

April 18, 1997

Mr. Bruce D. Kenyon  
President and Chief Executive Officer  
Northeast Nuclear Energy Company  
c/o Terry Harpster  
P.O. Box 128  
Waterford, Connecticut 06385-0128

SUBJECT: NRC INSPECTION REPORT NO. 50-245/96-13 (REPLY)

Dear Mr. Kenyon:

This refers to your March 26, 1997 correspondence, in response to our letter, dated on February 3, 1997. Your response addressed the Notice of Violation, identified in the subject inspection report, which involved failure to establish and implement procedures required by Section 6.8 of the Technical Specification to verify ventilation system performance as described in: (1) Section 9.4.6 of the Unit 1 UFSAR (maintaining at about -0.1" of water for the Turbine Building Area Ventilation Differential Pressure); (2) Section 9.4.8 of the Unit 1 UFSAR (maintaining at about -0.25" of water for the Steam Tunnel Ventilation System); and (3) Sections 9.4.4 and 9.4.5 of UFSAR of the Unit 1 (air supply 10,900 scfm to the Radwaste Building and 3,350 scfm to the Radwaste Storage Building).

We have reviewed your assessment and planned corrective actions, which include: (1) developing test procedures for the turbine building, radwaste building, and radwaste storage building ventilation systems; (2) validating the UFSAR design for the turbine building, radwaste building, and radwaste storage building ventilation systems; and (3) installing a pressure gauge outside of the steam tunnel to allow logging of the steam tunnel ventilation negative pressure. We understand that the corrective measures identified in your response will be completed before restarting the unit. Accordingly, we consider the actions you have taken or planned to be acceptable and will review the effectiveness of these actions in a future inspection.

We appreciate your cooperation.

Sincerely,

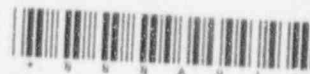
*Original Signed  
By*

John R. White, Chief  
Radiation Safety Branch  
Division of Reactor Safety

Docket No. 50-245

*IEO*

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cc:

N. S. Carns, Senior Vice President and Chief Nuclear Officer  
P. Loftus, Director - Regulatory Affairs for Millstone Station  
J. McElwain, Unit 1 Recovery Officer  
D. M. Goebel, Vice President, Nuclear Oversight  
J. K. Thayer, Recovery Officer, Nuclear Engineering and Support  
P. D. Hinnenkamp, Director, Unit Operations  
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J. Stanziewicz, Training Recovery Manager  
R. Johannes, Director - Nuclear Training  
L. M. Cuoco, Esquire  
J. R. Egan, Esquire  
V. Juliano, Waterford Library  
Department of Public Utility Control  
S. B. Comley, We The People  
State of Connecticut SLO Designee  
D. Katz, Citizens Awareness Network (CAN)  
R. Bassilakis, CAN  
J. M. Block, Attorney, CAN  
S. P. Luxton, Citizens Regulatory Commission (CRC)  
Representative Terry Concannon  
E. Woollacott, Co-Chairman, NEA

Mr. Bruce D. Kenyon

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Distribution:

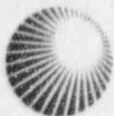
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W. Lanning, Deputy Director of Inspections, SPO, RI  
M. Kalamon, SPO, RI  
NRC Resident Inspector  
Nuclear Safety Information Center (NSIC)  
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J. Jang, RI

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**Northeast  
Nuclear Energy**

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The Northeast Utilities System

**MAR 26 1997**  
Docket No. 50-245

B16307

Re: 10CFR2.201

U.S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, DC 20555

Millstone Nuclear Power Station, Unit No. 1  
Reply to Notice of Violation 50-245/96-13-01  
Procedures Involving Ventilation Systems  
Inspection 50-245/96-13; 50-336/96-13; 50-423/96-13

In a letter dated February 3, 1997,<sup>(1)</sup> the NRC transmitted the results of an inspection conducted at the Millstone Station from November 12, 1996 through November 22, 1996. The NRC Inspection Report concluded that certain of our activities at Millstone Unit No. 1 appeared to be in violation of NRC requirements.

It was determined that Northeast Nuclear Energy Company (NNECO) did not establish and implement procedures as required by Technical Specification 6.8 to verify ventilation system performance relative to air balance, as described in the Unit 1 UFSAR for the following areas: radwaste building, radwaste storage building, turbine building, and steam tunnel.

On behalf of Millstone Unit No. 1, Attachment 1 provides NNECO's reply to the Notice of Violation.

<sup>(1)</sup> John R. White letter to Bruce D. Kenyon, "NRC Combined Inspection Report 50-245/96-13; 50-336/96-13; 50-423/96-13; and Notice of Violation," dated February 3, 1997.

Commitments

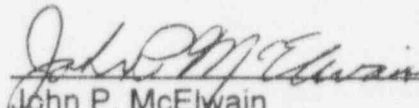
The following are NNECO's commitments within this letter. All other statements are for information only.

- B16307-1 NNECO will validate the UFSAR design for the turbine building, radwaste building, and radwaste storage building ventilation systems prior to reactor restart.
- B16307-2 NNECO will establish procedures or processes to ensure the turbine building, radwaste building, and radwaste storage building ventilation systems are operated in accordance with the UFSAR prior to reactor restart.
- B16307-3 NNECO will install a pressure gauge outside of the steam tunnel to allow logging of the steam tunnel ventilation negative pressure during reactor operation prior to reactor restart.

On March 12, 1997, Mr. R. Walpole requested on behalf of Millstone Unit No. 1, an extension to respond to the Notice of Violation until March 26, 1997. This request was granted by Mr. J. Durr. Please contact Mr. R. Walpole at (860) 440-2191 should you have any questions regarding this submittal.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

  
\_\_\_\_\_  
John P. McElwain  
Millstone Unit No. 1 Recovery Officer

Attachments (1)

cc: H. J. Miller, Region I Administrator  
Dr. W. D. Travers, Director, Special Projects Office  
W. D. Lanning, Director, Millstone Assessment Team  
S. Dembek, NRC Project Manager, Millstone Unit No. 1  
T. A. Easlick, Senior Resident Inspector, Millstone Unit No. 1

Docket No. 50-245  
B16307

Attachment 1

Millstone Unit No. 1

Reply to Notice of Violation 50-245/96-13-01

March 1997

### **Restatement of Violation**

Section 6.8 of the Unit 1 Technical Specification (TS) requires, in part, that written procedures shall be established, implemented, and maintained covering the activities recommended in Appendix A of Regulatory Guide 1.33 (RG 1.33), February 1978. Appendix A of the RG 1.33, "Typical Procedures for Pressurized Water Reactors and Boiling Water Reactors," describes typical procedures for the control of radioactivity, including procedures involving ventilation systems relative to limiting personnel exposure and releases to the environment.

Section 9.4.6 of the UFSAR, "Turbine Building Area Ventilation Differential Pressure," states that the area should be maintained at a negative pressure (about 0.1" of water) to avoid any release of potentially contaminated air through turbine building vents or doors. Section 9.4.8 of the UFSAR, "Steam Tunnel Ventilation System," indicates that differential pressure should be maintained at a negative pressure (about 0.25" of water) to ensure that there will be no inadvertent ground level release. Sections 9.4.4 and 9.4.5 of the UFSAR describe the design basis relative to ventilation air supply, including 10,900 scfm to the Radwaste Building Ventilation and 3,350 scfm to the Radwaste Storage Buildings.

Contrary to the Section 6.8 TS requirements, as of November 22, 1996, the licensee failed to establish and implement procedures to verify that: (1) the design basis relative to air balance affecting the turbine building area ventilation system and the steam tunnel ventilation system was maintained at a negative pressure, as described by the UFSAR; and (2) the design basis relative to ventilation air supply involving the Radwaste and Radwaste Storage Buildings was maintained as described by the UFSAR.

This is a Severity Level IV Violation (Supplement IV).

### **Reason for the Violation**

Northeast Nuclear Energy Company (NNECO) agrees that the operation of the steam tunnel ventilation system is not currently monitored and represents a violation of the facility license. The steam tunnel ventilation system is required by the safety analysis to maintain a 0.25 inch negative pressure prior to operation of the Standby Gas Treatment System (SGTS) during a Design Basis Accident. The description of the steam tunnel ventilation system in the UFSAR, section 9.4.8, requires the system to maintain a slightly negative pressure of -0.25 inches of water when compared to the outside atmosphere. The requirement to monitor the negative pressure in the steam tunnel during steam tunnel ventilation system operation is not currently performed since no instrumentation exists in the current facility design to perform this surveillance.



For the remaining three systems contained in the violation, NNECO agrees that the UFSAR contains information for which procedures or processes should be developed to ensure compliance. The scope of design requirements for these systems will be validated during the 10CFR50.54(f) review process.

The turbine building, radwaste building, and the radwaste storage building ventilation systems provide air that is filtered and heated to maintain an adequate working environment in each building. In addition, each system is arranged to provide supply air flow to the clean areas of the building and exhaust air from any potentially contaminated areas of the building to limit the potential spread of airborne contamination. These systems function to support the radiological controls program for the facility and to maintain building habitability. They do not have a safety function, and the negative pressure in these areas do not support a safety system such as the Standby Gas Treatment System. This position is consistent with "SEP Topic IX-5, Ventilation Systems Millstone Nuclear Power Station Unit 1," dated September 14, 1982, which concludes that the radwaste building and the radwaste storage building ventilation systems are not essential. In addition, the only safety related HVAC equipment in the turbine building is the recirculation coolers servicing the condensate and feedwater pump areas.

Cause:

The cause of the violation for the turbine building, radwaste building, and the radwaste storage building ventilation systems is failure to ensure procedures and processes exist to operate the facility in accordance with the UFSAR.

The cause of the violation for the steam tunnel ventilation system is failure to identify the safety analysis assumption of zero draw down time when operation of the SGTS is required to support secondary containment. The steam tunnel ventilation system safety function is to isolate when the SGTS system initiates. NNECO did not identify that the operation of this system supports an initial condition of zero draw down time for the secondary containment during an accident condition.

Contributing Factors:

The current Technical Specifications for Millstone Unit No. 1 require surveillance of the secondary containment integrity of the steam tunnel in conjunction with the reactor building by operating the SGTS. The additional surveillance requirement for monitoring secondary containment pressure during reactor power operation included in the General Electric Standard Technical Specifications is not part of the current Technical Specifications for Millstone Unit No. 1.



### **Corrective Steps That Have Been Taken and Results Achieved**

To ensure compliance with the negative pressure requirement during RFO 15 refueling operations, the steam tunnel will not be isolated from the reactor building since there is no potential for a HELB event. Therefore, the steam tunnel pressure is monitored as part of the reactor building pressure. NNECO is in full compliance with the steam tunnel HELB doors open.

### **Corrective Actions That Will Be Taken**

NNECO has initiated a design modification package to install a permanent local differential pressure gauge for the steam tunnel. The gauge will be accessible during reactor power operation. When the steam tunnel is isolated from the reactor building by the HELB doors, the gauge will allow logging of the negative pressure in the steam tunnel.

The design modification package to install the local gauge for the steam tunnel pressure will be completed prior to reactor restart. The modification package will include revision of an operator log to record the steam tunnel pressure during operation. The Technical Requirements Manual will be revised to specify the steam tunnel differential pressure in addition to the reactor building pressure. The minimum pressure limit for the local gauge will ensure that the pressure in the steam tunnel is at least -0.25 inches of water during reactor power operation.

The current design description of the turbine building and the radwaste facilities ventilation systems in the UFSAR has not been validated. NNECO will validate the design of these systems during the 10CFR50.54(f) review process. Additionally, the design for the radwaste building will be modified as part of the Radwaste Remediation project. The performance of these three systems will be verified and maintained by procedures or processes to ensure that these systems are operated in accordance with the UFSAR.

### **Date When Full Compliance Will Be Achieved**

NNECO is currently in compliance based on monitoring of the reactor building pressure which is common to the steam tunnel pressure. NNECO will be in compliance for reactor power operation prior to reactor restart.