

NORTHEAST UTILITIES

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

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January 31, 1992

Docket No. 50-336

B14019

Re: 10CFR50.90

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

Gentlemen:

Millstone Nuclear Power Station, Unit No. 2
 Proposed Revision to Technical Specifications
Radiation Monitoring Instrumentation

Pursuant to 10CFR50.90, Northeast Nuclear Energy Company (NNECO) hereby proposes to amend its Operating License No. DPR-65 by incorporating the changes identified in Attachment 1 into the Technical Specifications of Millstone Unit No. 2.

Background

By letter dated October 18, 1991, ⁽¹⁾ the NRC issued an exemption from the requirements of 10CFR70.24(a) regarding the storage and handling of irradiated or unirradiated fuel assemblies in the reactor vessel and fuel handling building without having a monitoring system which will energize clearly audible alarms if accidental criticality occurs. This exemption was incorporated in the previously granted exemption to 10CFR70.24 contained in the special nuclear material license for Millstone Unit No. 2 (SNM-1335, Docket No. 70-1360, item 10), but was inadvertently omitted from the operating license when it was issued.

The technical specification requirements coupled with the inherent design features at the plant preclude an inadvertent criticality at Millstone Unit No. 2. Shutdown margin specifications protect the plant against inadvertent criticality for operations and fuel handling/shuffling concerns in the vessel itself. The spent fuel pool uses geometric spacing, fixed poisons, and technical specification limits on K_{eff} to prevent criticality. The new fuel vault also relies on geometric spacing and technical specification limits on maximum enrichment to prevent criticality. Intermediate fuel handling locations, such as two assemblies residing in the upender, have been evaluated

(1) J. F. Stolz letter to E. J. Mroczka, "Issuance of Exemption from 10CFR70.24(a) for Haddam Neck Plant and Millstone 1, 2, and 3," dated October 18, 1991.

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as appropriate. Inadvertent criticality in the core is precluded by shutdown margin specifications and criticality elsewhere is precluded by the inherent design features and technical specifications for the plant.

The spent fuel pool area monitors serve several functions. The public safety and technical specification function of these monitors is to provide an indication of a possible release of high airborne activity into the building such that emergency ventilation systems can be activated to minimize any offsite doses. The other function is for worker protection. The monitor will provide a warning to those in the area upon measurement of high dose rates. This is similar to the purpose of all other area radiation monitors.

There are a number of possible causes for potentially high dose rates including raising highly radioactive components too close to the pool surface, having small fuel fragments inadvertently removed from the pool via hoses or handling tools, or airborne releases due to the rupture of fuel cladding. The least likely cause would be a criticality event.

Description of Proposed Change

The proposed technical specification change to Tables 3.3-6 and 4.3-3 and Bases Section 3/4.3.3.1 deletes the inference that the spent fuel pool area radiation monitors are required for criticality monitoring as specific in 10CFR70.24. There is no change in the monitor design, operation, control functions, surveillance requirements, or setpoints. The change is intended to clarify the safety function of these monitors by deleting the reference to these monitors as criticality monitors. The removal of the inferred criticality function of these monitors does not adversely affect any design basis accidents. Based upon the discussion above, it is concluded that there is no adverse impact on the design basis analysis due to the change.

Significant Hazards Consideration

NNECO has reviewed the proposed change in accordance with 10CFR50.90, and has concluded that the change does not involve a significant hazards consideration. The basis for this conclusion is that the three criteria of 10CFR50.92(c) are not compromised. The proposed change does not involve a significant hazards consideration because the change would not:

1. Involve a significant increase in the probability or consequences of an accident previously analyzed. The proposed change clarifies the safety function of the spent fuel pool area radiation monitors by deleting the wording that termed these monitors as criticality monitors in Tables 3.3-6 and 4.3-3 and Bases Section 3/4.3.3.1. There are no design basis accidents adversely affected due to the change.
2. Create the possibility of a new or different kind of accident from any previously analyzed. Since there are no changes in the way the plant is operated, the potential for an unanalyzed accident is not created.

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3. Involve a significant reduction in a margin of safety. Since the change does not affect the consequences of any accident previously analyzed, there is no reduction in the margin of safety.

Moreover, the Commission has provided guidance concerning the application of standards in 10CFR50.92 by providing certain examples (March 6, 1986, 51FR7751) of amendments that are considered not likely to involve a significant hazards consideration. Although the proposed change is not enveloped by a specific example, the change would not involve a significant increase in the probability or consequences of an accident previously analyzed. No physical modifications to equipment or equipment operation have been made. The proposed change deletes the inference that the spent fuel pool area radiation monitors are required for criticality monitoring and to accurately reflect an exemption from the requirements of 10CFR70.24(a) granted by the NRC Staff on October 18, 1991.

Based on the information contained in this submittal and the environmental assessment for Millstone Unit No. 2, there are no significant radiological or nonradiological impacts associated with the proposed action, and the proposed license amendment will not have a significant effect on the quality of the human environment.

The Millstone Unit No. 2 Nuclear Review Board has reviewed and approved the proposed change and has concurred with the above determination.

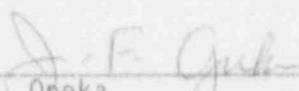
Regarding our schedule for this amendment, we request issuance at your earliest convenience with the amendment effective within 30 days of issuance.

In accordance with 10CFR50.91(b), we are providing the State of Connecticut with a copy of this proposed amendment.

Should you have any additional information, please contact our Licensing representative.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY



J. F. Opeka
Executive Vice President

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

Notary Commission

1992

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

Then personally appeared before me, J. F. Opeka, who being duly sworn, did state that he is Executive 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 Licensee herein, and that the statements contained in said information are true and correct to the best of his knowledge and belief.

Lorraine J. Lamonica
Notary Public

My Commission Expires March 31, 1993