

**NORTHEAST UTILITIES**

THE CONNECTICUT LIGHT AND POWER COMPANY  
WESTERN MASSACHUSETTS ELECTRIC COMPANY  
MIDDLESEX 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

January 22, 1993

Docket No. 50-336  
B14322

Re: NRC Inspection Report  
50-336/91-30

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

Gentlemen:

Millstone Nuclear Power Station, Unit No. 2  
Safety System Functional Inspection Observations  
Information Letter

In a letter dated January 15, 1992,<sup>(1)</sup> the NRC Staff transmitted the results of the resident safety inspection conducted at Millstone Station on November 16, 1991, through January 4, 1992. One item discussed in the report concerned electrical system design, particularly the emergency diesel generator postulated unavailability under certain scenarios involving a faulted condition combined with the occurrence of a limiting single failure. The issue had been raised previously as Observation #61 in the Millstone Unit No. 2 Safety System Functional Inspection (SSFI), completed by Northeast Nuclear Energy Company (NNECO) in 1988. The purpose of this letter is to provide updated status to the NRC Staff on the issue, based on actions completed during the recently completed refueling and steam generator replacement outage.

Background

10CFR50 Appendix A, General Design Criterion (GDC) 17, provides the minimum requirements and guidance for design of electric power systems. The question of whether the Millstone Unit No. 2 electrical system meets the requirements of GDC 17 arose as a result of the Millstone Unit No. 2 SSFI and was discussed in detail in the January 15, 1992, NRC Inspection Report 91-30 (pages 21 through 23), as previously cited. Design reviews conducted by NNECO personnel concluded that the Millstone Unit No. 2 design was in compliance with GDC 17. The NRC Staff also concluded that Millstone Unit No. 2 complied with the requirements of GDC 17 and was, therefore, acceptable. Although the Staff found the design acceptable, they further concluded that it would be prudent for NNECO to enhance the electrical design associated with faulted bus isolation.

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(1) E. C. Wenzinger letter to J. F. Opeka, "Millstone Unit 1 Inspection 91-27; Unit 2 Inspection 91-30; Unit 3 Inspection 91-24," dated January 15, 1992.

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In discussions with the Staff, NNECO stated that a design modification was under consideration to address the issue. Further, as described in the inspection report dated January 15, 1992, NNECO initiated a project assignment to address the lack of coordination between the undervoltage and overcurrent relays on the 4 kV safety buses, since we considered that situation to be technically unacceptable. We committed to have this hardware in place no later than the 1994 refueling outage. Similarly, although the present 1600 ampere setting on the preferred off-site power supply overcurrent relays was found to be technically acceptable, NNECO initiated actions to perform the engineering necessary to raise the setpoint by December 31, 1992. Based on these two commitments, the Staff considered Item 336/91-15-01 closed.

#### Closure Status

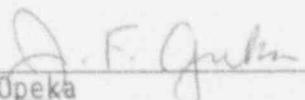
The commitment to resolve the undervoltage and overcurrent coordination no later than the 1994 refueling outage has been completed ahead of schedule. Equipment was procured and installed, as part of a design modification during the current outage, to raise the undervoltage time delay setpoint from 0.5 seconds to 2.00 seconds. This will resolve the undervoltage and overcurrent coordination issue.

The off-site power supply relay setting issue has also been resolved. After additional engineering evaluation, NNECO has determined that the cable ampacity and the bus loading values are lower than those initially assumed. Therefore, the existing 1600 ampere setting is acceptable and no design modifications are required.

Based on the above information, NNECO considers both commitments associated with SSFI Observation #61, as discussed in NRC Inspection Report 91-30, dated January 15, 1992, <sup>(2)</sup> closed. Should the NRC Staff have any questions relating to either of these issues, please contact my staff.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

  
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J. F. Opeka  
Executive Vice President

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