

September 19, 1990

Docket No. 50-423

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Mr. Edward J. Mrocza
Senior Vice President
Nuclear Engineering and Operations
Connecticut Yankee Atomic Power Company
Northeast Nuclear Energy Company
Post Office Box 270
Hartford, Connecticut 06141-0270

Dear Mr. Mrocza:

SUBJECT: ISSUANCE OF AMENDMENT (TAC NO. 77148)

The Commission has issued the enclosed Amendment No. 55 to Facility Operating License No. NPF-49 for Millstone Nuclear Power Station, Unit No. 3, in response to your application dated June 29, 1990.

The amendment changes Millstone Unit 3 Technical Specification (TS) 4.4.8, "Specific Activity," to allow reactor startup without prior determination of E-bar (a measurement of the specific activity of all isotopes in the reactor coolant that have half lives greater than 10 minutes).

A copy of the related Safety Evaluation is also enclosed. The notice of issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

original signed by David Jaffe

David H. Jaffe, Project Manager
Project Directorate I-4
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 55 to NPF-49
2. Safety Evaluation

cc w/enclosures:
See next page

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

September 19, 1990

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Senior Vice President
Nuclear Engineering and Operations
Connecticut Yankee Atomic Power Company
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Sincerely,

A handwritten signature in black ink, appearing to read "David H. Jaffe", is written over a horizontal line.

David H. Jaffe, Project Manager
Project Directorate I-4
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 55 to NPF-49
2. Safety Evaluation

cc w/enclosures:
See next page

Mr. E. J. Mrocza
Northeast Nuclear Energy Company

Millstone Nuclear Power Station
Unit No. 3

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DATED: September 19, 1990

AMENDMENT NO. 55 TO FACILITY OPERATING LICENSE NO. NPF-49

DISTRIBUTION

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Plant File

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

NORTHEAST NUCLEAR ENERGY COMPANY, ET AL.

DOCKET NO. 50-423

MILLSTONE NUCLEAR POWER STATION, UNIT NO. 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 55
License No. NPF-49

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Northeast Nuclear Energy Company, et al. (the licensee) dated June 29, 1990, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

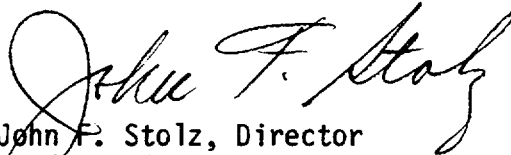
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-49 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 55, and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of the date of its issuance, to be implemented within 30 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



John F. Stolz, Director
Project Directorate I-4
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: September 19, 1990

ATTACHMENT TO LICENSE AMENDMENT NO. 55

FACILITY OPERATING LICENSE NO. NPF-49

DOCKET NO. 50-423

Replace page 3/4 4-32 of the Appendix A Technical Specifications with the enclosed page. The revised page is identified by amendment number and contains vertical lines indicating the areas of change.

TABLE 4.4-4 (Continued)

TABLE NOTATIONS

*A radiochemical analysis for \bar{E} shall consist of the quantitative measurement of the specific activity for each radionuclide, except for radionuclides with half-lives less than 10 minutes and all radioiodines, which is identified in the reactor coolant. The specific activities for these individual radionuclides shall be used in the determination of \bar{E} for the reactor coolant sample. Determination of the contributors to \bar{E} shall be based upon those energy peaks identifiable with a 95% confidence level.

**Sample to be taken after a minimum of 2 EFPD and 20 days of POWER OPERATION have elapsed since reactor was last subcritical for 48 hours or longer. The provisions of Specification 4.0.4 are not applicable.

#Until the specific activity of the Reactor Coolant System is restored within its limits.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 55

TO FACILITY OPERATING LICENSE NO. NPF-49

NORTHEAST NUCLEAR ENERGY COMPANY, ET AL.

MILLSTONE NUCLEAR POWER STATION, UNIT NO. 3

DOCKET NO. 50-423

INTRODUCTION

By application for license amendment dated June 29, 1990, Northeast Nuclear Energy Company, et al. (the licensee), requested a change to Millstone Unit 3 Technical Specifications (TS).

The proposed amendment would change Millstone Unit 3 Technical Specification (TS) 4.4.8, "Specific Activity," to allow reactor startup without prior determination of E-bar (a measurement of the specific activity of all isotopes in the reactor coolant that have half lives greater than 10 minutes).

DISCUSSION AND EVALUATION

Technical Specification 4.4.8 requires the licensee to measure E-bar at least every 6 months. This surveillance requirement further states that the measurement must take place after a minimum of 2 effective full power days and 20 days of power operation. An additional provision, TS 4.0.4, applies to TS 4.4.8 and requires that, "... Entry into an OPERATIONAL MODE or other specified condition shall not be made unless the Surveillance Requirement(s) associated with the Limiting Condition for Operation has been performed within the stated surveillance interval or as otherwise specified."

In the event that the licensee has not performed the required surveillance during the stated surveillance interval, the combination of TS 4.4.8 and 4.0.4 would preclude reactor startup since E-bar must be determined after operation at full power (TS 4.4.8), while full power operation is precluded since a required surveillance has not been performed (TS 4.0.4). This situation occurred at Millstone Unit 3 in that, on January 18, 1990, the licensee discovered that the surveillance that requires E-bar be measured once every 6 months per Technical Specification Section 4.4.8 had not been met. On January 18, 1990, the licensee requested NRC Enforcement Discretion regarding the requirements of Specification 4.0.4 to allow start-up of Millstone Unit No. 3 from MODE 3 in order to take a reactor coolant sample to satisfy the requirement for the E-bar determination. The NRC subsequently granted relief from Technical Specification 4.0.4, regarding completion of surveillance requirements per Section 4.4.8 prior to plant start-up. This relief permitted restart of Millstone Unit No. 3 to allow taking a reactor coolant sample to satisfy the E-bar determination.

The proposed change to TS 4.4.8 would add a statement that TS 4.0.4 is not applicable to the E-bar determination. Thus, should the E-bar determination not be made within the required interval, startup of Millstone Unit 3 would be permitted. The NRC staff understands that the E-bar determination would be made, subsequently, at the earliest permitted time.

The NRC staff recognizes that a conflict exists in TS 4.0.4 in that, when a surveillance can only be accomplished in a particular operational mode, TS 4.0.4 may prevent entry into that mode to perform the surveillance. It is the NRC staff's position that an exception to TS 4.0.4 should be permitted when entry into an operational mode is required to perform a surveillance. The proposed change to TS 4.4.8 allows entry into an operational mode where E-bar can be determined. Accordingly, the proposed change to TS 4.4.8 is acceptable.

ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. We have determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The staff has previously published a proposed finding that the amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

CONCLUSION

We have concluded, based on the considerations discussed above, that (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: September 19, 1990

Principal Contributor:
D. Jaffe