling outage (2R16, May 2005). The inspectors noted an improvement in SIT performance since 2R16 as evidenced by SIT levels and pressure.

Unit 3

Service Water Brazed Joint Leakage

a. Inspection Scope

The inspectors selected CR-04-02255, “Entry into Unplanned LCO; Identified Leak from Service Water Piping in Engineered Safety Feature (ESF); The Leak is coming from Braze Joint Between 3SWP*V706 and 3SWP*V673,” for detailed review. This CR was associated with service water leakage from a degraded brazed joint of a safety-related system. The specific CR and CR history were reviewed to ensure that the full extent of the issues were identified, an appropriate evaluation was performed, and appropriate corrective actions were specified and prioritized. The inspectors evaluated the reports against the requirements of Dominion's corrective action program.

b. Findings and Observations

No findings of significance were identified.

Dominion’s extent of condition involved the full scope of service water leaks and considered operability, reportability, and previous occurrences. Dominion’s corrective actions to date, and those scheduled, appear to be progressing towards replacing all brazed joints and short-radius service water piping by Cycle 13 (approximately four

years from now). Dominion has prioritized their corrective action schedule for significant replacements with respect to the system affected and whether it is isolable. The reviewed schedule addresses replacement of the majority of unisolable and ESF service water connections during the next outage (3R10) with the remaining replacements to follow over the next three cycles. Overall, the inspectors determined that Dominion's plan to address service water brazed joint leakage is adequate.

.3 Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems

a. Inspection Scope

The inspector reviewed twenty-four (24) CRs, and a Nuclear Oversight Audit of the REMODCM to evaluate Dominion's threshold for identifying, evaluating, and resolving problems in implementing the effluents control program. This review was conducted against the criteria contained in 10 CFR Parts 20 and 50, the REMODCM, and the Dominion's procedures.

b. Findings

No findings of significance were identified.

.4 Cross-References to PI&R Findings Documents Elsewhere

Section 1R15 describes a failure to adequately implement the OD procedure on three separate occasions. In each circumstance, the operability of safety-related equipment with degraded conditions was not adequately evaluated and an operability basis was not adequately defined to ensure the availability of the affected equipment to perform the intended safety function. The finding was related to the cross cutting area of Problem Identification and Resolution because of the failure to conduct timely and adequate evaluations of degraded and non-conforming conditions.

4OA3 Event Followup (71153 - One Unit 2 Sample)

(Closed) LER 05000336/2005-002-00, Reactor Coolant System Pressure Boundary Leakage From Primary Water Stress Corrosion Cracking In A Pressurizer Heater Sleeve

The inspectors interviewed Dominion personnel and reviewed this LER with its associated CRs to verify that the root cause and corrective actions related to the event were adequate. No findings of significance were identified. This LER is closed.

4OA4 Cross Cutting Aspects of Findings

Section 1R14.2 describes a failure to take TS action to ensure that the SDAFW pump was available when the "B" EDG was declared inoperable. The finding was related to the cross cutting area of Human Performance in that operations personnel failed to

perform the required actions of TS 3.8.1.1.b.3 after they declared the “B” EDG inoperable on May 18, 2005.

4OA5 Other Activities

.1 (Closed) Unresolved Item (URI) 05000336/2004008-02, Potential Inoperable Enclosure Air Conditioner

On December 8, 2004, CR-04-10911 identified a high-pitched whistling noise coming from the air conditioning (AC) unit that cools the motor control center (MCC) B51 enclosure. On December 9, 2004, the inspectors discussed the corrective actions planned to address the deficiency with Operations personnel. Dominion informed the inspectors that the “Fix It Now Team” would troubleshoot the AC unit and perform appropriate maintenance. Subsequently, on December 16, 2004, an operator reported that the unit was whistling and was not providing any cooling to the MCC B51 enclosure. Dominion declared the MCC B51 inoperable and entered multiple Technical Specification LCO requirements. The inspectors determined that maintenance was not performed on this AC unit following identification of the degraded condition on December 8, 2004. Dominion’s troubleshooting efforts determined that the freon level in the system was 50 percent of the full load level as a result of leakage past an AC unit valve. Dominion repaired the leaking system valve, and recharged the system which restored operability to MCC B51. An unresolved item (URI) was opened pending NRC evaluation of Dominion’s operability determination. On August 10, 2005, Dominion provided the inspectors with additional information from the AC unit vendor which concluded that the MCC B51 enclosure AC unit would have operated for at least 24 hours with two pounds of freon (approximately one-half the normal freon load) and in consideration of an existing leakrate conservatively assumed to be the amount lost (two pounds over seven days). As a result, the MCC B51 enclosure AC unit would have been able to perform its intended safety function. This URI is closed.

.2 (Closed) URI 05000336/2005003-02, Degradation of Turbine-Driven Auxiliary Feedwater (TDAFW) Pump Cubicle High Energy Line Break (HELB) Protection Function

This URI was opened to assess Dominion’s evaluation of the impact of a security fence that was installed over the TDAFW HELB blowout panel. See Section 1R15 for further discussion. This URI is closed.

.3 (Discussed) URI 05000423/2005003-04, Failure to Formally Disposition Leakage into the "B" EDG Rocker Arm Lubricating Oil System

Introduction. This URI was opened to assess Dominion’s response to an abnormal lube oil sample result for the "B" EDG identified on June 17, 2005, and to follow-up on Dominion’s root cause determination and corrective actions. This URI will remain open pending a review of the ability of the “B” EDG to meet the intended function given the conditions discovered on September 27, 2005. Documents reviewed are listed in the Attachment.

Description. On June 17, 2005, Dominion identified that there was 1 percent water in the main lubricating oil sump of the "B" EDG. On June 18, 2005, Dominion obtained additional sample results which indicated that the water was actually in the rocker arm lubricating oil system and was 12.5 percent water content (subsequent analysis indicated that the water content was closer to 3.2 percent). Operators declared the "B" EDG inoperable and entered Technical Specification (TS) 3.8.1, “AC Sources.” Dominion replaced the rocker arm lubricating oil and restored the "B" EDG to operable status on June 19, 2005. Dominion verified the water content in the rocker arm lubricating oil was now between 0.1 percent to 0.2 percent, however, Dominion did not determine or correct the cause of the leakage nor did Dominion establish a threshold for water content in the rocker arm lubricating oil beyond which the EDG would be considered inoperable.

On June 24, 2005, the inspectors met with Operations, Engineering, Condition Based Monitoring and Licensing personnel. The circumstances of the event and the lack of a resolution of the cause of the water introduction into the rocker arm lubricating oil were discussed. The inspectors determined that there was reasonable assurance that the "B" EDG remained operable with the amount of water that was currently determined to be in the rocker arm lubricating oil, however, the inspectors did not consider that Dominion had identified or corrected the cause of the water entry into the rocker arm lubricating oil nor had they established a water content operability threshold. As a result, the inspectors initiated a URI pending Dominion’s completion of a cause analysis and corrective actions.

On July 6, 2005, the inspectors met with the Station Directors for the monthly Directors’ meeting. The inspectors noted to the Directors that the cause of the water leakage into the rocker arm lube oil had not been identified or corrected and consequently, the degraded condition had not been formally dispositioned. The inspectors discussed with the Directors that the basis documented in the condition report did not address the impact of potential continued water leakage into the rocker arm lubricating oil system on EDG operability.

On July 11, 2005, the "B" EDG rocker arm lubricating oil results showed an elevated water content of 2 percent water. Dominion stated in the associated CR that it appeared that there was a "small cooling water leak" into the rocker arm lubricating oil system. Dominion identified in the CR that "elevated water content is a long term wear issue of the rocker arm bearings and does not have an affect on the design function of the diesel." A Reasonable Expectation of Continued Operability and OD were generated in which Operations determined the "B" EDG to remain operable. Dominion subsequently closed the OD because they determined that the EDG was fully qualified. Dominion continued to trend lubricating oil analysis data but did not initiate further corrective action to determine the cause of the water entry into the rocker arm lubricating oil, did not specify any further corrective or compensatory actions while this condition continued to exist, and did not establish a threshold for water content in the rocker arm lubricating oil beyond which the EDG would be considered inoperable.

On August 2, 2005, the inspectors met with Dominion engineering staff to determine what Dominion had evaluated as the root cause for this water in-leakage. Dominion identified that the cause for the water in-leakage was from leaking jacket water O-rings and that they intended to revise their sampling procedure and review their maintenance schedule for scheduling corrective action. Dominion also indicated their root cause investigation was complete. The inspectors continued to follow-up with Dominion during the month of August to determine what additional actions Dominion intended to take to monitor this condition and how they intended to evaluate operability in the presence of this known degraded condition.

On September 13, 2005, the inspectors held a conference call with NRC Technical, Regional, and Dominion staff to discuss the water in the "B" EDG rocker arm lubricating oil. The inspectors determined that Dominion did not intend to establish an operability threshold, compensatory actions, or corrective actions for the elevated water content in the rocker arm lubricating oil. The inspectors also determined that Dominion was considering corrective maintenance during the October 2005 outage on the EDG exhaust cage jumper O-rings which they considered to be the likely source of the leakage. On September 21, 2005, Dominion subsequently decided to delay corrective action to replace the exhaust valve cage jumper O-Rings until February of 2006.

On September 27, 2005, Dominion drained the rocker arm lubricating oil reservoir and replaced the oil with fresh oil in preparation for a surveillance run of the "B" EDG. Approximately 47 milliliters of water was drained from the reservoir at that time. Dominion then conducted the monthly operability run for approximately one hour and sampled the rocker arm lubricating oil at which point a quart of water was drained from the reservoir (nominal capacity of reservoir is approximately 9 gallons). Dominion removed the cylinder rocker arm covers and identified water leaking from an exhaust valve on the Number Seven cylinder head. Dominion declared the "B" EDG inoperable and initiated a maintenance activity to replace all of the cylinder exhaust valves. The "B" EDG was restored to service on October 2, 2005.

Dominion determined that four additional cylinders (3-5-6-8) had water leakage similar to the #7 cylinder. It was noted that the O-rings for the exhaust cages associated with these cylinders were brittle compared to the O-rings for the cylinders that did not experience water leakage. Dominion determined that the jacket cooling water that cools these exhaust valve cages was leaking through the brittle O-rings. This URI will remain open pending a review of the ability of the “B” EDG to meet the intended function given the conditions discovered on September 27, 2005.

.4 Temporary Instruction (TI) 2515/163, Operational Readiness of Offsite Power - Resident Follow-Up

a. Inspection Scope

The inspectors performed a follow-up inspection of one negative response for TI 2515/163, “Operational Readiness of Offsite Power.” The inspectors reviewed the initial licensee response and interviewed Dominion personnel for additional information.

Dominion intends to evaluate future procedure changes to be instituted by the independent system operator and have documented this in CR 05-09287. This information was forwarded to Nuclear Reactor Regulation for further review.

b. Findings

No findings of significance were identified.

4OA6 Meetings, Including Exit

TI 2515/163, Operational Readiness of Offsite Power - Resident Follow-Up Exit Meeting Summary

The inspectors presented the inspection results to Mr. Stephen Scace, Director of Nuclear Station Safety and Licensing, and other Dominion management on August 24, 2005. Dominion acknowledged the results presented.

Licensed Operator Requalification Program (Biennial) Exit Meeting Summary

The inspector presented the inspection results to members of Dominion management at the conclusion of the inspection on August 29, 2005, and obtained pass/fail results from a Dominion representative on September 26, 2005. No materials reviewed were identified by the licensee as proprietary.

Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems Exit Meeting Summary

The inspector presented the inspection results to Dominion management on September 1, 2005. Dominion acknowledged the results presented.

Integrated Report Exit Meeting Summary

On October 20, 2005, the resident inspectors presented the overall inspection results to Mr. J. Alan Price and other members of his staff who acknowledged the findings. The inspectors confirmed that proprietary information was not provided or examined during the inspection.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee personnel

D. Aube, System Engineer
K. Beagle, Systems Engineer, Radwaste
G. Belke, Chemistry Technician
N. Bihl, CBM Engineer
G. Blackburn, Nuclear Chemistry, Supervisor of Chemical Processes
R. Bonner, Operations
J. Chadbourne, System Engineer
A. Chyra, PRA Engineer
K. Cortis, IST Engineer
D. Cyr, Senior Nuclear Chemistry Technician - Unit 2
L. Crone, Supervisor, Nuclear Chemistry
D. Dallago, Nuclear Oversight Specialist
G. D'Auria, Nuclear Chemistry, Supervisor of Analytical Chemistry
C. DeBiasi, Instrument Technician
J. DiLuna, Engineer, Mechanical Engineering
J. Doroski, Health Physicist
E. Dundon, System Engineer
W. Eakin, Supervisor, Radiological Engineering
W. Gorman, Supervisor, Instrumentation and Control
S. Grondahl, Analytical Chemist
N. Jaycox, Design Engineer
A. Jordan, Director, Nuclear Station Operations & Maintenance
M. Kai, Nuclear Fuels Engineer
B. Krauth, Technical Specialist, Licensing
T. Kulterman, Supervisor of Operator Training
J. Kunze, Operations Manager
J. Laine, Manager, Radiation Protection & Chemistry
L. Lebaron, System Engineer, Unit 3
L. Loomis, System Engineer
W. Mangler, Chemistry Technician
S. Matthess, Nuclear Chemistry, Supervisor of Chemistry Laboratories
T. Morris, Senior Nuclear Chemistry Technician - Unit 3
F. Perkins, MP3 EDG Engineer
T. Pitcher, Chemistry Technician
A. Price, Site Vice President - Millstone
S. Scace, Director, Nuclear Station Safety and Licensing
P. Raimondi, Engineer, Technical Project
S. Turowski, Supervisor, Radiological Technical Support
M. Van Haltern, Nuclear Analysis & Fuels Engineering Supervisor
D. Vining, Systems Engineer, Unit 2
W. Zumbo, Engineer, Electrical and I&C

NRC personnel

G. S. Barber, Senior Project Engineer, Division of Reactor Projects (DRP)
J. C. Benjamin, Resident Inspector, DRP
A. C. Cerne, Consultant, Division of Reactor Safety (DRS)
L. S. Cheung, Senior Reactor Inspector, DRS
J. M. D'Antonio, Operations Engineer, DRS
G. X. Johnson, Reactor Inspector, DRS
S. R. Kennedy, Resident Inspector, DRP
G. J. Malone, Resident Inspector-Salem, DRP
T. A. Moslak, Health Physicist, DRS
S. M. Pindale, Senior Reactor Inspector, DRS
S. M. Schneider, Senior Resident Inspector, DRP
D. L. Werkheiser, Reactor Inspector, DRS

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened and Closed

05000336/2005004-01	NCV	Failure to take TS action with the "B" EDG inoperable (1R14.2)
05000336,423/2005004-02	FIN	Failure to adequately implement operability determination procedure on three occasions (1R15)
05000423/2005004-03	NCV	Failure to properly correct known water in-leakage into the "B" EDG rocker arm lubricating oil system (4OA5.2)

Closed

05000336/2005-001-00	LER	Non Conformance With Surveillance Requirements (1R14.1)
05000336/2005-002-00	LER	Reactor Coolant System Pressure Boundary Leakage From Primary Water Stress Corrosion Cracking In A Pressurizer Heater Sleeve (4OA3)
05000336/2005-003-00, 01	LER	Non-Compliance With Technical Specifications Due to Installation Of Unqualified Test Equipment (1R14.2)
05000336/2004008-02	URI	Potential Inoperable Enclosure Air Conditioner (4OA5.1)
05000336/2005003-02	URI	Degradation of TDAFW Pump Cubicle HELB Protection Function (4OA5.2)

Discussed

05000423/2005003-04	URI	Failure to Formally Disposition Leakage into the "B" EDG Rocker Arm Lubricating Oil System (4OA5.3)

LIST OF DOCUMENTS REVIEWED

Section 1R01: Adverse Weather Protection

SP-2619A-001, Revision 44-06, Control Room Daily Ultimate Heat Sink Surveillances from 7/20/05 - 8/3/05
Unit 2 Technical Specification
Unit 2 UFSAR

Section 1R04: Equipment Alignment

Partial Equipment Alignment

OP-2308, High Pressure Safety Injection System
SP-2604E, HPSI System Boron Injection Flowpath Verification, Facility 1
SP-2610BO, Revision 000-02, TDAFP and Recirculation Check Valve IST
Drawing 25203-26005, Revision 50, Sheet 3 of 4, Condensate Storage and Auxiliary Feedwater
Drawing 25203-26017, Revision 50, Sheet 1 of 3, Charging System
Drawing 12179-EM-152C-17, Sheet 3 of 3, ESF and MSV Building Ventilation
Drawing 12179-EM-133B, Revision 64, Service Water
FSAR, Section 6.3, Safety Injection System
CR-05-07639, Evidence of RCS Leakage Post 2-SI-247 during HPSI pump surveillances
CR-05-05782, Margin Management Issue 48-HPSI Pump High Flow Testing Margin
OP-3304A, Revision 029-04, Charging and Letdown
OP-3330D, Revision 006-03, Charging Pump Cooling
SP-3604A.1, Revision 013-03, Charging Pump A Operational Readiness Test
SP-3604A.2, Revision 013-06, Charging Pump B Operational Readiness Test
SP-3630D.1, Revision 005-03, Charging Pump Cooling 3 CCE*P1A Operational Readiness Test

Complete System Alignment

Drawing 25203-26027, Revision 46, Sheet 1 of 4, HVAC System Turbine Building Intake Structure WHSE and Diesel Generator Rooms
ARP 2590B-046, Revision 000-01, Charging Pump A Trip
ARP 2590B-051, Revision 000-01, Charging Pump B Lube Oil Pressure Lo
ARP 2590B-047, Revision 000-01, Charging Pump A Lube Oil Pressure Lo
ARP 2590B-053, Revision 000-01, Charging Pump C Seal Lube System Pressure Hi/Lo
CR-04-11049, Charging Pump NPSH Questioned by NRC Inspector

CR-04-09268, All 3 Charging Pumps Momentarily Started When Shifting L-1104 From Local to Remote
CR-05-01702, P18A “A” Charging Pump Failed Surveillance, Pump Declared Inoperable
CR-05-03126, Recommendations for Managing Charging Dampener Bladder Pressure
CR-05-03713, Low Charging Flow After Starting Pump
CR-05-03945, CRED Required to Repair Charging Support 49,382
CR-05-05489, Unable to Run 3 Charging Pumps Due to Not Able to Achieve 128 gpm Letdown Flow
CR-05-06739, To Check Charging Pumps Pulsation Dampener Pressure
CR-05-05739, VR-11 Appears to Shift to its Emergency Supply When the A Charging Pump Starts
CR-05-08140, “B” Charging Pump Trip Logic Cycled Numerous Times within 7 Minutes Resulting in Charging Pump Being Made Unavailable
CR-05-08153, I&C Loop Folder Indicate Historical Problems
CR-05-08252, PEO Discovered a Leak on the “B” Pulsation Dampener
CR-05-08455, The “A” Charging Pump Discharge Pulsation Dampener Pressure is Below 1700 psig
CR-05-08662, MP2 P18B Charging Pump Reservoir Oil Sample is in the Monitoring Status due to Ferrous Material
OP-2304E, Revision 015, Charging Pump
AOP 2558, Revision 005, Emergency Boration
SP-2601J-006, Revision 001-13, BA Gravity Feed and Emergency Supply Header Check Part Stroke IST (Cold Shutdown)
SP-2601J-002, Revision 001-02, Loop 1A and Loop 2A Charging Header Check, Open IST
SP-2601B-001, Revision 020-00, Boric Acid Flow Path Verification
PI&D 104A, Revision 45, Chemical and Volume Control
PI&D 104D, Revision 25, Chemical and Volume Control
PI&D 105A, Revision 20, Charging Pump Sealing and Lubrication
PI&D 113A, Revision 24, High Pressure Safety Injection

Section 1R05: Fire Protection

Millstone Unit 2 Fire Hazards Analysis
FP-EV-99-0002, Expansion Joints in Fire Barriers, Millstone Unit 2
M2-EV-99-0093, MP2 Technical Evaluation Evaluate Compensatory Measures to Use during Loss of Cooling Ventilation systems Supporting Vital Switchgear Rooms
OP-2315D, Vital Electrical Switchgear Room Cooling systems
CR-05-08071, Pre-job Briefing for Fire Watch not Adequate
CR-05-07653, Lack of Support while Establishing a Continuous Fire Watch
CR-05-04594, Abandoned Continuous Fire Watch Post
CR-04-01783, Some Fire Watches May Not Be Fully Aware of Their Responsibilities
FPI 50-001, Revision 010-00, Fire Brigade Drill Assessment Data Sheet
WC 7, Revision 005, Fire Protection Program
Millstone Unit 3 Fire Hazard Analysis Boundary Drawing
SFP-26, Functional Check of CO2 Fire Protection System
SFP-17, Fire Penetration Seal and Barrier Inspections
Millstone 3, Fire Protection Evaluation Reports, Revision 17

MNPS-3-FSAR
Millstone 3 Fire Hazard Analysis 26
Millstone 3 Fire Hazard Analysis 27
Millstone 3 Fire Hazard Analysis 29
Millstone 3 Fire Hazard Analysis 30
Millstone 3 Fire Hazard Analysis 31
Millstone 3 Fire Hazard Analysis 32
Unit 3 Fire Protection Evaluation Report, Revision 17.3, Auxiliary Building Analysis 5
Unit 3 Technical Requirements Manual, TRM 7.4-1, Fire Related Safe Shutdown Components

Section 1R06: Flood Protection Measures

Calc P®) 1072, Service Water Cubicle Flooding Hazards Analysis, Revision 0
Calc P®) 1198, Flood Source Termination Evaluation, Revision 0
CR-05-09137, Service Water Pipe Leak
OD-MP3-015-05, Operability Determination for Water Pipe Leak (CR-05-09137)
P&ID 12179-EM-106C, Radioactive Liquid Waste & Aerated Drains
Technical Specification Change # 218 (Amendment 214)

Section 1R11: Licensed Operator Requalification Program

Requalification Activities Review by Resident Staff

AOE-02, Revision 0, Simulator Exam Guide Approval Sheet
AOE-08, Revision 1, Simulator Exam Guide Approval Sheet

Biennial Review by Regional Specialist

CR-05-09253, Operating Exam Malfunction Given Out of Sequence
CR-05-09195. Exam JPM Did Not Function as Planned
CR-05-09236, A Licensed Operator Annual Exam JPM Was Not Reviewed Against the Simulator Exam for Preconditioning or Double Jeopardy Considerations
MP3 JIT-05-002 MP3 April 17, 2005 Event Review
CR-05-09284, Lessons Learned in Steam Release Events and Operator Training
CR-05-05566, NRC Special Inspection Team Finding - Event Classification
CR-05-03889, Training Department and Operations Review of April 17, 2005 Event
CR-05-05568, NRC Special Inspection Team Finding - EOP Implementation
NTP 122.4, Revision 001-03, Operator Training Branch Examination Security
NTP 144, Revision 003-03, Conducting Simulator Training and Examinations

Section 1R12: Maintenance Effectiveness

System Health Report for Unit 2 Charging System
System Health Report for Unit 2 for “A” and “C” ESF Ventilation
System Health Report for Unit 3 “B” Service Water
System Health Report for Unit 3 for 3HVQ*ACU2A

CR-05-07933, Charging Pump “A” Cycling On/Off Approximately 2 Times A Second
CR-05-08141, “A” Charging Pump Tripped Four Times within Approximately One Second
CR-05-08140, “B” Charging Pump Trip Logic Cycled Numerous Times within 7 Minutes
CR-05-08546, Air Flows Obtained for F15A do not Meet Acceptance Criteria
CR-05-08603, Unplanned LCO Due to Insufficient Service Water through 3HVQ*ACUS2A
CR-05-08623, Foreign Material Found Downstream of Valve SWP*V052
CR-05-08722, “B” Service Water Pump Failed to Backwash After 4 Hours
CR-05-08769, Multiple Septum Strainer Elements on 2SWP*STR1B Degraded

Section 1R13: Maintenance Risk Assessments and Emergent Work Evaluation

Major Equipment Schedule
Equipment Out of Service Risk Model
CR-05-09162, Unplanned LCO, SW Pipe Support for a 3" Supply in ESF Showing Corrosion

Section 1R14: Personnel Performance During Non-Routine Plant Evolutions and Events

CR-05-01147, 2-SI-306 Manual Operator Appears To Be Not Properly Pinned
CR-05-05660, When Requested To Install Astromed On “A” Diesel Generator Found Astromed Installed on “B” Diesel Generator
CR-05-05517, LS-4590 Terry Turbine Steam Trap Level Switch Malfunctioning
CR-05-05884, LS-4590, Aux FW Turb Water Level Switch, May Require Calibration Check Following Plant Startup
CR-05-05986, Steam Driven Auxiliary Feed Pump (P4) Steam Supply Water Level Switch LS-4590 Needs To be Calibrated
CR-05-06075, LS-4590 Terry Turbine Steam Supply Water Detector Level Switch Failure Mechanism
CR-05-08286, Missed Surveillance for MP3 Equipment Hatch (3CS*HATCH2)
CR-05-08272, O-Rings and V-Rings That Function as Part of the Containment Pressure Boundary were Inappropriately Downgraded to Non-Safety Related
TS 3.6.1.2, Containment Leakage
TS 4.0.3, Surveillance Requirements
ARP-2590D-053, Revision 000, Aux FW Turb Steam Line Water Level Hi
TS 3/4, Limiting Condition for Operation
TS B3/4.8, Electrical Power Systems
Unit 2 Control Room Logs
Unit 3 Control Room Operations Log, Night Shift, July 06, 2005
CR-05-07458, Need to Schedule Motor Swap for 3GMS-FN1B
CR-05-07423, Vibration Retest for the New 3GMS-FN1A is SAT, but is in Alert
CR-05-07417, Recent Trending of Catastrophic Failures of Motors have Raised concern of the [sic] our Protective Devices Programs
CR-05-02619, MP3 3GMS-FN1A Fan Motor Vibration is in the “Alert” Range
CR-05-02909, Retest on 3GMS-FN1A Unsat Due to Vibration Levels Exceeding .66 IPS
CR-05-0750, Low Freon Charge on 3HVQ*ACUS1B
MP-28-AIR-FAP00.2, Revision 001-02, Administration of the Air Quality Management Program
EOP-3509, Revision 018-00, Fire Emergency

OP-3347C, Revision 013-05, Main Transformer and Isophase Bus
OP-3324A, Revision 009-10, Main Generator

Section 1R15: Operability Evaluations

CR-05-07084, Crevice corrosion is identified on the outlet flange face for Unit 3 service water spool 23-10 (near 3SWP*V040)
CR-05-07091, Degraded coating and rust blooms identified during visual inspection of Unit 3 service water spool 3SWP-23-9 (adjacent to 3SWP*V040)
CR-05-07099, Degraded rubber liner identified on 3SWP*V040
CR-05-07933, “A” Charging Pump Cycled On/Off Approximately 2 Times a Second
CR-05-08100, PC-224X was Found Air-Bound
CR-05-08124, Emergent Work to Support P18AM Investigation for Operability
CR-05-08140, “B” Charging Pump Trip Logic Cycled Numerous Times with 7 Minutes
CR-05-08141, “A” Charging Pump Tripped Four Times with Approximately One Second
CR-05-08153, I&C Loop Folders for PC-224X, PC-224Y, PC-224Z Indicate Historical Problems
CR-05-08163, Fuse Blown for “A” Charging Stabilizing Heaters
CR-05-07988, Silent TM/LP Pre-Trip Channel “A” RPS
CR-05-07917, Found 2-RB-50A and 2-RB-50B Out of Required Position
CR-05-08272, O-Rings and V-Rings That Function as Part of the Containment Pressure Boundary were Inappropriately Downgraded to Non-Safety Related
CR-05-07466, 3EGS*EGB Rocker Arm Oil analyses Results Show Elevated Water Content
CR-05-08769, Multiple Septum Strainer Elements in 3SWP*STR1B Found Degraded
CR-05-09317, Service Water Pipe Leak
CR-05-09162, Unplanned LCO, SW Pipe Support for 3" A Supply in ESF Showing Corrosion
CR-05-09337, Upper 4160V Switchgear Room Temperature 92 Degrees
CR-05-10013, Oil Leakage on 3SIH*P1A 1.25" Oil Drain Line Back to Reservoir from Pump Inboard Bearing
CR-05-10257, 3SIH*P1A Outboard Pump Bearing Housing is Leaking Oil
CR-04-10084, Oil Found External to the “A” Safety Injection Pump Oil Line
RP-5, Revision 004-01, Operability Determinations
CE Evaluation dated June 16, 1989, Evaluation of Hot Leg Temperatures
ARP-2590C, Revision 005, Control Room Panel, C-04
MP3 FSAR
MP2 TS, Section 3/4.7, Plant Systems
MP3 TS, Section 3/4.7, Plant Systems
OD MP2-011-05, Operability Determination for TM/LP, CR-05-08050
OD MP2-012-05, “A” Charging Pump Operability Determination, CR-05-07933
OD MP3-012-05, 3SWP*V040 RECO dated 6/30/05
OD MP3-012-05, 3SWP*V040 Operability Determination, CR-05-07099
OD MP3-014-05, Revision 0, During Review of Bill of Materials for MP3 Equipment Hatch (3CS*Hatch2) Seal Quality Requirements Identified that the 18" Man-Way Shaft Seals Replacement During 3R09 Had an Insufficient PMT
OD MP3-016-05, Degraded Service Water Pipe Support 3 SWP-4-PSR248
RECO MP3-014-05, During Review of Bill of Materials for MP3 Equipment Hatch (3CS*Hatch2) Seal Quality Requirements Identified that the 18" Man-Way Shaft Seals Replacement During 3R09 Had an Insufficient PMT

RECO/OD MP3-013-05, Lube Oil Analysis For 3 EGS*EGB Rocker Arm Lube Oil Shows An Elevated Water Content (2%)
RECO MP3-016-05, Degraded Service Water Pipe Support 3 SWP-4-PSR248
RECO MP3-015-05, Service Water Pinhole Pipe Leak in Line 3-SWP-003-324-3
CBM 106, Revision 1, Oil Analysis
AWO M3-05-10794, Perform LLRT on Manway Shaft Seals for Equipment Hatch
MP2-EV-99-0093, Revision 04, Evaluate Compensatory Measures to Use During Loss of Cooling/Ventilation Systems Supporting Vital Switchgear Room
MP3-EV-05-0001, Revision 2, Estimate of ECCS Hot Leg Recirculation Flow Provided Through a Seized SIH Pump
MP3-EV-04-0039, Revision 0, Safety Injection Pump Oil Reservoir Volume and Depletion Time
25212-ER-04-0001, Revision 0, Results of ESF Building and Service Water Cubicles Loss of Ventilation GOTHIC Analysis
M3-04-12068, Install New Valve and Lap Joint IAW DM3-04-0234-04

Section 1R16: Operator Work-Arounds

MP-14-OPS-GDL600, Revision 004-00, Operations Administration Procedures
MP-14-OPS-GDL600, Revision 003-00, Plant Status and Configuration Control
Millstone Station Aggregate Impact Analysis dated 8/1/05
Millstone 2 Weekly Aggregate Impact Assessment Report Dated 8/1/05
Millstone 3 Weekly Aggregate Impact Assessment Report Dated 8/1/05
Millstone 2 & 3 Operator Work-Arounds Management Summary Dated 7/6/05 & 7/29/05
Millstone 2 & 3 Control Panel Issues Management Summary Dated 7/6/05 & 7/29/05
Millstone 2 & 3 Alternate Plant Configurations Management Summary Dated 7/6/05 & 7/29/05
CR-05-07229, 3SWP*STR1C Eagle Reset Timer Discovered Failed During Troubleshooting
CR-05-07228, Received MB4C-1-12, for CVSWP-Z24A, Train “A” Service Water Pump Strainer Hasn’t Blown Down in 4.5 Hours
CR-05-07749, Momentary Loss 23KV (Flanders Line)
CR-05-07403, Loss of Power from the Flanders Line due to a Blown Disconnect
CR-05-07169, Loss of Flanders Line, Entry into AOP-2508 - Second Trip within 24 Hours
CR-05-07112, Loss of Flanders Line, Entry into AOP-2508
AOP-2508, Revision 000-05, Loss of 23KV Offsite Power

Section 1R17: Permanent Plant Modifications

FP-EV-04-001, Revision 1, 3MMS*MOV74A,B,C and D Control Circuit Hot Short Modification, Including Lockout Switches
DCN DM3-00-0242-05, Revision 0, DCR M3-04002 Test Plan Enhancements
25212-32001, Sh 6AKM, Elementary Diagram480V MV, MN STM Pressure Relieving Bypass Valve 3MMS*MOV74B
25212-32001, Sh 6AKP, Elementary Diagram480V MV, MN STM Pressure Relieving Bypass Valve 3MMS*MOV74D
25212-28036, Sheet 8, Logic Diagram, Turbine Bypass.
WO M3-04-02008, Modify Control Circuit for 3MMS MOVu74A Hot Short Mod
WO M3-04-02009, Modify Control circuit for 3MMS MOVu74B Hot Short Mod

WO M3-04-02009, Modify Control circuit for 3MMS MOVu74C Hot Short Mod
WO M3-04-02009, Modify Control circuit for 3MMS MOVu74D Hot Short Mod

Section 1R19: Post-Maintenance Testing

M2-00-14807, CEA Motion Inhibit Primary Power Supply
M2-05-06300, Main Steam Supply Low-Point Steam Trap
M2-04-08691, Terry Turbine Trip Throttle Valve Rework, July 20, 2005
SP-2610CO-002, Revision 000-01, 2-FW-43A and 2-FW-43B Stroke and Timing IST
SP-2660-002, Revision 004-01, AFP Turbine Trip Throttle Valve Exercise Test
M3-04-13687, Take Oil Samples and Change Oil From MDAFW Motor Bearing, PM 1 Year
U3 TS
U3 FSAR
CR-05-05419, Trip is Blowing By
CR-01-10429, 3FWA-P1B Has An Oil Leak

Section 1R20: Refueling and Outage Activities

OP-3208, Revision 20-13, Plant Cooldown
SP-3712G, Revision 008, Main Steam Code Safety Valve Surveillance Testing (IPTE)

Section 1R22: Surveillance Testing

NRC Inspection Manual 9900, Technical Guidance
SP-2610BO, Revision 000-01, TDAFP and Recirculation Check Valve IST
SP-2402M, Revision 008-16, Functional Test of Steam Generator Level and Auto Aux. Feedwater Logic
SP-3601F.6, Revision 005-04, Reactor Coolant System Water Inventory Measurement
SP-3622.2-001, Revision 013-02, Auxiliary Feed Pump 3FWA*P1B Operational Readiness Test
SP-3609-001, Revision 012, RSS
SP 3601F.6, Revision 005-04, Reactor Coolant System Water Inventory Measurement
TS 3.7.1.2, Auxiliary Feedwater System
TS 3.3.2, Engineered Safety Features Activation System Instrumentation
TS 3.6.3, Containment Isolation Valves
SR 4.7.1.2, AFW Surveillance Requirement
CR-05-07957, Time Delay Relay 62/Z1 Needs to be Replaced
CR-05-09754, Aux Feed Pump 3FWA*P1B Operations Readiness Test
AWO M2-05-01850, Functional Test of Auto Aux Feedwater Logic

Section 1R23: Temporary Plant Modifications

OP-3225A, Revision 022-01, Circulating Water
WC-10-004, Revision 000-01, Temporary Modification Control Sheet
MP3-05-001, Control Building Service Water Enclosure Tube Closure Plate Control Room Habitability Seal

Section 1EP6: Drill Evaluation

AOE-02, Revision 0, Simulator Exam Guide (Unit 2 and Unit 3)
DNAP-2605, Revision 1, Drill/Exercise Indicator Performance - NEP
Scenario 1.D., MP2-2
MP-26-EPI-FAP06-002, Revision 003, Emergency Action Levels (Millstone Unit 2)

Section 2PS1: Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems

Procedures:

SP-2815, Revision 001-01, Weekly Main Station Stack, Wide Range Gas Monitor (WRGM) Sampling for Iodine & Particulates
SP-2814A, Revision 009-02, Gaseous Effluents Sampling for Iodines & Particulates from Unit 2 Vent- Weekly
SP-3614A Series, Unit 3 Auxiliary Building Ventilation System Surveillance Tests
SP-3614I Series, Unit 3 Supplemental Leak Collection & Release System Surveillance Tests
SP-2654Q Series, Unit 2 Containment & Enclosure Building Exhaust Filter L-25 HEPA Filtration Testing
SP-2609D Series, Unit 2 Enclosure Building Charcoal/HEPA Filtration Testing
VPROC-OPS03-001, Revision 0, In-Place Testing of HEPA Filters & Charcoal Absorbers
SP-3670.1, Revision 11-04, Temporary Sampling Surveillance
SP-3880, Revision 002-01, Unit 3 SLCRS Vent Radiation Monitor Inoperable

Condition Reports:

05-09249, 05-00223, 05-00752, 05-00775, 05-01169, 05-01652, 05-01721, 05-03155, 05-03156, 05-03258, 05-06347, 05-08203, 04-11326, 04-10322, 04-09848, 04-11374, 04-05740, 04-05775, 04-05963, 04-06282, 04-09125, 04-09373, 04-10488, 04-10490

Nuclear Oversight Reports:

Audit 03-11: Offsite Dose Calculation Manual (ODCM) Radiological Environmental Monitoring (REMP) and Environmental Protection Plan

Section 4OA2: Identification and Resolution of Problems

Main Steam Code Safety Valve Lifting

CR-04-02514, Trending CR for Main Steam Safety Valve Opening After Reactor Trip at Millstone Unit 2
CR-04-02543, CR Issued for Trending the Lifting of S/G Safety Valves 2-MS-252 and 2-MS-242 Following U2 Reactor Trip on 3/15/04
CR-04-02760, Manual Reactor Tripping Causes SG Safety Valves to Lift
MP2 FSAR, Section 7.4.5.1.1

S-04129S2, MP2 MSSV Lifting Study, dated December 2004
NE-04-F-115, MSSV Lifting Study Results and Recommendation memo, dated December 22, 2004
Millstone Integrated Inspection Report 2004007
RELAP 5 Mod 3.2 Output Summary Graphs, MP2 MSSV Lifting Study

Safety Injection Tank Leakage

NCV05000336/2004002-02, NRC Integrated Inspection Report (Resident) 05000336,423/2004002, dated April 9, 2004
CR-04-01854, Repeated Attempts to Resolve SIT Leakage at Unit 2 is not Captured Within Level 2 CR Investigation
CR-04-06173, NCV for Untimely Corrective Actions Concerning SIT System Leakage at Unit 2 Requires Additional Actions
Safety Injection Tanks System Health Report, 2005 Qtr. 2
CR-05-06042, OWA-C Operator Distraction Yellow #17, #1 Safety Injection Tank Pressure is Decreasing
SIT Level Trend Plot for SIT #1-SIT#4, Aug. 2005; dated August 30, 2005
SIT Level Trend Plot for SIT #1-SIT#4, Jan. 2005-April 2005; dated August 30, 2005
SIT Level Trend Plot for SIT #1, May 2005-Aug. 2005; dated August 30, 2005
SIT Pressure Trend Plot for SIT #1-SIT#4, Aug. 2005; dated August 30, 2005
Containment Pressure, SIT #2 PressureTrend Plot, Aug. 2005; dated August 30, 2005
ARP 2590A/A-10, Revision 000-01, Safety Injection Tank 1 Level Hi
ARP 2590A/B-10, Revision 000, Safety Injection Tank 1 Level Lo
ARP 2590A/C-10, Revision 000, Safety Injection Tank 1 Pressure Hi
ARP 2590A/D-10, Revision 000-02, Safety Injection Tank 1 Pressure Lo
AWO M2-04-01400, Safety Injection Tank Level Reduction Probably Leak at 2-SI-638 Identified (CR-04-00877)
M2-EV-02-0029, Revision 00, HPSI Pump Availability During Surveillance Testing, dated August 14, 2002
CR-02-07821, SP26048 Facility 2 HPSI OP and IST, Creates an Orange Risk Condition in MP2 Schedule and Needs to be Evaluated for Availability by Engineering

Service Water Brazed Joint Leakage

CR-04-02255, Entry into Unplanned LCO; Identified Leak from Service Water Piping in ESF; The Leak is coming from Braze Joint Between 3SWP*V706 and 3SWP*V673
CR-04-02795, Poor Braze Penetration in Flange Joint Removed from MP3 Service Water System
MP3 Maintenance Rule (a)(1) Evaluation for Service Water System, Revision 5
MP3 System Health Report - Service Water (3326), 2005 Quarter 1
MP3 Brazed Joint Inventory Table / Matrix Summary, dated September 01, 2005
MP3 SW Brazed Joint Table for 1 ½" and Larger Diameter, dated March 21, 2005

Section 4OA5: Other Activities

CR-05-09287, Tracking CR for ISO-New England Procedure Revision

LIST OF ACRONYMS

AC	air conditioning
AFW	auxiliary feedwater
AOP	Abnormal Operating Procedure
CEA	control element assembly
CFR	Code of Federal Regulations
CR	condition report
CVCS	chemical and volume control system
DRP	Division of Reactor Projects
DRS	Division of Reactor Safety
ECCS	emergency core cooling system
EDG	emergency diesel generator
EOP	Emergency Operating Procedure
ESF	engineered safety feature
FSAR	Final Safety Analysis Report
HELB	high energy line break
HPSI	high pressure safety injection
IMC	Inspection Manual Chapter
LER	licensee event report
LCO	limiting condition of operation
MCC	motor control center
MDAFWP	motor-driven auxiliary feed water pump
MR	Maintenance Rule
MSSV	main steam safety valve
NCV	non-cited violation
NRC	Nuclear Regulatory Commission
OD	Operability Determination
OWA	operator work-around
PMT	Post-Maintenance Test
RB	reactor building
RBCCW	reactor building closed cooling water
REMODCM	Radiological Effluent Monitoring & Offsite Dose Calculation Manual
SDAFW	steam-driven auxiliary feedwater
SDP	significance determination process
SIH	safety injection high
SIT	safety injection tank
SORC	Site Operations Review Committee
TI	temporary instruction
TS	technical specification
TDAFW	turbine-driven auxiliary feedwater