October 26, 2004

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

SUBJECT: MILLSTONE POWER STATION - NRC EVALUATED EMERGENCY

PREPAREDNESS EXERCISE - INSPECTION REPORT NOS.

05000336/2004016 & 05000423/2004016

Dear Mr. Christian:

On September 16, 2004, the US Nuclear Regulatory Commission (NRC) completed an inspection at your Millstone Power Station. The enclosed inspection report documents the inspection findings which were discussed on September 16, 2004 with Mr. A. Price 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 of significance were identified.

In accordance with 10CFR2.390 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 NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

/RA/

Richard J. Conte, Chief Operational Safety Branch Division of Reactor Safety

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

Enclosure: Inspection Report Nos. 05000336/2004016 & 05000423/2004016

w/Attachment: Supplemental Information

cc w/encl:

- J. A. Price, Site Vice President Millstone
- 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
- W. Meinert, Massachusetts Municipal Wholesale Electric Company

First Selectmen, Town of Waterford

- V. Juliano, Waterford Library
- J. Markowicz, 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
- D. Bell, FEMA, Region I

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DATE	10/05/04	10/18/04	10/26/04	

U. S. NUCLEAR REGULATORY COMMISSION REGION I

REGION I

Docket Nos: 50-336 and 50-423

License Nos: DPR-65 and NPF-49

Report Nos: 05000336&423/2004-016

Licensee: Dominion Nuclear Connecticut, Inc.

Facility: Millstone Power Station

Location: P.O. Box 128

Waterford, CT 06385

Dates: September 13 - 16, 2004

Inspectors: D. Silk, Sr. Emergency Preparedness Inspector, Division of Reactor

Safety (DRS), (Lead)

N. McNamara, Emergency Preparedness Inspector, Division of Reactor

Safety (DRS)

S. Kennedy, Resident Inspector, Millstone, DRP

J. Williams, Operations Engineer, DRS

Observer: J. Lillendahl, Reactor Engineer, DRS

Approved by: Richard J. Conte, Chief

Operational Safety Branch Division of Reactor Safety

SUMMARY OF FINDINGS

IR 05000336/2004-016 and 05000423/2004-016; 09/13-16/2004; Millstone Power Station. Emergency Preparedness Exercise. Emergency Performance Indicators.

This inspection was conducted by region-based inspectors and the resident inspector. No findings of significance were identified using IMC 0609, Significance Determination Process (SDP). 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 Findings

Cornerstone: Emergency Preparedness

None.

B. <u>Licensee-Identified Findings</u>

None.

ii Enclosure

Report Details

1. REACTOR SAFETY

Cornerstone: Emergency Preparedness (EP)

1EP1 Exercise Evaluation (71114.01)

a. Inspection Scope

Prior to the exercise, an in-office review was conducted of the exercise objectives and scenario submitted to the NRC to determine if the exercise would test major elements of the emergency plan as required by 10 CFR 50.47(b)(14). This inspection activity represents the completion of one sample on a biennial cycle.

The onsite inspection consisted of the following review and assessment:

- The adequacy of Dominion's performance in the biennial full-participation exercise regarding the implementation of the risk-significant planning standards (RSPS) in 10 CFR 50.47 (b) (4), (5), (9) & (10) which are emergency classification, offsite notification, radiological assessment, and protective action recommendations, respectively.
- The overall adequacy of Dominion's emergency response facilities with regard to NUREG-0696, "Functional Criteria for Emergency Response Facilities" and Emergency Plan commitments. The facilities assessed were the simulator control room, Technical Support Center (TSC), Operations Support Center (OSC), and the Emergency Operations Facility (EOF).
- Other performance areas besides the RSPS, such as the emergency response organization's (ERO) recognition of abnormal plant conditions, command and control, intra- and inter-facility communications, prioritization of mitigation activities, utilization of repair and field monitoring teams, interface with offsite agencies, and the overall implementation of the emergency plan and its implementing procedures.
- Past performance issues from NRC inspection reports and Dominion's drill reports to determine effectiveness of corrective actions as demonstrated during this exercise to ensure compliance with 10CFR50.47(b)(14).
- The post-exercise debriefs and critique to evaluate Dominion's self-assessment of its ERO performance during the exercise and to ensure compliance with 10CFR50 Appendix E.IV.F.2.g.

The inspectors reviewed various documents which are listed in Attachment 1 to this report.

b. Findings

A potential finding was identified during the licensee's September 16, 2004, exercise critique in which an inaccurate PAR was not critiqued by the licensee. The PAR accuracy issue pertained to the decision to not recommend potassium iodine (KI) for the public in the PAR notification associated with the general emergency declaration. The KI recommendation was included in an upgraded PAR. This issue is unresolved pending NRC review of the applicability of the significance determination process for a PAR involving KI.

Prior to the exercise, the inspectors discussed the process for recommending KI as a PAR with the licensee's EP staff. The licensee stated that KI recommendations are based on radiological information such as, radiation monitor readings and/or offsite dose readings. The licensee stated that if that information was available and verified at the time of the general emergency (GE) declaration, the players would have to consider it for including KI as part of the initial PAR. If the information was not available, the recommendation for KI would be issued as a subsequent PAR upgrade.

During the exercise, the dose assessment team quickly identified that containment radiation monitors had significantly increased and were simultaneously informed by an offsite field team of a high dose reading (2R/hr) within the site boundary. The dose assessment team immediately performed a dose projection based on that information and calculated a 21R/hr thyroid CDE dose at the site boundary. In accordance to the PAR flowchart (Procedure MP-26-EPI-FAP06-006) "If thyroid CDE >5 REM at site boundary, recommend state officials implement KI." However, the licensee did not include the recommendation for KI in their initial PAR. The GE was declared at 1117. The projection results were available at 1120. The GE and PAR notifications were completed at 1122 and 1123, respectively. The licensee's upgraded PAR notification, which included the KI recommendation, occurred at 1137.

The inspector observed that there was no sense of urgency in reviewing the initial dose projection calculation for assessing the information to be included in the initial PAR. The first dose projection calculation was completed three minutes following the GE declaration. The Manager Radiological Dose Assessment (MRDA) did not promptly ensure that the initial projection was quickly reviewed even though the results were verbally announced by the dose assessor at the time when the initial calculation was completed. The MDRA informed the Assistant Director Emergency Operations Facility (ADEOF) that this calculation had not been confirmed. The ADEOF did not inquire about the status of the confirmation so that he could make an informed decision about including the KI recommendation with the initial PAR. The licensee has 15 minutes following a GE declaration to deliver a PAR to the offsite agencies. The licensee issued an initial PAR (not including KI) only six minutes after the GE declaration. The decision to not include the KI recommendation was made on the basis that the initial dose projection calculation had not been confirmed. The KI recommendation was delivered to offsite agencies as an upgrade PAR 14 minutes following the first PAR. The licensee did not critique this performance issue of ensuring that a timely review of all available information was incorporated into the initial PAR.

The NRC is considering this issue as an Unresolved Item (URI 50-336,423/04-16-01) pending NRC's review of the significance of KI as a PAR as it relates to this issue.

4. OTHER ACTIVITIES (OA)

4OA1 Performance Indicator (PI) Verification (71151)

a. <u>Inspection Scope</u>

The inspectors reviewed the licensee's procedure for developing the data for the EP PIs which are: (1) Drill and Exercise Performance (DEP); (2) ERO Drill Participation; and (3) ANS Reliability. The inspector reviewed supporting documentation from drills in 2003 and 2004 drill and ANS testing data to verify the accuracy of the reported data. Data generated between the January 2003 and June 30, 2004 (last reported quarter) was reviewed during this inspection. The review of these performance indicators was conducted in accordance with NRC Inspection Procedure 71151. The acceptance criteria used for the review were 10 CFR 50.9 and NEI 99-02, Revision 2, Regulatory Assessment Performance Indicator Guidelines.

b. <u>Findings</u>

No findings of significance were identified.

4OA2 Identification and Resolution of Problems (71152: PI&R Sample)

a. Inspection Scope

The inspectors reviewed Dominion's critique findings as documented in condition reports from 2002 through 2004. This review was conducted to determine if significant performance trends exist and to determine the effectiveness of licensee corrective actions based upon ERO performance during this exercise. The inspectors verified that issues identified during this exercise were entered into Dominion's corrective action program and are listed in an attachment to this report. The inspector also reviewed the licensee's evaluation of the August 14, 2003 blackout event as far as its impact upon the EP program. The inspection was conducted in accordance with NRC Inspection Procedure 71114, Attachment 01; 10 CFR 50.47(b)(14); and Appendix E IV.F.2.g were used as reference criteria

b. Findings and Observations

No findings of significance were identified.

40A6 Meetings, Including Exit

The inspectors presented the inspection results to Alan Price, Site Vice President, and other members of the licensee's staff at the conclusion of the inspection on September 16, 2004. The licensee had no objections to the NRC observations. No proprietary information was provided to the inspectors during this inspection.

A-1

ATTACHMENT

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

- P. Luckey, Emergency Preparedness Manager
- T. Ridney, Emergency Preparedness staff

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened, Closed, Discussed

05000336, 423/2004016-01 URI

Timely review of available dose projection information to be incorporated into a PAR

LIST OF DOCUMENTS REVIEWED

Section 1EP1: Exercise Evaluation

Millstone Power Station Emergency Plan **Emergency Plan Implementing Procedures**

Section 40A1:Performance Indicator Verification

Emergency Planning Performance Indicators, MP-26-EPA-GDL01, Rev 2

Section 40A2: Identification and Resolution of Problems

AR 03006983

AR 03006037

Combined Functional Drill 03-01 (Unit 3), March 6,13,27, 2003, Training Drill Series

Combined Functional Drill 03-01 (Unit 3), April 8, 2003, Off-year Exercise Rehearsal Report

Combined Functional Drill 03-02 (Unit 3), April 24, 2003, Off-year Exercise Report

Combined Functional Drill 03-04 (Unit ½) Training Drills

Combined Functional Drill 04-01 (Unit 2), Ongoing Self-Assessment Drill Report

LIST OF ACRONYMS

ADEOF Assistant Director Emergency Operations Facility

ANS Alert and Notification System
CFR Code of Federal Regulations
EAL Emergency Action Level

ERO Emergency Response Organization EOF Emergency Operations Facility EP Emergency Preparedness

ERO Emergency Response Organization

GE General Emergency KI Potassium Iodine

MRDA Manager Radiological Dose Assessment

OSC Operations Support Center PI Performance Indicator

RSPS Risk Significant Planning Standard

TSC Technical Support Center