

# 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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April 9, 1990

Docket Nos. 50-245

50-336

50-423

B13461

Re: 10CFR50.72/73

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

- Reference:
- (1) U.S. Nuclear Regulatory Commission, Region I, Inspection Report No. 50-423/89-23, dated February 26, 1990.
  - (2) U.S. Nuclear Regulatory Commission, Region I, Inspection Report No. 50-336/89-24, dated March 9, 1990.
  - (3) Northeast Nuclear Energy Company letter to U.S. Nuclear Regulatory Commission, Millstone Unit No. 1, LER No. 89-022-00, dated December 15, 1989.

Gentlemen:

Millstone Nuclear Power Station, Unit Nos. 1, 2, and 3  
Timely Evaluation and Reporting of Potential Problems

This letter responds to the U.S. Nuclear Regulatory Commission (NRC) concerns about timely notification and reporting.

In Reference (1) the NRC identified the Millstone Unit No. 3 apparent untimely notification and reporting of potential problems with the 4160-volt fast bus transfer scheme. In Reference (2) the NRC identified the Millstone Unit No. 2 notification and reporting of an air check valve in the service water system. Both inspection reports requested (1) Northeast Nuclear Energy Company's (NNECO) assessment of when the problems should have been reported, and (2) the steps which have been or will be taken to assure timely notification and reporting. In addition to these two examples, there is a third example which involves the Millstone Unit No. 1 Feedwater Coolant Injection System (FWCI). This was reported to the NRC in Reference (3). Our response addresses all of these examples together since there are similar timeliness elements in each case, and we have gained additional insights by considering them collectively.

We wish to note that Reference (1) requested a response by March 26, 1990, and Reference (2) requested a response by April 9, 1990. NNECO personnel discussed our plans to submit a comprehensive response with the NRC Senior

Resident Inspector for the Millstone site on March 13, 1990, and March 23, 1990. It was agreed that a combined response would be due on April 9, 1990, and that it would also be appropriate to address the Millstone Unit No. 1 FWC issue in this response even though a response has not been requested in an NRC inspection report as of this time. Attachments 1, 2, and 3 to this letter provide detailed information and specific corrective action for each of the Millstone Unit Nos. 1, 2, and 3 concerns, respectively.

Representatives of NNECO and Northeast Utilities Service Company (NUSCO) met with the NRC Senior Resident Inspector for the Millstone Station and other NRC personnel on March 13, 1990, to review our reporting policies, timeliness concerns, procedures, and improvements. We found this meeting to be very productive and mutually beneficial. The discussion provided below highlights the more important information that was reviewed at that meeting.

As a matter of corporate policy that has been widely promulgated, NU actively encourages employees to identify and report potential safety issues, and we recognize that prompt identification, investigation, and resolution of all safety concerns is a matter of the highest priority.

The reporting determinations on the three subject issues were conducted under a corporate procedure, NEO 2.25, "Identification and Implementation of NRC Reporting Requirements." This procedure has been in place for approximately 2½ years to supplement the station procedures on reporting requirements which had been in place for many years. The timeliness of all reporting evaluations (REFs) that have been performed under this procedure was reviewed. It was found that with few exceptions, the reporting evaluations were conducted in a timely manner. However, the timeliness has been an area of heightened emphasis over the last six months, and we have seen significant timeliness improvements.

Because the NEO 2.25 procedure is relatively new, we have monitored its use very closely and have made improvements to it. A number of additional improvements were recently made, and an updated procedure was approved on April 4, 1990. We had the opportunity to review these planned improvements with the NRC Senior Resident Inspector for the Millstone Station and with other NRC personnel in the above-noted meeting at the station on March 13, 1990.

As further corrective action, we are considering additional training on reporting for corporate and station personnel. This includes a reporting guidance document that is being revised to provide more consistency to the process. We will keep the NRC Senior Resident Inspector for the Millstone Station informed of our plans in this area.

In summary, we agree with the NRC concern that the reporting evaluations that were conducted under NEO 2.25 could have been initiated at an earlier time. If this were done, a final determination under NEO 2.25 would have been made earlier. We also believe that the heightened attention in this area and the

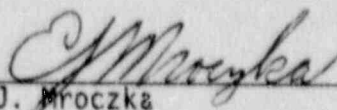
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procedural improvements that have been made will minimize the potential for any future delays in initiating a reporting determination.

We trust this information is responsive to your requests.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

  
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E. J. Mroczka  
Senior Vice President

cc: T. T. Martin, Region I Administrator  
M. L. Boyle, NRC Project Manager, Millstone Unit No. 1  
G. S. Vissing, NRC Project Manager, Millstone Unit No. 2  
D. H. Jaffe, NRC Project Manager, Millstone Unit No. 3  
W. J. Raymond, Senior Resident Inspector, Millstone Unit Nos. 1, 2, and 3



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Attachment I

Millstone Nuclear Power Station, Unit No. 1

Feedwater Coolant Injection

April 1990

Millstone Nuclear Power Station, Unit No. 1  
Feedwater Coolant Injection

The Feedwater Coolant Injection (FWCI) system was declared administratively inoperable on November 17, 1989, and was reported to the U.S. Nuclear Regulatory Commission (NRC) via LER-89-022-00 on December 15, 1989. This issue was reviewed by Northeast Utilities personnel for timeliness and any corrective measures that may be warranted as a result of that assessment.

In June of 1989 a meeting was held between the Millstone Unit No. 1 staff and personnel from Northeast Utilities Service Company (NUSCO) to discuss various issues regarding the feedwater pump minimum recirculation flow valves. The minimum recirculation flow valves are designed to fail open upon loss of air, thus providing pump protection when being restarted or if a downstream valve should fail closed. Of interest during this meeting was the desire for the minimum flow valves to be subsequently closed upon loss of control air, thus ensuring that adequate FWCI flow is directed into the reactor vessel.

With this concern in mind, the meeting participants concluded that a reliability enhancement in the form of air accumulators for the minimum flow valve operators would be prudent. During the meeting, system flow capability was discussed. The participants determined that there was no concrete information that inadequate flow would exist and that there was no need to initiate a reportability determination at that time. In lieu of performing a lengthy and expensive analysis that would have confirmed whether they were needed, it was decided to pursue installation of the air accumulators. The air accumulators could be installed in a more timely manner, at a lower cost and provide a tangible benefit in reliability that an analysis would not. Following the June meeting, the reliability enhancements were pursued in an expedited manner.

During a later review of the plant design change to add the air accumulators to the minimum flow valve operators, it was realized that operability of the system may be in question. Accordingly, corporate procedures were initiated in order to evaluate and document the operability of this equipment. As the evaluation proceeded it was realized that a thorough Operability Determination would require substantial time and resources. There was a high degree of confidence that the FWCI system would deliver more than enough emergency core cooling system (ECCS) flow to the vessel, even if the minimum flow valves failed open. However, adequate pump NPSH could not be assured, so plant management took the conservative action of administratively declaring the FWCI system inoperable.

For corrective action, the plant design change, which was initiated in June 1989, was completed and the air accumulators were installed during the Technical Specification limiting condition for operation time period of seven days. NNECO believes that if a reportability evaluation were initiated following the June meeting, as it should have been, NNECO would have reached an earlier

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conclusion as to whether the condition was reportable. We believe that once the reportability evaluation was initiated, the reporting procedures were complied with. The need to conservatively initiate operability determinations and reportability determinations has been discussed with key personnel involved in this issue both at the station and in the corporate office.

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Attachment II

Millstone Nuclear Power Station, Unit No. 2

Service Water Air Check Valve

April 1990



Millstone Nuclear Power Station, Unit No. 2  
Service Water Air Check Valve

The incorrectly installed check valve in the air supply to the SW isolation valve was reported to the U.S. Nuclear Regulatory Commission (NRC) in LER-89-011 on January 5, 1990. This issue has been reviewed for timeliness of reporting and any corrective measures which may be warranted as a result of that assessment.

As stated in the NRC Inspection Report 50-336/89-24, the Instrument Air (IA) check valve deficiency was identified on September 6, 1989. The initial determination as documented in the Plant Incident Report (PIR) No. 89-93, dated September 8, was that the condition was not reportable.

From a nuclear safety viewpoint, it is important to recognize that the mislocation of the check valve was corrected almost immediately, resolving potential safety concerns during operation. This was and remains the highest priority in all aspects of our operation. The issue of concern is a timeliness one, regarding an event for which there were different viewpoints as to its reportability. There were extensive discussions between site personnel and the corporate office which led to a reporting evaluation using corporate procedure NEO 2.25 (Identification and Implementation of NRC Reporting Requirements). This procedure defines a multidiscipline process whereby issues which might be reportable may be evaluated to determine if they should be reported. In this procedure it is the Unit Director's responsibility to make the determination as to whether a reportable event or condition exists. After a thorough and detailed analysis and a final review by the Unit Director, the issue was determined to be reportable on December 7, 1989. The LER for the Technical Specification was submitted to the NRC on January 5, 1990.

We acknowledge that this is an example of a reporting evaluation where our decisions could have been made earlier in time. In order to improve the timeliness of reporting, the need to conservatively initiate operability and reportability determinations has been discussed with key personnel involved in this issue both at the station and in the corporate office. We believe that after reviewing this issue, and having revised the reporting evaluation procedures, our performance will improve. We are committed to demonstrate that in the future by our actions.



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Attachment III

Millstone Nuclear Power Station, Unit No. 3

4160-Volt Fast Bus Transfer Design

April 1990

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Millstone Nuclear Power Station, Unit No. 3  
4160-Volt Fast Bus Transfer Design

The 4160-volt fast bus transfer design issue was reported to the U.S. Nuclear Regulatory Commission (NRC) in LER-89-030-00 on December 26, 1989. This issue was reviewed for timeliness and any corrective measures that may be warranted as a result of that assessment.

The NRC inspection report (Reference 1) contains a detailed discussion of the high-speed transfer design and the sequence of our analysis of this concern. The inspection report also contains positive comments regarding the comprehensive technical analysis and design assessment by the Northeast Utilities' corporate staff.

Northeast Nuclear Energy Company (NNECO) agrees with the NRC that the engineering conclusions which were documented in a July 6, 1989, memorandum did not substantively change after that date. We believe that a reportability evaluation could have been initiated as early as July 6, 1989. Instead, an evaluation was initiated on October 20, 1989. We believe that the delay in this unusual case was due in part to the continuing nature of our engineering evaluations and the industry lead work we were doing on this subject. NNECO's decision to report this was conservative in some respects. We know that an additional high-speed bus transfer is safe and thus the plant does not have an existing "condition that alone could have prevented the fulfillment of the safety functions. . . ." Nevertheless, if an evaluation were initiated on July 6, 1989, or immediately thereafter, as it should have been, NNECO would have reached a conclusion as to whether the design condition was reportable earlier in time. We believe that once the evaluation was initiated, the reporting procedures were complied with. Thus, our concerns are directed at the timely initiation of the reportability evaluation when a suspected condition exists.

The chronology of events that led to a reporting evaluation and subsequent NRC notification was prepared and reviewed with the personnel involved in this issue. A meeting was held with these individuals and the Millstone Unit No. 3 Director to discuss these events, the timing of the initiation of the reporting evaluation, and the reporting decision that was made. All of these individuals are more mindful of the need to promptly initiate a reportability evaluation when information is available that suggests a reportable event or condition may exist.