

NORTHEAST UTILITIES



THE CONNECTICUT LIGHT AND POWER COMPANY
WESTERN MASSACHUSETTS ELECTRIC COMPANY
HOLYOKE WATER POWER COMPANY
NORTHEAST UTILITIES SERVICE COMPANY
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October 6, 1989

Docket No. 50-245
B13354

Re: 10CFR50.90

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

Gentlemen:

Millstone Nuclear Power Station, Unit No. 1
Proposed Revision to Technical Specifications
Primary System Boundary - Coolant Chemistry

Pursuant to 10CFR50.90, Northeast Nuclear Energy Company (NNECO) hereby proposes to amend its Operating License, DPR-21, by incorporating the changes identified in Attachment 1 into the Technical Specifications of Millstone Unit No. 1.

Background

The proposed changes will revise Technical Specifications 3.6.C.1.a "Coolant Chemistry" and 6.9.1.5 "Annual Reports" to reflect Generic Letter 85-19 which states:

- o Reporting requirements for iodine spiking can be reduced from a short-term report (Special Report or Licensee Event Report) to an item which is to be included in the Annual Report.
- o Existing requirements to shut down a plant if coolant iodine activity limits are exceeded for 800 hours in a 12-month period can be eliminated.

The above modifications were deemed appropriate because 1) the quality of nuclear fuel has been greatly improved over the past decade with the result that normal coolant iodine activity is well below the limit, and 2) 10CFR50.72 (b)(1)(ii) requires the NRC to be immediately notified of any event or condition during operation that results in the condition of the nuclear power plant, including its principal safety barrier, being seriously degraded. This requirement ensures that significant fuel problems are addressed in a timely manner.

Generic Letter 85-19 requires that the Annual Report include information that was previously provided in the Licensee Event Report, and to also include the

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specific activity analysis but delete the information regarding fuel burnup by core region.

Specific Modifications

In accordance with Generic Letter 85-19 described above, NNECO proposes to delete the following paragraph from Millstone Unit No. 1 Technical Specification Section 3.6.C.1.a:

"When the reactor is in the STARTUP/HOT STANDBY or RUN mode, if the reactor coolant specific activity is greater than 0.2 microcuries per gram DOSE EQUIVALENT I-131 but less than or equal to 4.0 microcuries per gram, operation in that mode may continue for up to 48 hours provided that the cumulative operating time under these circumstances does not exceed 800 hours in any consecutive 12-month period."

NNECO believes the above modification meets the intent of Generic Letter 85-19 because the original intent of Technical Specification 3.6.C.1.a was to provide restrictive guidelines for the operation of Millstone Unit No. 1 with a reactor coolant specific activity between 0.2 and 4.0 microcuries per gram DOSE EQUIVALENT I-131. These guidelines were intended to prevent operation for an extended period of time with poor fuel performance (i.e., clad rupture). NNECO concludes that the above technical specification modification is acceptable because fuel performance at Millstone Unit No. 1 has improved significantly since the initial cycles of plant operation. Additionally, NRC regulations (i.e., 10CFR50.72(b)(1)(ii)) require NRC notification of any event or condition during operation that results in the condition of the nuclear power plant, including its principal barriers, being seriously degraded. This would bring attention to a fuel performance problem long before exceeding the above-mentioned Technical Specification limit of $0.2 > \text{DOSE EQUIVALENT I-131} < 4.0$ for 800 hours per year. The Technical Specifications will still provide the forty-eight hour limit for reactor coolant specific activity greater than 0.2 microcuries per gram DOSE EQUIVALENT I-131, while deleting previously cumulative annual operating time limits. The current requirement to be in the Cold Shutdown or the Refuel Condition within 24 hours, if the reactor coolant specific activity is greater than 0.2 microcuries per gram DOSE EQUIVALENT I-131 for longer than 48 hours or greater than 4.0 microcuries per gram DOSE EQUIVALENT I-131, remains unchanged.

Lastly, Technical Specification 6.9.1.5(b) of the Administrative Controls Section is being proposed to reflect the requirements of Generic Letter 85-10 concerning Annual Reports. This proposed section is identical to the NRC Sample Technical Specifications contained in the Generic Letter, and outlines the information to be included in the Annual Report, should the primary coolant exceed the limits of Specification 3.6.C.1.

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 or consequences of an accident previously evaluated, in that they do not affect the allowed plant operating conditions. Therefore, this change does not invalidate the assumptions made in the design basis analysis for the calculation of off-site dose. These proposed changes will not result in physical changes to the plant or changes in the way the plant is operated. NNECO concurs with Generic Letter 85-19 that, based on current fuel technology, the probability of operating at greater than 0.2 micro Ci/gm Dose Equivalent I-131 for more than eight hundred (800) hours/year is negligibly small such that a Technical Specification limit is no longer necessary. NNECO concludes and concurs with the NRC that the probability of a main steam line break with a pre-existing iodine spike is not increased by this amendment request; therefore, there is no effect on the probability or consequences of any accident previously analyzed.
2. Create the possibility of a new or different kind of accident from any previously analyzed. The change affects only the reporting requirements and not the plant operating requirements as related to primary coolant iodine spikes. Existing reporting requirements (10CFR50.72(b)(1)(ii)) will ensure that appropriate actions are taken.
3. Involve a significant reduction in a margin of safety. Based on current fuel technology, the probability of excessive reactor coolant iodine levels is negligible. In addition, 10CFR50.72 requires NRC notification of any event or condition during operation that results in the condition of the nuclear power plant, including its principal safety barriers, being seriously degraded. This would bring attention to a fuel performance problem long before exceeding the present limit.

The Commission has provided guidance concerning the application of standards in 10CFR50.92 by providing certain examples (51FR7750, March 6, 1986). The changes proposed herein are not enveloped by a specific example, but this does not alter the conclusion that the proposed amendment does not involve a significant hazards consideration. The change to reporting requirements reflects the determination that the Technical Specification limit regarding reactor coolant specific activity is no longer necessary on the basis that proper fuel design and management and existing reporting requirements (10CFR50.72(b)(1)(ii)) provide the appropriate controls. It is also noted that this proposal is in complete conformance with Generic Letter 85-19, which invites licensees to seek the amendment proposed herein.

