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

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November 25, 1992

Docket Nos. 50-245
50-336
B14292

Re: 10CFR2.201

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

Gentlemen:

Millstone Nuclear Power Station, Unit Nos. 1 and 2
Reply to a Notice of Violation
Inspection Report Nos. 50-245/92-22; 50-336/92-25;
and 50-423/92-20

On October 16, 1992,[1] the NRC Staff transmitted the results of a safety inspection conducted at the Millstone Nuclear Power Station from July 26, 1992, through September 7, 1992. The NRC Staff identified two Severity Level IV violations for Millstone Unit No. 1 and one Severity Level IV violation for Millstone Unit No. 2.

As required by 10CFR2.201, Attachment 1 describes in detail the reasons associated with the violations, the corrective steps that have been and will continue to be taken to avoid further violations, and the dates when full compliance was achieved. This reply is being forwarded 30 days from the date of receipt, as was agreed by Northeast Nuclear Energy Company (NNECO) and the NRC Staff during a telephone conversation on November 12, 1992.

It should be noted that in addition to the attached response to violation "C", NNECO is conducting further assessment of this situation in order to confirm that the corrective actions identified will provide adequate assurance that similar violations will not occur. NNECO will provide the Staff with any pertinent information resulting from this additional review.

(1) A. R. Blough letter to J. F. Opeka, "Millstone Combined Inspection 50-245/92-22; 50-336/92-25; 50-423/92-20," dated October 16, 1992.

IE01

If you have any questions regarding the information contained in this letter, please contact us.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

FOR: J. F. Opeka
Executive Vice President

BY: E. A. DeBarba
E. A. DeBarba
Vice President

cc: T. T. Martin, Region I Administrator
J. W. Andersen, NRC Acting Project Manager, Millstone Unit No. 1
G. S. Vissing, NRC Project Manager, Millstone Unit No. 2
P. D. Swetland, Senior Resident Inspector, Millstone Unit Nos. 1, 2 and 3

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Attachment 1

Millstone Nuclear Power Station, Unit Nos. 1 and 2

Reply to a Notice of Violation

November 1992

Mil'stone Nuclear Power Station, Unit No. 1 and 2
Reply to a Notice of Violation

A. Description of Violation

10 CFR 50 Appendix B, Criterion VII (Control of Purchased Material, Equipment, and Services) requires, in part, that measures be established to assure that purchased services conform to purchase requirements. These measures shall include provisions for source evaluation and selection, and examination of products upon delivery.

Nuclear Engineering and Operations (NEO) Procedure 6.02, "Quality Purchase Requisitions," Section 6.5 requires, in part, that services be procured on a quality purchase requisition when the service is applicable to safety-related equipment. Quality Services Department (QSD) Procedure 3.02, "Supplier Evaluation," Section 6.1 requires, in part, that procurement vendor services personnel perform an evaluation of a supplier when a need is established for use of a supplier not on the approved supplier list.

Contrary to the above, during July and August 1992, a purchase requisition was not issued prior to using engineering service procured from Saul Levy Incorporated (SLI) to perform analyses on safety-related systems and components. Additionally, procurement vendor services had not performed an evaluation of SLI prior to NRC identification that SLI was not listed on NNECO's approved supplier list.

This is a Severity Level IV Violation (Supplement I). This violation applies to Unit 1 only.

1. Reason for the Violation

A root cause investigation revealed that inadequate understanding of, and adherence to, Northeast Utilities (NU) purchase order review and approval process requirements, which are outlined in NEO 6.02, was the reason for the above violation. Adherence to NEO 6.02 and appropriate processing of the required purchase order would have resulted in conduct of the necessary inspection/surveillance/audit of SLI during performance of the actual work, per Section 6.1.3. With regard to the portion of the violation which cites QSD Procedure 3.02 as having been improperly implemented, it should be noted that it was not NNECO's intention to place SLI on the approved supplier list, but to utilize SLI's services on a one-time basis. QSD Procedure 3.02 is only applicable when a supplier is intended to be placed on the approved supplier list, and, therefore, was not implemented. As such, NEO 6.02 was the appropriate procedure to be followed in this situation. QSD-2.03 entitled, "Performance Reporting and Follow-up of Surveillance Activities," was employed

prior to the start of work in order to assess the vendor's capabilities. Results were provided in Surveillance Report S05620, completed on July 16, 1992 and recommended that a follow-up inspection/surveillance/audit be conducted during the period when actual work was being performed. As noted above, proper adherence to NEO 6.02 would have assured that this activity took place.

2. Corrective Steps Taken and Results Achieved

On August 10, 1992, it was discovered that the follow-up activity, recommended per Surveillance Report S05620, had not yet been conducted at SLI. Immediately following this discovery, a quality assurance audit was arranged for and conducted by Northeast Utilities Service Company's (NUSCO) Engineering and Quality Services Department personnel at the SLI headquarters in Campbell, California on August 11 and 12, 1992.

On August 10, 1992, directly following identification of the above-mentioned situation, it became evident that there was no purchase order for the ongoing SLI work. Purchase Requisition E-59830 was immediately issued and followed by Purchase Order 238359 on August 12, 1992. In parallel, a satisfactory audit was completed at SLI to verify the necessary requirements. It should be noted that no modifications to operable plant equipment were made and no credit was taken for work performed by SLI prior to satisfactory completion of this audit.

3. Corrective Steps Taken to Prevent Future Violations

This violation was discussed at the Nuclear Engineering Services Division staff meeting and at the monthly Engineering Department meeting, with the intention of notifying individuals of the importance of strict adherence to procedures. Corrective Action Request 92-08 was initiated on August 12, 1992 by the Director of the Quality Services Department to investigate the circumstances surrounding this situation. The Corrective Action Request was completed on October 20, 1992. A root cause investigation was also completed by NUSCO Electrical, and Instrumentation and Control Engineering Departments on September 30, 1992. Based on the information and conclusions derived from the Corrective Action Request 92-08 and the Root Cause Investigation Report, a Procedure Action Request has been initiated to revise NEO 6.02 to help alleviate any possible misunderstanding of the provisions of NEO 6.02. This is targeted to be completed by the end of June 1993. Additionally, the Nuclear Training Department has been made aware of this situation and will determine whether changes to existing procurement process training are appropriate.

4. Date When Full Compliance will be Achieved

Full compliance with existing NU purchase order requirements was achieved on August 12, 1992, upon completion of the supplier audit of Saul Levy Incorporated and subsequent issuance of Purchase Order 238359.

5. Generic Implications

A memorandum from the Executive Vice President will be distributed to all Nuclear Engineering and Operations personnel stressing the importance of adherence to purchasing requirements.

B. Description of Violation

The Millstone Nuclear Power Station Physical Security Plan, Revision 16, dated March 1992, Section 11.5, "General Construction Activities," requires, in part, that when large equipment movement and other construction-related activities take place within protected or vital areas, compensatory measures are to be taken to assure security is not diminished. These compensatory measures include the use of watchmen for surveillance, closed circuit television, escorts, and other temporary cordons.

Contrary to the above, for a period of about 50 hours between August 8 and August 11, 1992, the licensee failed to establish and maintain adequate compensatory measures for the extended vital area boundary in Unit 2.

This is a Severity Level IV Violation (Supplement III). This violation applies to Unit 2 only.

1. Reason for Violation

The reason appropriate compensatory security measures were not adequately maintained around the extended vital area boundary at Millstone Unit No. 2 is attributed to the failure of the security officers and field supervision to effectively monitor and respond to the changing events associated with the unusual vital area configuration. Post orders given by security supervision in the above scenario did not specifically identify the field of view for each compensatory post, so that when equipment movement obstructed the view, individual officers assumed the area in question was visible from another location.

2. Corrective Steps Taken and Results Achieved

An additional security officer was immediately posted, as appropriate, when the violation was identified. The expanded vital

area boundary was in the process of being restored to the normal configuration at the time of discovery. The restoration was completed within an hour.

A joint search of all non-contaminated areas in the Millstone Unit No. 2 containment building was conducted by Security and Operations Department personnel. No unauthorized activities were detected. At the time of this event, the unit was in Mode 6 with the core off-loaded, and there was no equipment in the containment building that could be considered vital for protection of the plant or public health and safety.

3. Corrective Actions Taken to Prevent Future Violations

Security post orders were rewritten to include specific details to eliminate any potential inadequacies prior to expanding the vital area boundary for the Unit No. 2 steam generator replacement activities.

Memoranda were issued to all licensee and contractor security supervisory personnel involved in the violation. A review of the event and a restatement of their performance standards and expectations was included. This was completed on August 26, 1992.

An instructional guide was issued to all security contractor supervisory personnel delineating the requirements and responsibilities associated with conducting security officer post inspections. This was completed on August 26, 1992.

A revision to contractor security supervisory personnel rotation schedule was implemented. This revision created a dedicated field supervisor to conduct post/officer inspections for the entire duration of each shift. Prior to this change, the field supervisor position rotated four (4) times a shift. This change was initiated on August 26, 1992.

The process for creating and changing security post orders was modified. Security Department Instruction 111, "Post Orders Log," has been modified to delineate the specific actions required for post order creation/changes. This instruction requires a review by the Security Department Administrative Review Committee prior to implementing changes, except in exigent circumstances. Emergency changes require the security shift supervisor and security shift commanding officer, at a minimum, to approve changes, with a follow-up review by the Administrative Review Committee. This change was completed on October 15, 1992.

A memorandum was issued to all security personnel, detailing the event and reemphasizing the need to maintain vigilance and

attentiveness while on duty and to maintain a questioning attitude about the effectiveness of security measures. This was completed on November 6, 1992.

4. Date When Full Compliance Will Be Achieved

Full compliance to Millstone Nuclear Power Station Physical Security Plan, Revision 16, was achieved on August 11, 1992, upon the immediate posting of additional security officers at the expanded vital area boundary.

5. Generic Implications

NNECO will convey the lessons learned from this violation to the Security Department at the Haddam Neck Plant.

C. Description of Violation

10CFR50 Appendix B, Criterion III (Design Control) requires that measures be established for the selection and review for suitability of application of materials, parts, and equipment that are essential to the safety-related functions of the structures, systems, and components.

The Northeast Utilities Quality Assurance Program, Paragraph 3.2.1, requires that standard "off the shelf" commercial or previously approved items essential to the quality functions be selected and reviewed for suitability of application.

Administrative Control Procedure (ACP) QA-4.03A, "Upgrading Spare Parts for Use in QA Application -- Commercial Grade Item Procurement and Dedication," implements the above and delineates the requirements for the specification, procurement, acceptance, and handling of the procurement and dedication of commercial grade items for safety-related applications. ACP-QA-4.03A requires that Standard Form 1417 be completed documenting the dedication evaluation, including identifying critical characteristics and acceptance methods for verifying critical characteristics.

Contrary to the above,

- The new commercial grade motor and gearbox, installed on the "A" emergency service water strainer (ESW) in September 1991, were not dedicated, as required by procedure ACP QA-4.03A, prior to installation.

- The replacement strainer body, installed in the "A" train of ESW in August 1991, was accepted based on an inadequate dedication in that the commercial grade pressure boundary materials and weld wire used in fabricating the strainer body were accepted without verifying the

validity of the commercial grade certified material test reports as required by procedure ACP-QA-4.03A.

This is a Severity Level IV violation (Supplement I). This violation applies to Unit 1 only.

1. Reason for the Violation

- The reason for the lack of proper dedication of the ESW strainer motor and gearbox prior to installation, was failure of the personnel involved in the dedication process to adequately follow the requirements of procedure ACP QA-4.03A.

- NU's program addressed the direct procurement of Nuclear Operation Defective Items List (NODIL) items, however, it did not provide any specific guidance for NODIL items being provided by a second or third tier supplier. As a result of this inspection item, NU has recognized this to be a potential (although minor) path for unacceptable materials intrusion into the nuclear plants. NU's source inspection and receipt inspection procedures require inspection for signs of fraudulent items and provide guidelines for the identification of fraudulent items established by the NUMARC Procurement Initiative.

  With respect to material dedication inadequacies identified during the inspection, NNECO believes that the actual measures taken to assure suitability of application met ANSI N18.7 provisions and, therefore, satisfied 10CFR50 Appendix B requirements. Specifically, from July 19—27, 1991, NUSCO Procurement Vendor Services conducted Source Inspection I04787 at S. P. Kinney of Carnegie, Pennsylvania, per the provisions of Purchase Order 936538. The scope of this activity was to ensure that the items being procured were supplied in accordance with the specified requirements. An inspection plan was generated utilizing the purchase order, referenced standards, and Commercial Grade Dedication Form MP1-0740. This method of vendor control is governed by 10CFR50 Appendix B, through the NU Quality Assurance Program Topical Report and implementing Procedure QSDI-PR-1.02, as well as ACP QA-4.03A.

  As specified in the dedication plan, material was identified as a critical characteristic. Verification of this attribute was based on a review of certified material test reports against the material specification combined with a programmatic review to assure that the vendor controlled his sub-suppliers. This was done through an evaluation of applicable S. P. Kinney audits, material control, and inspection practices to ensure all materials associated with the manufacturer of the strainer

were acceptable. No unsatisfactory conditions were identified. Consequently, reasonable assurance was attained, and no further validation was deemed necessary.

2. Corrective Steps Taken and Results Achieved

- NCR 1-92-156 documents the acceptable commercial upgrade of the replacement motor and gear box. The NCR verified that the analysis and inspection previously performed during the installation of the new motor and gear box, per PDCR 1-240-91, satisfied the key elements of the commercial grade dedication process.

- NCR 1-92-157 was initiated to provide further assurance of the ESW strainer flange material because this was the only material identified as being supplied by a NODIL vendor.

3. Corrective Steps Taken to Avoid Future Violations

- NEO 6.11 entitled, "Commercial Grade Items" was revised and became effective on July 1, 1992. This procedure now requires that all dedication activities be controlled by the Procurement Engineering Department. The Procurement Engineering Department is fully cognizant of the requirement of ACP QA-4.03A.

- Implementing procedures governing both source inspections and receipt inspection have been revised to provide guidance for NUSCO inspectors to investigate/evaluate materials from third party sources with respect to the NODIL.

4. Date When Full Compliance Was Achieved

Full compliance was achieved when NCR 1-92-156 and NCR 1-92-157 were dispositioned on September 22, 1992, and September 4, 1992, respectively.

5. Generic Implications

Ongoing assessments of this incident will address any associated generic implications.