

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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February 25, 1988

Docket No. 50-423

B12817

Re: 10CFR50.90

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D.C. 20555

Reference: (1) J. F. Opeka letter to B. J. Youngblood, Technical Specification - Protection System Setpoint Study, dated November 18, 1985.

Gentlemen:

Millstone Nuclear Power Station, Unit No. 3
Proposed Revision to Technical Specifications
Steam Generator Low Low Level Reactor Trip Setpoint

Pursuant to 10CFR50.90, Northeast Nuclear Energy Company (NNECO) hereby proposes to amend its Operating License, NPF-49, by incorporating the changes identified in Attachment 1 into the Technical Specifications of Millstone Unit No. 3.

Specifically, the proposed changes will decrease the reactor trip setpoint and engineered safety features actuation system (ESFAS) instrumentation trip setpoint (auxiliary feedwater initiation) for the steam generator water level low low trip setpoint from 23.5% to 20.73% of narrow range instrument span. The corresponding total allowance (TA) and allowable value, Z and S values in Technical Specification Tables 2.2-1 and 3.3-4, are also being adjusted.

Discussion

The revised steam generator level low low trip setpoint is calculated by the methodology described in WCAP-10991, "Westinghouse Setpoint Methodology for Protection System, Millstone Unit No. 3" (Reference (1)), which is also the method used in calculating other setpoints in Tables 2.2-1 and 3.3-4 of the Technical Specifications. The steam generator level low low setpoint was recalculated and reduced from 23.5% to 20.73% due to:

- o A reduction in the calculated reference leg heat-up factor,
- o An assumed initial reference leg temperature of 125⁰F (the original calculation assumed reference leg temperature of 100⁰F), and
- o A more appropriate statistical analysis methodology.

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Significant Hazards Consideration

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

1. Involve a significant increase in the probability or consequences of an accident previously evaluated. The revised trip setpoint is consistent with the accident analyses assumption. As recommended in WCAP-10991, the revised calculated value accounts for the instrument uncertainty including the harsh environment effects and drifts. The lower calculated value is mainly due to a more accurate calculation of the effect of the reference leg heat-up on the trip setpoint. The lower setpoint does not delay reactor trip or auxiliary feedwater initiation beyond what is assumed in the analysis. Therefore, it is concluded that the proposed changes have no impact on the consequences of the accidents previously evaluated. The proposed changes have no impact on the probability of failure of the reactor protection system and auxiliary feedwater system. Therefore, the proposed changes do not involve an increase in the probability or consequences of an accident previously evaluated.
2. Create the possibility of a new or different kind of accident from any previously evaluated. Since there are no changes in the way the plant is operated, the potential for an unanalyzed accident is not created. There are no new failure modes associated with the proposed changes.
3. Involve a significant reduction in a margin of safety. Since the proposed changes do not affect the consequences of any accident previously analyzed, there is no reduction in a margin of safety. Therefore, it is concluded that the proposed changes do not change the basis or margin of safety as implied in the Technical Specifications.

Moreover, the Commission has provided guidance concerning the application of standards in 10CFR50.92 by providing certain examples (March 6, 1986, FR7751) of amendments that are considered not likely to involve a significant hazards consideration. Although the proposed changes herein are not enveloped by a specific example, the proposed changes would not involve a significant increase in the probability or consequences of an accident previously analyzed. As stated earlier, the lower calculated value is mainly due to a more accurate calculation of the effect of the reference leg heat-up on the trip setpoint. The lower setpoint does not delay reactor trip or auxiliary feedwater initiation beyond what is assumed in the analysis. Therefore, it is concluded that previously analyzed accidents are not affected.

Based upon the information contained in this submittal and the environmental assessment for Millstone Unit No. 3, there are no significant radiological or non-radiological impacts associated with the proposed action, and that the proposed license amendment will not have a significant effect on the quality of the human environment.

The Millstone Unit No. 3 Nuclear Review Board has reviewed and approved the attached proposed revisions and has concurred with the above determinations.

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

Pursuant to the requirements of 10CFR170.12(c), enclosed with this amendment request is the application fee of \$150.00.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

E. J. Mroczka

E. J. Mroczka
Senior Vice President

C. F. Sears

By: C. F. Sears
Vice President

Attachment

cc: Kevin McCarthy
Director, Radiation Control Unit
Department of Environmental Protection
Hartford, Connecticut 06116

W. T. Russell, Region I Administrator
R. L. Ferguson, NRC Project Manager, Millstone Unit No. 3
W. J. Raymond, Senior Resident Inspector, Millstone Unit Nos. 1, 2, and 3

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

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

Lorraine J. D'Amico

Notary Public

My Commission Expires March 31, 1988