April 9, 2004

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 PROBLEM IDENTIFICATION AND RESOLUTION INSPECTION REPORT 05000336/2004002, 05000423/2004002

Dear Mr. Christian:

On February 26, 2004, the NRC completed a team inspection at the Millstone Power Station Unit 2 and Unit 3. The enclosed report documents the inspection findings which were discussed on February 26, 2004, with Mr. J. Alan Price and other members of your staff during an exit meeting.

This inspection was an examination of activities conducted under your license as they relate to the identification and resolution of problems, compliance with the Commission's rules and regulations, and the conditions of your operating license. Within these areas, the inspection involved examination of selected procedures and representative records, observation of activities, and interviews with personnel.

On the basis of the samples selected for review, the team concluded that in general, problems were properly identified, evaluated, and corrected. The team identified two findings of very low safety significance (Green). The first finding was associated with the failure to implement an appropriate test program following the installation of a modification on the Unit 2 charging system. The second finding involved the failure to implement appropriate corrective actions for repeat instances of safety injection tank leakage, also at Unit 2. These findings were determined to be violations of NRC requirements. However, because of their very low safety significance and because they were entered into your corrective action program, the NRC is treating these findings as a non-cited violations consistent with Section VI.A of the NRC Enforcement Policy.

If you deny these non-cited violations, you should provide a response with the basis for your denial within 30 days of the date of this inspection report, to the U. S. Nuclear Regulator Commission, ATTN. Document Control Desk, Washington DC 20555-0001, with copies to the Regional Administrator, Region I; the Director, Office of Enforcement, U. S. Nuclear Regulator Commission, Washington DC 20555-0001; and the NRC Resident Inspector at the Millstone Facility.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document

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Sincerely,

/RA/

Raymond K. Lorson, Chief
Performance Evaluation Branch
Division of Reactor Safety

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

Enclosure: Inspection Report 05000336/2004002 and 05000423/2004002
w/Attachment: Supplemental Information

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REGION I

Docket Nos:	50-336, 50-423
License Nos:	DPR-65, NPF-49
Report No:	05000336/2004002 and 05000423/2004002
Licensee:	Dominion Nuclear Connecticut, Inc.
Facility:	Millstone Power Station, Unit 2 and Unit 3
Location:	P. O. Box 128 Waterford, CT 06385
Dates:	February 9 - 13 and February 23 - 26, 2004
Inspectors:	Stephen M. Pindale, Senior Reactor Inspector (Team Leader) Paul D. Kaufman, Senior Reactor Inspector Silas R. Kennedy, Resident Inspector Veronica M. Rodriguez, Reactor Inspector Josephine A. Talieri, Reactor Inspector Michelle P. Snell, Reactor Inspector (Intern)
Approved by:	Raymond K. Lorson, Chief Performance Evaluation Branch Division of Reactor Safety

Enclosure

SUMMARY OF FINDINGS

IR 05000336/2004-002, 05000423/2004-002; 2/9/04 - 2/13/04 and 2/23/04 - 2/26/04; Millstone Power Station, Unit 2 and Unit 3; biennial baseline inspection of the identification and resolution of problems. One violation was identified in the area of design control, and one violation was identified in the area of corrective actions.

This inspection was conducted by four regional inspectors and a resident inspector. The inspection identified two Green findings that were non-cited violations. 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.

Identification and Resolution of Problems

The team determined that the licensee was generally effective at identifying discrepant conditions at an appropriate threshold and entering them into the corrective action program. Once entered into the system, issues were usually prioritized appropriately and in a timely fashion; and were properly evaluated commensurate with the safety significance. Overall, the evaluations reasonably identified the causes of the problem, the extent of the condition, and provided for corrective actions to address the causes. However, in some cases, the corrective action program was not effectively used to resolve and prevent problems. There were some instances where issue evaluations, as well as the associated corrective actions, were not effective in resolving problems. There were also some examples in which condition reports were characterized at a lower category than prescribed by the corrective action program.

Cornerstone: Mitigating Systems

> Green. The team identified a non-cited violation of 10 CFR 50 Appendix B, Criterion III, "Design Control," which requires that design control measures be established and implemented to assure that applicable regulatory requirements and the design basis for structures, systems, and components are correctly translated into specifications, drawings, procedures, and instructions. The charging system was modified to install pulsation dampeners, however, a suitable test program was not developed to ensure that the dampeners would remain available to support the charging system during postulated events.
>
> This finding was more than minor because the condition of the pulsation dampeners subsequently degraded, which affected the design control and equipment performance attributes and the availability, reliability, and capability objective of the mitigating systems cornerstone. The degraded condition of the pulsation dampeners challenged the reliability of the charging system to mitigate design basis events. This finding was determined to be of very low safety significance (Green) based on the results of a bounding risk assessment. (Section 4OA2.c.2.1)

Green. The team identified a non-cited violation of 10 CFR 50 Appendix B, Criterion XVI, “Corrective Action,” which requires that measures shall be established to assure that conditions adverse to quality are promptly identified and corrected. The licensee failed to take appropriate corrective actions in a timely manner to address and correct repeat instances, over a multiple year period, of safety injection tank (SIT) leakage at Unit 2.

The finding was more than minor because it affected the equipment performance attribute and the availability, reliability, and capability of the mitigating systems cornerstone. The chronic leakage problem resulted in an increased unavailability of a high pressure safety injection system train during the periods of time when the system was realigned and used to fill the SITs. This finding was determined to be of very low safety significance (Green) since an actual loss of the safety system function had not occurred and the high pressure safety injection train was removed from service for less than the Technical Specification allowed outage time. (Section 4OA2.c.2.2)

Report Details

4. OTHER ACTIVITIES (OA)

4OA2 Problem Identification and Resolution

a. Effectiveness of Problem Identification

(1) Inspection Scope

The inspection team reviewed the procedures describing the corrective action program (CAP) at the Millstone Power Station. The team reviewed items selected from various licensee processes and activities to determine whether personnel were properly identifying, characterizing and entering problems into the CAP for evaluation and resolution. The licensee's formal CAP utilizes condition reports (CR) to identify and document problems at Millstone. The team selected CRs to cover the seven cornerstones of safety identified in the NRC Reactor Oversight Process (ROP). In addition, the team considered risk insights from the individual plant examination report and the probabilistic risk assessment to focus the sample selection and system walkdowns on risk significant components. The CRs are classified by level (1, 2, and N), with Level 1 requiring the most rigorous review due to higher safety and/or risk significance.

The team reviewed logs, control room deficiencies, operator work-arounds, system health reports, temporary modifications, operating experience reviews, and procedures. The team selected items from the licensee's maintenance, operations, engineering, emergency planning, security, radiological controls and oversight processes to verify that the licensee appropriately considered problems identified in these processes for entry into the CAP. In addition, the team interviewed plant staff and management to determine their understanding of and involvement with the CAP. The specific documents reviewed and referenced during the inspection are listed in the attachment to this report.

The team reviewed a sample of nuclear oversight audits and assessments, as well as departmental and program self-assessments. This review was to determine whether problems identified by these evaluations were entered into the CAP, and whether the corrective actions were properly completed to resolve the self-identified deficiencies. The team evaluated the effectiveness of the audits and self-assessments by comparing the associated results against self-revealing and NRC-identified findings.

The team conducted several plant walkdowns of safety-related, risk significant areas to determine if observable system equipment and plant material adverse conditions were identified and entered into the CAP. Team members attended daily review and management meetings where CRs were reviewed for screening and assignment. The team attended these meetings to understand the threshold for identifying problems and to assess management involvement with the CAP. The team also assessed the interface between the CAP and the work control process.

(2) Observations and Findings

No findings of significance were identified.

The team determined that the licensee was generally effective at identifying discrepant conditions and initiating CRs where appropriate. Notwithstanding, the team identified an example where the licensee did not enter a human performance error into the CAP. Subsequently, the licensee initiated CRs 04-02024 and 04-02026 to address this condition. The team also identified an instance where the licensee was slow to accurately engage the CAP. During a plant tour, the team identified an active leak on the Unit 2 'B' residual heat removal (RHR) heat exchanger. There was also apparent degradation (corrosion) on a few of the studs and nuts at the vertical heat exchanger bottom head. Although the licensee stated that they had similarly identified the leak several days before the team identified it, no CR had been submitted. Further, the team found that engineering had incorrectly characterized the boric acid residue as a dry deposit, and not as an active leak. Upon further licensee review and walkdown, they confirmed the leak to be active. The licensee initiated CR 04-01858 to resolve this condition. The team determined that the two items discussed above were minor.

As a result of review of CRs, security reports, interviews of security personnel, and a review of employee concern issues, the team noted that concerns had surfaced about the willingness of members of the security organization to utilize the CAP to document security deficiencies. Upon further evaluation of this condition, the team determined that the licensee was aware of this potential problem within the security organization and had hired an outside contractor to perform an independent investigation of the security organization, which included an assessment of how this incident may have affected the work environment for raising security concerns. The team reviewed the investigation report compiled by the independent contractor, and concluded that the licensee was adequately addressing the concern and was currently in the process of developing appropriate corrective actions.

b. Prioritization and Evaluation of Issues

(1) Inspection Scope

The team reviewed the CRs listed in the attachment to this report to assess whether the licensee adequately prioritized and evaluated problems. These reviews evaluated the causal assessment of each issue (i.e., root cause analysis or apparent cause evaluation); and for significant conditions adverse to quality, the extent of condition and determination of corrective actions to preclude recurrence. The team selected the CRs to cover the seven cornerstones of safety identified in the NRC ROP. A portion of the items chosen for review were those that were age dependent (e.g., erosion/corrosion - induced pipe wall thinning, potential for gas binding of high pressure safety injection pumps during a postulated accident), and, accordingly, the scope of review was expanded to five years. The team also considered risk insights from the Millstone probabilistic risk assessment to help focus the inspection sample. Throughout the

inspection, the team attended periodic meetings to observe the CR review process and to understand the basis for assigned significance and root cause levels.

The team selected a sample of CRs associated with previous NRC non-cited violations (NCV's) and findings to determine whether the licensee evaluated and resolved problems associated with compliance to applicable regulatory requirements and standards. The team reviewed the licensee's evaluation of industry operating experience for applicability to Millstone. The team also reviewed the licensee's assessment of equipment operability and reportability requirements associated with CRs.

(2) Observations and Findings

No findings of significance were identified.

The team determined that, in general, the licensee adequately prioritized and evaluated the issues and concerns that had been entered into the CAP. Personnel were generally effective at classifying and performing operability evaluations and reportability determinations for discrepant conditions. However, the team noted some examples where CRs were classified at a lower category than prescribed. For example, the following CRs were characterized as significance level 'N' but, the team determined that a significance level '2' classification was appropriate.

- CR 03-12017 (Safety injection tank level loss due to leakage - and several other CRs on this same issue);
- CR 01-11975 (Over-greasing of more than 80% of station motors).

The team determined that these issues were not being evaluated at a level commensurate with the significance of the associated problems. In response, the licensee initiated additional CRs to properly evaluate these issues.

Another observation by the team was related to the licensee's evaluation of previously issued NCVs. The team identified an example where the evaluation and corrective actions did not appear to demonstrate alignment with the documented issue in the inspection report. One example included NCV 03-06-03 (failure to diagnose and enter the appropriate abnormal operating procedure for reactor coolant leakage). The team identified that the CRs initiated to address the violation (CR 03-03295 and CR 03-02978) did not accurately describe and address the violation. Accordingly, the cause(s) of the issue did not appear to have been fully identified; and, as a result, the appropriate corrective actions may not have been taken. The team noted that there were no significant adverse consequences or operability issues associated with this observation; and the licensee initiated CR 04-01833 to address this problem.

c. Effectiveness of Corrective Actions

(1) Inspection Scope

The team reviewed the corrective actions associated with selected CRs to determine whether the actions addressed the identified cause(s) of the problems. The team also reviewed the licensee's timeliness in implementing corrective actions and their effectiveness in precluding recurrence of significant conditions adverse to quality. Furthermore, the team assessed the backlog of outstanding corrective actions to determine if they, individually or collectively, represented an increased risk to the plant. The team also reviewed NCVs and findings issued since the last inspection of the licensee's CAP to determine if issues placed in the program had been properly evaluated and corrected.

As a result of the Unit 2 charging system being declared inoperable on February 20, 2004, the team reviewed the design change package for the pulsation dampeners on the Unit 2 charging system to ensure proper corrective actions associated with installation, post-maintenance testing, and periodic testing.

(2) Observations and Findings

The team identified two findings. One included the failure to develop and implement a suitable test program following the installation of a design modification. The second finding involved the failure to implement adequate corrective actions for chronic safety injection tank leakage.

In addition, the team identified weaknesses with the licensee's response to several instances over a several year period in which motor bearings were over-greased. Industry operating experience revealed that over-greasing can cause motors to fail due to bearing failure, or can cause the windings to overheat and short out if the excess grease reaches the stator and/or motor windings. Relevant Millstone experience included a Unit 3 quench spray pump that required repair due to high vibration induced by over-greasing in 1989.

In October 2001, in response to additional industry operating experience related to over-greasing, the licensee documented (in CR 01-11975) that over 80% of Unit 2 motors were over-greased. The team determined the actions associated with CR 01-11975 were weak. Furthermore, CR 01-11975 was not characterized as a condition adverse quality although the condition had the potential to affect plant safety and reliability. As a result, an apparent cause for the over-greasing was not determined. The team found that several safety-related motors were in the population of components affected by over-greasing, including the 'A' low pressure safety injection motor and the 'B' control room exhaust fan motor (both at Unit 2). The team did not any identify equipment that was degraded or rendered inoperable as a direct result of the over-greasing condition and therefore determined that this issue was of minor significance.

.1 Charging Pump Pulsation Dampeners

Introduction. The team identified a Green NCV for the failure to adequately verify or check the adequacy of the design of the Unit 2 charging system pulsation dampeners by the implementation of a suitable test program, as required by 10 CFR 50 Appendix B, Criterion III, "Design Control."

Description. Following recent maintenance on the Unit 2 'C' charging pump motor, a non-licensed operator noticed that the pump was making an abnormal sound during operation and initiated a CR. During their investigation, the licensee observed and measured a pressure spike of 2672 psig on the 'C' charging pump discharge header when the 'C' charging pump was started with the 'B' charging pump running. This pressure was higher than the maximum expected pressure of 2550 psig for this configuration. The licensee suspected that the 'C' charging pump discharge pulsation dampener was not properly charged, declared the charging system inoperable and entered Technical Specification (TS) 3.0.3. The licensee subsequently removed the 'C' pump from service and exited TS 3.0.3.

Further testing indicated that all of the pulsation dampeners had less than the required pressure of 1750 psig and also that the bladder in the 'B' pulsation dampener had failed. The pulsation dampeners had been installed on the discharge piping of the charging pumps during the 2003 Fall refueling outage to prevent pressure spiking during the simultaneous start of all three charging pumps from exceeding the charging pump relief valves setpoint pressure. The licensee formed an event team to determine the cause for the loss of pressure in the charging pump pulsation dampeners. During this review, engineering identified that design change package DCR M3-006, which incorporated the pulsation dampeners into the charging system design, required pressure in the pulsation dampeners to be monitored on a monthly basis, but this had not been performed since installation of the modification in November 2003.

Analysis. The team determined that this issue was a performance deficiency. Specifically, the licensee failed to periodically test the pulsation dampeners as specified by modification DCR M3-006 to ensure that they would continue to function as designed. As a result, the 'B' and 'C' charging pump pulsation dampeners experienced a loss of gas pressure that went undetected until February 20, 2004. This finding was greater than minor because the degraded condition of the pulsation dampeners affected the design control and equipment performance attributes and the availability, reliability, and capability objective of the mitigating systems cornerstone. Conservatively, the condition affected the operability of the charging system for a three month period.

The team conservatively assumed that the charging system was inoperable for the three month period discussed above and assessed this finding in accordance with NRC Manual Chapter 0609, Appendix A, Attachment 1, Significance Determination Process for Reactor Inspection Findings for At-Power Situations." The team noted that an assessment had been previously completed for a charging system failure on March 7, 2003. In that assessment (documented in NRC Inspection Report 05000336/2003004, 05000423/2003004), the NRC Senior Reactor Analyst conducted a SDP Phase 3 analysis using the NRC Standardized Plant Analysis Risk (SPAR) model for Millstone 2 and assumed that the charging system was inoperable for a period of 310 days. The

result of that analysis yielded a finding of very low risk significance (Green). The team determined that the current condition was bounded by the previous risk assessment since the charging system was degraded for a shorter period of time. Therefore this issue was determined to be a finding of very low safety significance (Green).

Enforcement. 10 CFR 50 Appendix B, Criterion III, "Design Control," requires, in part, that design control measures be established and implemented to assure that applicable regulatory requirements and the design basis for structures, systems, and components are correctly translated into specifications, drawings, procedures, and instructions; and that the design control measures shall provide for verifying or checking the adequacy of design, such as by the performance of a suitable testing program. Contrary to the above, in November of 2003, a design change was implemented on the Unit 2 charging system, however, a suitable test program was not developed to ensure that the charging system would remain available to fulfill its design function. Because the failure to develop an adequate test program for the charging system pulsation dampeners was determined to be of very low safety significance and has been entered into the licensee's CAP as CR 04-01675, this violation is being treated as an NCV, consistent with Section VI.A of the NRC Enforcement Policy. **NCV 05000336/2004002-01; Failure to Implement Adequate Design Control and Suitably Test a Modification to the Charging System**

.2 Safety Injection Tank System Leakage

Introduction. The team identified a Green NCV for the failure to establish appropriate corrective actions in a timely manner for safety injection tank (SIT) system leakage as required by 10 CFR 50 Appendix B, Criterion XVI, "Corrective Action."

Description. The four SITs are part of the emergency core cooling system that provide a way to reflood the reactor core rapidly following a large-break loss of coolant accident (LOCA). During an accident scenario, when reactor coolant system pressure drops to less than SIT system pressure, highly borated water is injected into the reactor vessel to ensure core cooling until the safety injection pumps can provide flow.

Millstone Unit 2 has a history of leakage from the SITs, dating back to prior to 2001, which required frequent refilling of the system using a high pressure safety injection (HPSI) pump. Each time the SITs are refilled, a TS action statement is briefly entered because the one train of the HPSI system is aligned to fill the SIT. Accordingly, use of the HPSI system to fill the SITs results in increased HPSI unavailability.

The licensee initiated several CRs related to this issue to document an increase in the frequency of the refills. All of these CRs were Level N, the lowest of three classification levels and thus a root or apparent cause evaluation of the cause of the leakage was not required or performed. The corrective actions related to these CRs included rework or replacement of several sets of valves in the system at various times throughout the history of the issue. These corrective actions did not eliminate the leakage; in fact, the

leak rate increased after the Fall 2003 refueling outage, after work was done on the system to try and address this issue.

Analysis. This issue is a performance deficiency related to inadequate problem resolution. Specifically the licensee did not implement effective actions to determine the cause for and to correct the condition. The documentation associated with this issue indicated that the leakage existed in excess of three years, however, interviews with plant staff indicated that SIT leakage may have existed between the past five to ten years.

This finding is more than minor because it affected the equipment performance attribute and the availability, reliability, and capability objective of the mitigating systems cornerstone. The chronic leakage problem resulted in an increased unavailability of one train of the high pressure safety injection system during the periods of time when the system was aligned to fill the SITs. This finding was assessed in accordance with NRC Manual Chapter 0609, Appendix A, Attachment 1, "Significance Determination Process for Reactor Inspection Findings for At-Power Situations," and was determined to be of very low safety significance (Green) since the removal of the HPSI train from service to refill the SIT did not result in a complete loss of the HPSI system function and was within the TS allowed outage time.

Enforcement. 10 CFR 50 Appendix B, Criterion XVI, "Corrective Action," requires, in part, that measures shall be established to assure that conditions adverse to quality are promptly identified and corrected. Contrary to this requirement, the licensee failed to take effective corrective actions to resolve multiple instances of loss of SIT level due to leakage in a timely manner. Because the loss of SIT level due to leakage was determined to be of very low safety significance and has been entered into the licensee's CAP (CR 04-01854), this violation is being treated as an NCV, consistent with Section VI.A of the NRC Enforcement Policy. **NCV 05000336/2004002-02; Failure to Correct Safety Injection Tank Leakage**

4OA6 Meetings, including Exit

The team presented the inspection results to Mr. J. Alan Price and other members of licensee management on February 26, 2004. Licensee management stated that none of the information reviewed by the inspectors was considered proprietary.

ATTACHMENT

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

M. Baldwin, Senior Engineer
J. Campbell, Manager, Nuclear Protection Services
T. Cleary, Senior Engineer
R. Donovan, Supervisor, Nuclear Procedures
T. Dubay, Shift Manager
J. Chadbourne, System Engineer
M. Gelinas, Coordinator, Nuclear Security Services
D. Guarneri, Technical Analyst
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R. Rogozinski, Senior Engineer
A. Vomastek, Employee Concerns Manager
V. Wessling, Supervisor, Nuclear Corrective Action
B. Wilkens, Manager, Nuclear Organizational Effectiveness

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened/Closed

05000336/2004002-01	NCV	Failure to Implement Adequate Design Control and Suitably Test a Modification to the Charging System (Section 4OA2.c.2.1)
05000336/2004002-02	NCV	Failure to Correct Safety Injection Tank Leakage (Section 4OA2.c.2.2)

LIST OF DOCUMENTS REVIEWED

Procedures

DNAP, Cause Evaluation Program, Rev. 0
MP-05-DC-FAP01.1, Developing and Modifying Procedures, Rev. 006-01
MP-08-LUB-SAP01, Lubrication Administration Guidance, Rev. 0
MP-16-CAP-FAP01.1, Condition Report Screening and Review, Rev. 6
MP-16-CAP-FAP01.3, CR Owner, Action Owner and Investigator Responsibilities, Rev. 8
MP-16-CAP-SAP01, Condition Report Initiation, Rev. 1
MP-16-MMM, Organizational Effectiveness, Rev. 9
MP-16-OE-FAP01, Operating Experience Evaluations, Rev. 0
MP-16-OE-SAP01, Operating Experience Program, Rev. 0
MP 2783, Charging Flow Pulsation Dampener, Rev. 000-02
SP 2663, Venting Charging Pump Stabilizers, Rev. 005-05
SPROC OPS03-2-02, Start of Unit 2 Charging Pumps, After Pulse Dampener Installation (IPTE), Rev. 000-02
WC9, Station Surveillance Program, Rev. 004-02

Condition Reports

CR-01-02022	CR-02-00834	CR-02-03644	CR-02-07420
CR-01-02222	CR-02-00876	CR-02-03701	CR-02-07502
CR-01-03649	CR-02-00977	CR-02-03713	CR-02-08090
CR-01-03858	CR-02-01280	CR-02-03825	CR-02-08250
CR-01-04090	CR-02-01293	CR-02-03858	CR-02-08390
CR-01-04870	CR-02-01320	CR-02-03871	CR-02-08391
CR-01-05179	CR-02-01750	CR-02-04363	CR-02-08430
CR-01-05474	CR-02-01786	CR-02-04431	CR-02-08467
CR-01-06120	CR-02-01804	CR-02-04525	CR-02-08606
CR-01-06420	CR-02-02025	CR-02-04698	CR-02-08851
CR-01-07456	CR-02-02125	CR-02-04790	CR-02-08950
CR-01-08811	CR-02-02162	CR-02-04976	CR-02-09044
CR-01-09415	CR-02-02244	CR-02-05058	CR-02-09226
CR-01-09486	CR-02-02308	CR-02-05188	CR-02-10018
CR-01-09486	CR-02-02414	CR-02-05233	CR-02-10189
CR-01-09604	CR-02-02529	CR-02-05342	CR-02-10359
CR-01-11749	CR-02-02536	CR-02-05356	CR-02-10886
CR-01-11975	CR-02-02546	CR-02-05527	CR-02-10909
CR-02-00363	CR-02-02686	CR-02-05785	CR-02-11461
CR-02-00434	CR-02-02797	CR-02-05945	CR-02-11539
CR-02-00467	CR-02-02816	CR-02-06054	CR-02-11541
CR-02-00553	CR-02-02827	CR-02-06232	CR-02-11727
CR-02-00577	CR-02-02831	CR-02-06506	CR-02-11761
CR-02-00768	CR-02-03063	CR-02-06605	CR-02-11905
CR-02-00794	CR-02-03354	CR-02-06824	CR-02-12051
CR-02-00795	CR-02-03511	CR-02-07000	CR-02-12052

CR-02-12102	CR-03-03359	CR-03-07944	CR-03-12189
CR-02-12532	CR-03-03414	CR-03-07980	CR-03-12194
CR-02-12766	CR-03-03537	CR-03-08051	CR-03-12853
CR-02-13045	CR-03-03611	CR-03-08142	CR-03-12942
CR-02-13121	CR-03-03745	CR-03-08278	CR-03-13025
CR-02-13621	CR-03-03790	CR-03-08305	CR-04-00235
CR-02-13689	CR-03-03960	CR-03-08583	CR-04-00277
CR-02-13705	CR-03-04046	CR-03-08589	CR-04-01118
CR-02-13724	CR-03-04090	CR-03-08823	CR-04-01301
CR-02-13770	CR-03-04095	CR-03-08906	CR-04-01353
CR-03-00142	CR-03-04142	CR-03-09039	CR-04-01380
CR-03-00260	CR-03-04403	CR-03-09399	CR-04-01393
CR-03-00538	CR-03-04433	CR-03-09437	CR-04-01508
CR-03-00917	CR-03-04521	CR-03-09580	CR-04-01519
CR-03-00920	CR-03-04620	CR-03-09838	CR-04-01647
CR-03-01001	CR-03-04633	CR-03-09855	CR-04-01675
CR-03-01294	CR-03-05011	CR-03-10021	CR-04-01676
CR-03-01408	CR-03-05204	CR-03-10036	CR-04-01696
CR-03-02032	CR-03-05259	CR-03-10072	CR-04-01856
CR-03-02242	CR-03-05403	CR-03-10443	M2-99-2530
CR-03-02305	CR-03-05484	CR-03-10552	M2-99-2804
CR-03-02381	CR-03-05516	CR-03-10737	M3-96-0496
CR-03-02395	CR-03-05722	CR-03-10845	M3-96-0497
CR-03-02416	CR-03-05861	CR-03-10950	M3-96-0620
CR-03-02426	CR-03-05863	CR-03-11073	M3-96-1441
CR-03-02598	CR-03-06354	CR-03-11356	M3-98-0975
CR-03-02598	CR-03-06951	CR-03-11798	M3-98-1872
CR-03-02716	CR-03-07111	CR-03-11837	M3-98-2055
CR-03-02795	CR-03-07623	CR-03-12035	M3-98-2740
CR-03-03083	CR-03-07815	CR-03-12076	M3-99-0152
CR-03-03295	CR-03-07831		

Operating Experience

Generic Letter 89-08	Erosion/Corrosion-Induced Pipe Wall Thinning
Information Notice 88-23	Potential for Gas Binding of HPSI Pumps During a LOCA
INPO O&MR 435	Unanticipated Feedwater Pipe Wall Thinning from Flow-Accelerated Corrosion
Information Notice 97-78	Crediting of Operator Actions In Place of Automatic Actions, Including Response Times
Information Notice 98-43	Leaks In Emergency Diesel Generator Lubrication Oil and Jacket Cooling Water Piping
Information Notice 96-71	Licensee Response to Indications of Tampering, Vandalism, or Malicious Mischief

Information Notice 96-05 Inadequate Net Positive Suction Head of Emergency Core Cooling and Containment Heat Removal Pumps Under Design Basis Accident Conditions

Audits and Self-Assessments

MP-03-A02 Corrective Action and Operating Experience Audit,
Millstone Nuclear Oversight Audit Report, MP-02-A05, Corrective Action, 7/23/03
Emergency Preparedness, First Quarter 2003 Trend Report, 4/22/03
Nuclear Oversight - Millstone Site Vice President's Brief - 9/24/2003
Nuclear Oversight - Millstone Site Vice President's Brief - 11/20/2003
Nuclear Oversight - Millstone 2R15 Outage Assessment October - November 2003
MP-SA-03-38 Self-Assessment - Millstone Station Corrective Action Effectiveness
MP-SA-02-39 Self-Assessment - Corrective Action Program Effectiveness
MP-SA-03-46 Self-Assessment - Conduct of Operations
02-03892 Audit MP-02-A01 Finding adverse trend in operations document control, recurring performance issues with the operations controlled document libraries
02-02515 Audit Deficiency: Nuclear Operations Controlled Documents (Procedures and Forms) used during Tech Specs Surveillances not the latest revisions
02-06755 2002 CMAP Audit Team identified a deficiency with development of Station Procedures

System Health Reports, Trending Data, and Performance Data

System Engineer Health Report - Third Quarter 2003, Unit 2 High Pressure Safety Injection
System Engineer Health Report - Third Quarter 2003, Unit 2 Auxiliary Feedwater
System Engineer Health Report - Third Quarter 2003, Unit 2 Service Water
System Engineer Health Report - Third Quarter 2003, Unit 3 Auxiliary Feedwater
System Engineer Health Report - Third Quarter 2003, Unit 3 EDG and EDG Fuel Oil
System Engineer Health Report - Third Quarter 2003, Unit 3 Service Water
Millstone Station First Quarter 2003 Trend Report
Millstone Station Second Quarter 2003 Trend Report
SIT Level Trend Report, 1/1/2003 - 2/25/04

Work Orders

AWO M2-98-07934
AWO M2-01-15775
AWO M2-02-07365
AWO M2-02-09172
AWO M2-03-07599
AWO M2-03-10292

Miscellaneous

Flow Accelerated Corrosion Program Manual, Rev. 4
Technical Report No. 94174-TR-01, Rev. 0, Millstone Unit 3, "Guidelines for the Selection of Erosion/Corrosion Inspection Locations", March 1996
Security Report 03-0187, 10/21/2003

Materials Testing Laboratory Test Report Number 12-97-022, Examination of Lubrication Oil Piping from Millstone Unit 2 'A' Emergency Diesel Generator
DCR M2-03006, Design change package for installation of pulsation dampeners, Revision 0

LIST OF ACRONYMS USED

CAP	Corrective Action Program
CFR	Code of Federal Regulations
CR	Condition Report
DCR	Design Change Request
HPSI	High Pressure Safety Injection
IMC	Inspection Manual Chapter
LOCA	Loss of Coolant Accident
NCV	Non-Cited Violation
NRC	Nuclear Regulatory Commission
psig	Pounds per Square Inch - Gauge
RHR	Residual Heat Removal
ROP	Reactor Oversight Process
SDP	Significant Determination Process
SIT	Safety Injection Tank
SPAR	Standardized Plant Analysis Risk
TS	Technical Specification