

Northeast
Nuclear Energy

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The Northeast Utilities System

May 12, 1997

Docket No. 50-336

B16418

Re: 10CFR2.201

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

Millstone Nuclear Power Station, Unit No. 2
Facility Operating License No. DPR-65
Reply to Notice of Violation 336/97-01-09
Inspection 50-336/97-01

In a letter dated April 11, 1997,⁽¹⁾ the NRC transmitted the results of an inspection conducted at the Millstone Station from January 1, 1997 through March 10, 1997. The NRC Inspection Report concluded that in three cases, radiological worker practices at Millstone Unit No. 2 were not in accordance with the radiation protection program. In two cases, workers entered a Radiological Controlled Area (RCA) without having signed in on the Radiation Work Permit (RWP), and without an electronic dosimeter. The third case involved a fire watch who entered the RCA with an electronic dosimeter that was not turned on, and upon discovery of the condition, remained in the RCA with a non-functioning electronic dosimeter until relieved. These three cases of improper radiological worker practices were not in accordance with 10CFR 20.1101 and the radiation protection program.

Improper radiological worker practices have continued to occur at Millstone Unit No. 2. Five additional occurrences have been self identified since the end of 50-336/97-01 reporting period, March 10, 1997. A common cause analysis has been completed, and corrective actions for the three events identified in the Notice of Violation are being implemented. As a result of additional events a root cause analysis will be performed to determine appropriate additional corrective actions.

Those events are considered collectively as a significant weakness in the implementation of the radiation protection program. Strong management attention is required and is being given. This included a Unit 2 stand down on May 5, 1997, for the reinforcement and endorsement of the radiation protection program.

⁽¹⁾ Jacques P. Durr to Bruce D. Kenyon, "NRC Combined Inspection 50-245/97-01; 50-336/97-01; 50-423/97-01 and Notice of Violation," dated April 11, 1997.

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Attachment 1 provides NNECO's reply to the Notice of Violation pursuant to the provisions of 10CFR2.201.

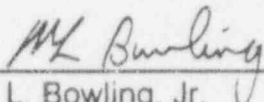
Commitments

The following are NNECO's commitments associated with this response:

B16418-1 NNECO will perform a root cause analysis for the events cited in the violation and subsequent events to determine appropriate additional corrective actions. The results of this root cause analysis, including the additional corrective actions will be provided to the NRC by July 11, 1997.

Should you have any questions regarding this submittal, please contact Mr. Ravi Joshi at (860) 440-2080.

NORTHEAST NUCLEAR ENERGY COMPANY



Martin L. Bowling, Jr.
Millstone Unit No. 2 Recovery Officer

Attachments (1)

cc: H. J. Miller, Region I Administrator
D. G. McDonald, Jr., NRC Project Manager, Millstone Unit No. 2
D. P. Beaulieu, Senior Resident Inspector, Millstone Unit No. 2
W. D. Travers, PhD, Director, Special Projects Office
J. P. Durr, Inspectors, Special Projects Office

Docket No. 50-336
B16418

Attachment 1

Millstone Unit No. 2

Facility Operating License No. DPR-65
Reply to Notice of Violation 336/97-01-09
NRC Combined Inspection Report
50-245/97-01, 50-336/97-01 and 50-423/97-01

May 1997

Restatement of Violation

Title 10, Code of Federal Regulations, Part 20.1101 (10 CFR 20.1101) requires, in part, that licensees develop and implement a radiation protection program. Paragraph 1.1 of procedure RPM 5.22, "Basic Radiation Worker Responsibilities," requires, in part, that workers entering the radiologically controlled areas (RCAs) comply with instructions provided by the unit radiation protection staff, including that contained in radiation work permits (RWPs). All Unit 2 entries to the RCA require that individuals be signed in on a general or specific radiation work permit (RWP) and wear a functioning digital alarming dosimeter.

Contrary to the above, at Unit 2, twice on January 16, 1997, and once on January 25, 1997, personnel entered the RCA without having signed in on a general or specific RWP and without wearing a functional electronic dosimeter.

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

Reason for the Violation and Causes

Northeast Nuclear Energy Company (NNECO) does not dispute the cited violation. This violation was caused by inadequate human performance.

Contributing Factors

The contributing factors to the improper radiological worker practices are:

Management expectations concerning the importance of proper radiological work practices were not clearly communicated, nor were the consequences of failure to comply with radiological worker requirements.

Radiological Worker training was weak in providing workers the necessary depth of training that would reinforce radiological worker requirements. Continued access events involving improper dosimetry issues indicate that training enhancements would help prevent recurrence of improper radiological worker practices.

Multiple entry points into the RCA were not monitored by Health Physics. Unmonitored entry points left workers vulnerable to human error.

Corrective steps that have been taken and the results achieved

NNECO has taken several steps to reinforce management expectations regarding radiological work practices. Additionally, we have instituted several additional barriers to failed human performance. Our actions to date include:

1. All normal entries into the Unit 2 Auxiliary Building are now made via a single entry point. Other access points to the Auxiliary Building have been closed to normal radiological worker traffic.
2. The Auxiliary Building RCA entrance door has been painted bright yellow with a magenta Tri-foil symbol and black letters that state: **RCA ENTRANCE**.
3. A "greeter", during day shift (heavy traffic) hours, has been stationed outside the Auxiliary Building access point to watch personnel as they enter the RCA and help ensure they are logged into an RWP with an active electronic dosimeter.
4. Electronic dosimeters are returned after each exit from the RCA. Exceptions are limited to only those individuals who need secondary monitoring to complete an in-progress task that takes them from one RCA directly into another.
5. Individuals are required to be briefed by Health Physics upon each RCA entry during day shift (heavy traffic) hours. Provisions have been made for back shift hours to brief Operations personnel during the control room shift briefing, at the beginning of the shift. Personal briefings on back shift will occur during normal outages, or when RCA traffic increases.
6. RCA familiarization tours are available for personnel at their request by the Health Physics department.
7. New employees are briefed on Health Physics expectations and provided with explicit instructions on RCA entry, protocol and dosimetry requirements.
8. Personnel briefings regarding management's expectations of basic access requirements have been conducted. Although not all personnel having access to the Millstone Unit 2 RCA have been briefed, all Millstone Unit 2 Departments have been briefed.
9. Articles have been placed into Millstone 2 Today, a news periodical, to remind workers about their RCA responsibilities and management's expectations.

In spite of the corrective actions that have been taken, improper radiological worker practices have continued to occur at Millstone, Unit No. 2. Five additional occurrences have been self identified since the end of 50-336/97-01 reporting period, March 10, 1997.

Three events occurred while the corrective actions were being implemented, and two of the events occurred after the corrective actions were taken. The corrective actions for the three events identified in the Notice of Violation and subsequent events are being implemented, and a root cause analysis will be performed to determine appropriate additional corrective actions. The root cause analysis may result in modifying the existing corrective actions. Results of the root cause analysis, including the additional corrective actions, will be provided to the NRC by July 11, 1997.

Corrective Steps That Will be Taken

NNECO will perform a root cause analysis for the events cited in the violation and subsequent events to determine appropriate additional corrective actions. The results of this root cause analysis, including the additional corrective actions, will be provided to the NRC by July 11, 1997.

NNECO is currently in full compliance with procedure RPM 5.2.2, "Basic Radiation Worker Responsibilities."