

NORTHEAST UTILITIES



THE CONNECTICUT LIGHT AND POWER COMPANY
WESTERN MASSACHUSETTS ELECTRIC COMPANY
HOLYOKE WATER POWER COMPANY
NORTHEAST UTILITIES SERVICE COMPANY
NORTHEAST NUCLEAR ENERGY COMPANY

General Offices • Seiden Street, Berlin, Connecticut

P.O. BOX 270
HARTFORD, CONNECTICUT 06141-0270
(203) 665-5000

October 2, 1989

Docket No. 50-245

A08262

Re: 10CFR2.201

Director, Office of Enforcement
U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555

Gentlemen:

Millstone Nuclear Power Station, Unit No. 1
Reply to a Notice of Violation (EA 89-124)

By letter dated August 31, 1989, ⁽¹⁾ the NRC transmitted its Notice of Violation relating to Inspection Report No. 50-245/89-13. The inspection was conducted on May 17 and 18, 1989 at the Millstone Nuclear Power Station to review the apparent inadequate controls which led to release of contaminated hydrolazer equipment from the Millstone site.

Pursuant to 10CFR2.201, Northeast Nuclear Energy Company (NNECO) is providing its response to the subject Notice of Violation (NOV). This response is included in Attachment 1.

In the assessment of the violation, the Staff expressed concern with the failure to establish adequate procedural controls of radioactive material and suggested that the violations demonstrated the need for improved planning, review, and control of those activities involving contaminated material.

NNECO agrees with the NRC's conclusion that certain procedures were not adequate (1) to prevent the inadvertent contamination of the hydrolazer equipment and (2) to detect and control the contaminated hydrolazer. NNECO also agrees, as a separate issue under Title 49 of the Code of Federal Regulations, that the contaminated hydrolazer was transported without adequate examination or testing, involved contamination in excess of 49CFR173.443, Table 10 limits, and was not accompanied by adequate shipping papers describing the material.

Notwithstanding the above discussion, NNECO believes that this event was not significant with respect to the actual consequences because of the low level of contamination. Moreover, because the hydrolazer was not identified as

(1) W. T. Russell letter to E. J. Mroczka, "Notice of Violation and Proposed Imposition of Civil Penalty," dated August 31, 1989.

*IEIA w/ check
\$25,000
1/1 #21571*

being contaminated, it did not become subject to the controls of the program for transportation of radioactive materials, and therefore, is not indicative of a weakness in NNECO's transportation program.

In addition, NNECO wishes to clarify one point discussed in the NOV transmittal letter regarding the unexpected contamination of five hoses. Specifically, the letter states, in part:

Since contamination of this number of hoses was not expected during use, management should have concluded that additional investigation and examination..., was warranted prior to release of the equipment from the site...

This statement would lead one to believe that NNECO failed to thoroughly evaluate the available information when the five contaminated hoses were identified. However, this was not the case. NNECO's decision not to investigate further was based on analysis of the plant setting and on a scenario which had a high probability of causing the level of contamination. The specifics of the analysis and decision making process were discussed in detail at the Enforcement Conference of June 21, 1989. It was NNECO's understanding that the Staff understood that this decision was supported by logic and experience.

We also wish to point out that management review of proposed work activities, which is normally very effective at Millstone Station, was identified by NNECO at the Enforcement Conference as not effective in this case, and was in fact a contributor to the event. Station management promptly addressed this issue with the Plant Operations Review Committee (PORC) in order to prevent recurrence.

The NOV cites two violations. The first is a Technical Specification violation for failure to have adequate procedures for contamination control and the second, consisting of three subparts, cites Department of Transportation violations. These violations have been categorized in the aggregate as a single Severity Level III violation pursuant to Supplement IV and V of the Enforcement Policy.

It is NNECO's understanding that the NRC's intent is to assess the penalty for the single Severity Level III violation based on Supplement IV, Health Physics, rather than Supplement V, Transportation. Contrary to the above, the NOV states that the \$25,000 cumulative civil penalty is assessed equally among the violations. Legally construed on its face, the NOV implies that each of the two individual violations is assessed a penalty of \$12,500. As the Staff is aware, Supplement V limits violations involving less than Type A quantities to \$5,000. Therefore, \$12,500 for the transportation violation would not be appropriate. It appears that the Staff did not intend to assess the \$25,000 penalty equally among the two individual violations as stated in the NOV. If you disagree with our understanding, we respectfully request a written

U.S. Nuclear Regulatory Commission
A08262/Page 3
October 2, 1989

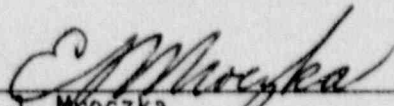
response detailing the proper breakdown of the civil penalty and further request the opportunity to answer the subject NOV pursuant to 10CFR2.205.

In summary, NNECO shares the Staff's conclusion that comprehensive corrective actions are necessary to improve control of radioactive material at Millstone Station. Accordingly, we have instituted timely and comprehensive corrective actions to address the immediate concerns and to proactively address other potentially affected areas involving radioactive materials control. We believe that our corrective actions, both completed and ongoing, will help ensure that future examples of these deficiencies do not occur and will also assist in our discovery of any prior activities that may have resulted in inadequate control of other potentially contaminated equipment.

After careful consideration of this matter, we have elected to enclose a check in the amount of \$25,000, in complete payment of the proposed civil penalty. We trust you will find our response to the subject violation satisfactory. Should you have any questions concerning this matter, please contact us.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

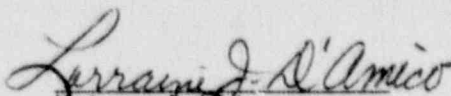


E. J. Mroczka
Senior Vice President

cc: W. T. Russell, Region I Administrator
M. L. Boyle, NRC Project Manager, Millstone Unit No. 1
W. J. Raymond, Senior Resident Inspector, Millstone Unit Nos. 1, 2, and 3

STATE OF CONNECTICUT)
) ss. Berlin
COUNTY OF HARTFORD)

Then personally appeared before me, E. J. Mroczka, who being duly sworn, did state that he is Senior Vice President of Northeast Nuclear Energy Company, a Licensee herein, that he is authorized to execute and file the foregoing information in the name and on behalf of the Licensees herein, and that the statements contained in said information are true and correct to the best of his knowledge and belief.



Notary Public
My Commission Expires March 31, 1993

Docket No. 50-245
A08262

Attachment 1

Millstone Nuclear Power Station, Unit No. 1
Reply to a Notice of Violation (EA 89-124)

October 1989

1. Description of Violations

- I. Millstone Unit No. 1 Technical Specification 6.8, Procedures, requires, in part, that written procedures be established, implemented and maintained covering the applicable procedures recommended in Appendix "A" of Regulatory Guide 1.33, February 1978.

Appendix "A" of Regulatory Guide 1.33, February 1978, Section VII.e(4) recommends, in part, that contamination control procedures be established.

Contrary to the above, on May 8 and 10, 1989, a high pressure water pump was used at Millstone Unit No. 1 without adequate procedures for contamination control. Specifically, the work was performed using Spec. Proc. 89-1-18, Rev. 0, dated May 2, 1989, "Decontamination of Reactor Cavity," and the procedures did not contain precautions or other provisions to ensure that (1) radioactivity would not be released from the Radiation Controlled Area (RCA) during the hydrolaze operation and (2) inadvertent radioactive contamination of hydrolaze equipment would be detected and controlled. The operation resulted in the release of radioactive material from the RCA to the hydrolaze equipment located in an unrestricted area via hoses (connected to the equipment) that had been submerged in the flooded reactor cavity.

- II. 10 CFR 71.5(a) states, in part, that "Each licensee who transports licensed material outside the confines of its plant...shall comply with the applicable requirements of the regulations appropriate to the mode of transport of DOT in 49 CFR Parts 170 through 189."

- A. 49 CFR 173.475 requires, in part, that "before each shipment of any radioactive materials package, the shipper shall ensure by examination or appropriate tests that...contamination levels are within the allowable limits specified in this subchapter."

Contrary to the above, on May 11, 1989, a contaminated high pressure pump and trailer were shipped from Millstone Unit No. 1 to a vendor in Moorestown, New Jersey, without an examination or appropriate test being performed to ensure that contamination levels were within the allowable limits specified.

- B. 49 CFR 173.443(a) requires, in part, that "the amount of radioactivity measured on any single wiping material when averaged over the surface wiped shall not exceed the limits given in Table 10 of 49 CFR 173 at any time during transport" (22 dpm/cm² for beta-gamma emitting radionuclides).

Contrary to the above, on May 11, 1989, a high pressure pump and trailer were shipped from Millstone Unit 1 to Moorestown, New Jersey, and at the time, the pump and trailer were contaminated with levels of removable radioactive contamination of up to 260 dpm/cm² for beta-gamma emitting radionuclides when averaged over the surface wiped, which is in excess of the limits given in Table 10 of 49 CFR 173.

- C. 49 CFR 172.200(a) requires, in part, that "each person who offers a hazardous material for transportation shall describe the hazardous material on the shipping paper in the manner required by this subpart" (49 CFR 172 Subpart C).

Contrary to the above, on May 11, 1989, a high pressure pump and trailer were shipped from Millstone Unit No. 1 to a vendor in Moorestown, New Jersey, and although the pump and trailer had surface contamination, they were not accompanied by a shipping paper describing the hazardous material.

2. Response to the Violations

NNECO agrees that the violations occurred as stated in the Notice of Violation. (1)

3. Reasons for the Violations

Millstone procedures SHP 4917, "Unconditional Radiological Release of Material for Unrestricted Use" and HP905/2905/3905, "Control and Accountability of Radioactive Material" provide instructions for controlling and accounting for radioactive material and provide a means for the unconditional release of material from contaminated areas for unrestricted use. These procedures did not effectively deal with the contamination of the hydrolazer trailer in that they did not adequately address situations in which an unanticipated flow path from a contaminated to a noncontaminated area could exist. In addition, in this particular instance, the Plant Operations Review Committee (PORC) did not postulate that this type of contamination could occur and, therefore, did not require that the issue be addressed in the appropriate procedure.

4. Corrective Steps Taken and the Results Achieved

NNECO took immediate actions to address the root cause and related areas of concern in that:

(1) However, please see the cover letter for a discussion concerning assessment of the civil penalty "equally among the violations."

- A. NNECO management became immediately involved in resolving deficiencies by conducting several meetings between the Health Physics Supervisor and all Radiation Protection Supervisors to discuss the scope of the event and obtain input for prompt programmatic and specific actions.
- B. A program was promptly implemented to survey all vehicles leaving the protected areas.
- C. The Station Superintendent promptly issued a memorandum to all members of the three Millstone PORCs to emphasize that comprehensive evaluations of contractor procedures be performed and that "what if" possibilities are adequately considered. NNECO also forwarded the memo to the Haddam Neck Station Superintendent to ensure that the Connecticut Yankee Atomic Power Company is also aware of the need for increased attention in this regard.
- D. To make other utilities aware of the possibility of such an unanticipated contamination occurrence, a NUCLEAR NETWORK entry was issued.

5. Corrective Steps to Prevent Future Violations

As previously stated, several short-term steps were taken. In addition, long-term activities to prevent future occurrences of similar violations or violations with similar root causes have been initiated. Procedural revisions, and realignment and restating of responsibilities should minimize the likelihood of recurrence. The upgraded radiological control practices which are currently in place, would have precluded contaminated material from being unconditionally released from the protected area. Specific long-term corrective actions which NNECO has undertaken include:

- A. A comprehensive review of the entire program for release and control of radiological material was initiated. As a result of this review, the following actions have been taken.
 - i. Health Physics is now responsible for surveying all items leaving the radiological control area (RCA) to provide the unconditional release.
 - ii. Health Physics is now responsible to co-sign all property passes that allow the removal of items from the Millstone site.
 - iii. The station procedure which controls the work process is being revised to ensure Health Physics involvement before and after support equipment is connected to a contaminated system.
 - iv. The program for surveying vehicles leaving the protected area has been strengthened through procedural controls.

- B. A survey of all potentially contaminated materials, such as tools and equipment which had been in the RCA, was initiated to determine the full effect of programmatic deficiencies. The survey included "clean" storage areas within the protected area, as well as an offsite warehouse. As a result, contaminated tools and a hydrolazer were identified as exceeding release limits. An informational License Event Report (LER) will be submitted under separate cover. In addition, a Task Force has been formed by NNECO management to expand the review of potential contamination control weaknesses to the entire NU system, to determine whether additional broad scope corrective actions are required. As part of this effort, NNECO will evaluate any potential impacts resulting from inadvertent exposures to contaminated equipment.
- C. State-of-the-art tool/equipment monitoring devices are currently undergoing field testing and evaluation. Automated trash frisking devices have been ordered.

6. Date When Full Compliance Will Be Achieved

As discussed in Item 4 above, NNECO's initial corrective actions were implemented immediately. However, ongoing program enhancements will continue to be implemented, as necessary, to minimize the likelihood of the occurrence of similar deficiencies. We consider our current program to be in compliance and acceptable, although the longer term corrective actions will serve to strengthen it.