



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION I  
475 ALLENDALE ROAD  
KING OF PRUSSIA, PA 19406-1415

November 30, 2010

Mr. David A. Heacock  
President and Chief Nuclear Officer  
Dominion Resources  
5000 Dominion Blvd.  
Glen Allen, VA 23060-6711

SUBJECT: MILLSTONE POWER STATION, UNITS 2 AND 3 – NRC EVALUATED  
EMERGENCY PREPAREDNESS EXERCISE – INSPECTION REPORT NOS.  
05000336/2010502 AND 05000423/2010502

Dear Mr. Heacock:

On October 22, 2010, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection of the October 19, 2010, evaluated emergency preparedness exercise at your Millstone Power Station, Units 2 and 3. The enclosed inspection report documents the inspection results, which were discussed on October 22, 2010, with Mr. A. J. Jordan, Millstone Site Vice President, and other members of your staff.

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

Based on the results of this inspection, no findings were identified.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure and your response (if any) will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of the NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.htm> (the Public Electronic Reading Room).

Sincerely,

A handwritten signature in black ink, appearing to read "Jim Trapp".

James M. Trapp, Chief  
Plant Support Branch 1  
Division of Reactor Safety

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

Enclosure: NRC Inspection Reports 05000336/2010502 and 05000423/2010502

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/RA/

James M. Trapp, Chief  
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SUNSI Review Complete: JMT (Reviewer's Initials)

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**U.S. NUCLEAR REGULATORY COMMISSION**

**REGION I**

Docket Nos.: 50-336, 50-423

License Nos.: DPR-65, NPF-49

Report Nos.: 05000336/2010502 and 05000423/2010502

Licensee: Dominion Nuclear Connecticut, Inc.

Facility: Millstone Nuclear Power Station, Units 2 and 3

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

Dates: October 18 - 22, 2010

Inspectors: S. Barr, Sr. Emergency Preparedness Inspector, DRS, Region I (Lead)  
S. LaVie, Sr. Emergency Preparedness Specialist, NSIR  
J. Laughlin, Emergency Preparedness Specialist, NSIR  
C. Crisden, Emergency Preparedness Inspector, DRS, Region I  
C. Douglas, Project Engineer, DRP, Region I  
J. Hawkins, Project Engineer, DRP, Region I

Approved By: James M. Trapp, Chief  
Plant Support Branch 1  
Division of Reactor Safety

## SUMMARY OF FINDINGS

IR 05000336/2010502, 05000423/2010502; 10/18/2010-10/22/2010; Millstone Power Station, Units 2 and 3; Emergency Preparedness Exercise Report.

This was an announced inspection conducted by four region-based inspectors and two headquarters-based inspectors. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4, dated December 2006.

### **Cornerstone: Emergency Preparedness**

No findings were identified.

## REPORT DETAILS

### 1. REACTOR SAFETY

Cornerstone: Emergency Preparedness (EP)

1EP1 Exercise Evaluation (71114.01 – 1 Sample)

#### a. Inspection Scope

Prior to the October 19, 2010, emergency preparedness exercise, the inspectors conducted an in-office review of the exercise objectives and scenario, submitted to the NRC by Dominion Nuclear Connecticut, Inc., to determine if the exercise would test major elements of the Millstone emergency plan as required by 10 CFR 50.47(b)(14). This overall exercise inspection activity represented the completion of one sample on a biennial cycle.

The exercise evaluation consisted of the following review and assessment:

- The adequacy of Millstone's performance in the biennial full-participation exercise regarding the implementation of the risk-significant planning standards (RSPS) described in 10 CFR 50.47(b)(4), (5), (9), and (10), which are: emergency classification; offsite notification; radiological assessment; and, protective action recommendations, respectively.
- The overall adequacy of Millstone's emergency response facilities with regard to NUREG-0696, "Functional Criteria for Emergency Response Facilities," and Emergency Plan commitments. The facilities assessed were the Control Room Simulator, Operational Support Center (OSC), Technical Support Center (TSC), and Emergency Operations Facility (EOF).
- A review of other performance areas, such as: the emergency response organization's (ERO's) recognition of abnormal plant conditions; command and control; intra- and inter-facility communications; prioritization of mitigating activities; utilization of repair and field monitoring teams; interface with offsite agencies; staffing and procedure adequacy; and, the overall implementation of the emergency plan and its implementing procedures.
- A review of past performance issues from the last NRC exercise inspection report and Millstone's EP drill reports, to determine the effectiveness of licensee corrective actions as demonstrated during the October 19<sup>th</sup> exercise and to ensure compliance with 10 CFR 50.47(b)(14).
- The licensee's post-exercise critiques, to evaluate Dominion's self-assessment of its ERO performance during the October 19<sup>th</sup> exercise and to ensure compliance with 10 CFR 50, Appendix E, Section IV.F.2.g.

The inspectors reviewed the documents listed in the attachment to this report.

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b. Findings

No findings were identified.

1EP4 Emergency Action Level (EAL) and Emergency Plan Changes (71114.04 – 1 Sample)

a. Inspection Scope

Since the last NRC inspection of this program area, Dominion implemented various changes to the Millstone Power Station Emergency Plan. Dominion determined that in accordance with 10 CFR 50.54(q), the changes resulted in no decrease in effectiveness of the Plan, and that the revised Plan continued to meet the requirements of 10 CFR 50.47(b) and Appendix E to 10 CFR 50. The inspectors reviewed all EAL changes made since August 2009, and conducted a sampling review of other Emergency Plan changes, including changes to lower-tier emergency plan implementing procedures, to evaluate for any potential decreases in effectiveness of the Emergency Plan. However, this review was not documented in a Safety Evaluation Report and does not constitute formal NRC approval of the changes. Therefore, these changes remain subject to future NRC inspection in their entirety.

b. Findings

No findings were identified.

**4. OTHER ACTIVITIES (OA)**

4OA1 Performance Indicator (PI) Verification (71151 – 3 Samples)

a. Inspection Scope

The inspectors reviewed data for the Millstone EP PIs, which are: (1) Drill and Exercise Performance (DEP); (2) Emergency Response Organization (ERO) Drill Participation; and, (3) Alert and Notification System (ANS) Reliability. The last EP inspection at Millstone was conducted in the third quarter of 2009, so the inspectors reviewed supporting documentation from EP drills and tests from third quarter 2009 through third quarter 2010 to verify the accuracy of the reported PI data. The review of these PIs was conducted in accordance with NRC Inspection Procedure 71151, using the acceptance criteria documented in NEI 99-02, "Regulatory Assessment Performance Indicator Guidelines," Revision 6.

This inspection activity represented the completion of three samples on an annual cycle.

b. Findings

No findings were identified.

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40A6 Meetings, Including Exit

On October 22, 2010, the inspectors presented the results of this inspection to Mr. A. J. Jordan, Millstone Site Vice President, and other members of the Millstone staff. No proprietary information was provided to the inspectors during this inspection.



**ATTACHMENT**  
**SUPPLEMENTAL INFORMATION**  
**KEY POINTS OF CONTACT**

**Licensee Personnel**

A. J. Jordan, Millstone Site Vice President  
D. Smith, Millstone Emergency Preparedness Manager

**LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED**

None

**LIST OF DOCUMENTS REVIEWED**

**Section 1EP1: Exercise Evaluation**

Millstone Power Station Emergency Plan (Revision 41)  
Millstone Power Station Emergency Plan Implementing Procedures  
Millstone Power Station Emergency Plan Administrative Procedures  
Millstone Power Station October 19, 2010, Emergency Exercise Scenario Package  
Millstone Power Station Emergency Preparedness Drill Reports, January 2009 – September 2010  
Condition Reports Submitted as a Result of the Exercise:  
CR399716, CR399726, CR399861, CR400033, CR400037, CR400167, CR402269,  
CR402274, CR402309, CR402860, CR403030, CR403034, CR403037, CR403039,  
CR403040, CR403041, CR403042

**Section 1EP4: Emergency Action Level and Emergency Plan Changes**

Millstone Power Station Emergency Plan (Revision 41)  
EP-AA-101, 10 CFR 50.54(q) Change Evaluation (Revision 1)  
EP-AA-303, Equipment Important to Emergency Response (Revision 1)  
MP-26-EPA-FAP01, Management Program for Maintaining Emergency Preparedness (Revision 6)  
MP-26-EPA-FAP04, Emergency Action Level Table Revision (Revision 1)  
MP-26-EPA-FAP06, Emergency Plan Change Process (Revision 4)  
10 CFR 50.54(q) Screening Packages: MP-09-21, MP-09-23, MP-09-24, MP-09-25, MP-09-26,  
MP-10-01 through MP-10-39

**Section 4OA1: Performance Indicator Verification**

EN-EP-201, Performance Indicators (Revision 10)  
DNAP-2605, Emergency Preparedness Performance Indicators (Revision 10)  
DEP PI data, July 2009 – October 2010  
ERO Drill Participation PI data, July 2009 – October 2010  
ANS Reliability PI data, July 2009 – October 2010

**LIST OF ACRONYMS**

ANS	Alert Notification System
CFR	Code of Federal Regulations
CR	Condition Report
DEP	Drill and Exercise Performance
EAL	Emergency Action Level
EOF	Emergency Operations Facility
EP	Emergency Preparedness
ERO	Emergency Response Organization
NEI	Nuclear Energy Institute
NRC	Nuclear Regulatory Commission
OSC	Operations Support Center
PI	Performance Indicator
RSPS	Risk Significant Planning Standard
TSC	Technical Support Center