

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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April 10, 1990

Docket No. 50-336

013473

Re: 10CFR50.90

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

Gentlemen:

Millstone Nuclear Power Station, Unit No. 2
Proposed Change to Technical Specifications
Definition of Core Alteration

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.

Specifically, the proposed change will change the definition for Core Alteration in Section 1.12 to clarify the scope of the movement or manipulation of a component during core alteration. The proposed definition reads as follows: "CORE ALTERATION shall be the movement or manipulation of fuel, CEAs, Neutron Sources, or Upper Guide Structure within the reactor pressure vessel with the vessel head removed and fuel in the vessel. Suspension of Core Alterations shall not preclude completion of movement of a component to a safe, conservative position."

Background

In a letter to the NRC Staff dated April 3, 1989,⁽¹⁾ NNECO proposed to submit a license amendment change which would clarify what constitutes a core alteration. The need for this license amendment was prompted by events during the end of Cycle 9 refueling outage for Millstone Unit No. 2. Specifically, one of the tasks performed routinely at each refueling outage is the replacement of a portion (approximately half) of the in-core instrumentation (ICI) detectors. The procedures for this task are well established and were being implemented by plant personnel to change out 23 of the 46 in-core detectors. During the performance of this task, it was noted that a senior reactor operator (SRO) was not present, in apparent conflict with the requirements of

(1) E. J. Mroczka letter to U.S. Nuclear Regulatory Commission, "Millstone Nuclear Power Station, Unit No. 2, Replacement of In-Core Detectors," dated April 3, 1989.

Apoll
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Technical Specification 6.2.2.e. The purpose of the April 1989 letter was to document NNECO's rationale in not assigning an SRO to be present during the replacement of the in-core detectors. Specifically, our interpretation was that the replacement of in-core detectors did not constitute a "Core Alteration" because it has a negligible effect on core reactivity and does not pose a threat to damaging the fuel which could result in a radioactive release.

In a letter dated May 4, 1989, ⁽²⁾ the NRC Staff acknowledged NNECO's position on this issue but stated the literal interpretation of Millstone Unit No. 2's Technical Specifications would include in-core detector replacement as a "Core Alteration." The NRC Staff noted that this issue would remain unresolved until the Technical Specifications were changed to be more specific.

Significant Hazards Consideration

NNECO has reviewed the proposed changes in accordance with 10CFR50.92 and has concluded that they do not involve a significant hazards consideration in that these changes would not:

1. Involve a significant increase in the probability of occurrence or consequences of an accident previously analyzed. The new definition of "Core Alteration" will continue to ensure that positive reactivity changes cannot occur while core alteration is suspended. There are no design basis accidents adversely affected due to the changes.

The reactivity effects caused by the insertion and removal of the ICI and ICI thimble tubes into the core are negligible. The ICI thimble tubes are made of zircaloy, and their removal or insertion will have an insignificant effect on the core reactivity. Therefore, the movement of the ICI plate and removal and installation of ICIs will have no noticeable positive reactivity addition to the core. There are no other components other than those specifically defined associated with refueling operations which could cause reactivity additions to the core.

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. No new failure modes are introduced.
3. Involve a significant reduction in a margin of safety. Since the changes do not affect the consequences of any accident previously analyzed, there is no reduction in a margin of safety.

(2) J. P. Durr letter to E. J. Mroczka, "Millstone 2 Resident Inspection 50-336/89-05 (2/11/89-3/23/89)," dated May 4, 1989.

The Commission has provided guidance concerning the application of Standards in 10CFR50.92 by providing certain examples (51FR7751, March 6, 1986) of amendments that are considered not likely to involve a significant hazards consideration. Although the changes proposed herein are not enveloped by a specific example, this proposed change is intended to clarify only the scope of the movement or manipulation of a component during core alteration.

The Millstone Unit No. 2 Nuclear Review Board has reviewed and approved the attached proposed revision and has concurred with the above determinations.

NNECO respectfully requests that this proposed change be issued prior to the start of the next refueling outage currently planned for September 1990 to avoid a similar situation as noted above. NNECO also requests this license amendment be effective as of the date of its issuance, to be implemented 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 application.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

E. J. Mroczka
E. J. Mroczka
Senior Vice President

cc: Mr. Kevin McCarthy, Director
Radiation Control Unit
Department of Environmental Protection
Hartford, CT 06116

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

STATE OF CONNECTICUT)
COUNTY OF HARTFORD) ss. Berlin

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 Licensee herein, and that the statements contained in said information are true and correct to the best of his knowledge and belief.

Lorraine J. L'Amico
Notary Public
My Commission Expires March 31, 1993