

April 26, 1995

Mr. John F. Opeka  
Executive Vice President, Nuclear  
Connecticut Yankee Atomic Power Company  
Northeast Nuclear Energy Company  
Post Office Box 270  
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SUBJECT: ISSUANCE OF AMENDMENT (TAC NO. M91136)

Dear Mr. Opeka:

The Commission has issued the enclosed Amendment No. 109 to Facility Operating License No. NPF-49 for the Millstone Nuclear Power Station, Unit No. 3, in response to your application dated December 2, 1994.

The amendment changes the Millstone 3 Technical Specification Table 4.3-1 by adding a note for certain Functional Units which would allow an entry into Mode 2 or Mode 1 before performing calibration for the power range detectors.

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

Sincerely,

Original signed by:

Vernon L. Rooney, Senior Project Manager  
Project Directorate I-3  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Docket No. 50-423

Enclosures: 1. Amendment No. 109 to NPF-49  
2. Safety Evaluation

cc w/encls: See next page

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

April 26, 1995

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Sincerely,

A handwritten signature in black ink, appearing to read "V. Rooney", written over a horizontal line.

Vernon L. Rooney, Senior Project Manager  
Project Directorate I-3  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Docket No. 50-423

Enclosures: 1. Amendment No. 109 to NPF-49  
2. Safety Evaluation

cc w/encls: See next page

Mr. John F. Opeka  
Northeast Nuclear Energy Company

Millstone Nuclear Power Station  
Unit 3

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

NORTHEAST NUCLEAR ENERGY COMPANY, ET AL.

DOCKET NO. 50-423

MILLSTONE NUCLEAR POWER STATION, UNIT NO. 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 109  
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 December 2, 1994, 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. 109 , 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



Phillip F. McKee, Director  
Project Directorate I-3  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical  
Specifications

Date of Issuance: April 26, 1995

ATTACHMENT TO LICENSE AMENDMENT NO. 109

FACILITY OPERATING LICENSE NO. NPF-49

DOCKET NO. 50-423

Replace the following pages of the Appendix A, Technical Specifications, with the attached pages. The revised pages are identified by amendment number and contain vertical lines indicating the areas of change.

Remove  
3/4 3-10  
3/4 3-13

Insert  
3/4 3-10  
3/4 3-13

TABLE 4.3-1

REACTOR TRIP SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>FUNCTIONAL UNIT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>ANALOG CHANNEL OPERATIONAL TEST</u>	<u>TRIP ACTUATING DEVICE OPERATIONAL TEST</u>	<u>ACTUATION LOGIC TEST</u>	<u>MODES FOR WHICH SURVEILLANCE IS REQUIRED</u>
1. Manual Reactor Trip	N.A.	N.A.	N.A.	R(14)	N.A.	1, 2, 3*, 4*, 5*
2. Power Range, Neutron Flux						
a. High Setpoint	S	D(2, 4), M(3, 4), Q(4, 6), R(4, 5)	Q	N.A.	N.A.	1, 2
b. Low Setpoint	S	R(4, 5)	S/U(1)	N.A.	N.A.	1***, 2
3. Power Range, Neutron Flux, High Positive Rate	N.A.	R(4, 5)	Q	N.A.	N.A.	1, 2
4. Power Range, Neutron Flux, High Negative Rate	N.A.	R(4, 5)	Q	N.A.	N.A.	1, 2
5. Intermediate Range	S	R(4, 5)	S/U(1)	N.A.	N.A.	1***, 2
6. Source Range, Neutron Flux	S	R(4, 5)	S/U(1), Q(9)	N.A.	N.A.	2**, 3, 4, 5
7. Overtemperature ΔT	S	R	Q	N.A.	N.A.	1, 2
8. Overpower ΔT	S	R	Q	N.A.	N.A.	1, 2
9. Pressurizer Pressure--Low	S	R	Q(18)	N.A.	N.A.	1
10. Pressurizer Pressure--High	S	R	Q(18)	N.A.	N.A.	1, 2
11. Pressurizer Water Level--High	S	R	Q	N.A.	N.A.	1
12. Reactor Coolant Flow--Low	S	R	Q	N.A.	N.A.	1

TABLE 4.3-1 (Continued)

TABLE NOTATIONS

- \* When the Reactor Trip System breakers are closed and the Control Rod Drive System is capable of rod withdrawal.
- \*\* Below P-6 (Intermediate Range Neutron Flux Interlock) Setpoint.
- \*\*\* Below P-10 (Low Setpoint Power Range Neutron Flux Interlock) Setpoint.
- \*\*\*\* Above the P-9 (Reactor Trip/Turbine Interlock) Setpoint.
- (1) If not performed in previous 31 days.
- (2) Comparison of calorimetric to excore power indication above 15% of RATED THERMAL POWER. Adjust excore channel gains consistent with calorimetric power if absolute difference is greater than 2%. The provisions of Specification 4.0.4 are not applicable to entry into MODE 2 or 1.
- (3) Single point comparison of incore to excore AXIAL FLUX DIFFERENCE above 15% of RATED THERMAL POWER. Recalibrate if the absolute difference is greater than or equal to 3%. The provisions of Specification 4.0.4 are not applicable for entry into MODE 2 or 1.
- (4) Neutron detectors may be excluded from CHANNEL CALIBRATION.
- (5) Detector plateau curves shall be obtained, and evaluated and compared to manufacturer's data. For the Source Range, Intermediate Range and Power Range Neutron Flux channels the provisions of Specification 4.0.4 are not applicable for entry into MODE 2 or 1.
- (6) Incore - Excore Calibration, above 75% of RATED THERMAL POWER. The provisions of Specification 4.0.4 are not applicable for entry into MODE 2 or 1.
- (7) Each train shall be tested at least every 62 days on a STAGGERED TEST BASIS.
- (8) (Not used)
- (9) Quarterly surveillance in MODES 3\*, 4\*, and 5\* shall also include verification that permissives P-6 and P-10 are in their required state for existing plant conditions by observation of the permissive annunciator window.



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 109

TO FACILITY OPERATING LICENSE NO. NPF-49

NORTHEAST NUCLEAR ENERGY COMPANY, ET AL.

MILLSTONE NUCLEAR POWER STATION, UNIT NO. 3

DOCKET NO. 50-423

1.0 INTRODUCTION

By letter dated December 2, 1994, the Northeast Nuclear Energy Company (the licensee), submitted a request for changes to the Millstone Nuclear Power Station, Unit No. 3 Technical Specifications (TSs). The requested changes would change the Millstone 3 TS Table 4.3-1 by adding a note for certain Functional Units which would allow an entry into Mode 2 or Mode 1 before performing calibration for the power range detectors.

2.0 EVALUATION

Background -

The Millstone 3 TS Section 4.3.1.1, Table 4.3-1 entitled "Reactor Trip System Instrumentation Surveillance Requirements" requires channel calibrations to be performed once per 18 months for Functional Units 2, 3, 4, 5, and 6 (Power Range, Neutron Flux; Intermediate Range, Neutron Flux; Source Range, Neutron Flux). The TSs for Functional Unit 2a (Power Range, Neutron Flux - High Setpoint), Functional Unit 5 (Intermediate Range, Neutron Flux), and Functional Unit 6 (Source Range, Neutron Flux) contain a note of exception (Note 5) to TS 4.0.4 which allows entry into Mode 1 or Mode 2 before performing a calibration of these functional units. This exception is not currently included for Functional Unit 2b (Power Range, Neutron Flux - Low Setpoint), Functional Unit 3 (Power Range, Neutron Flux - High Positive Rate), nor Functional Unit 4 (Power Range, Neutron Flux - High Negative Rate). Technical Specification 4.0.4 does not permit the plant to make an entry into an operational mode unless the surveillance requirement has been performed within the stated surveillance interval or as otherwise specified. However, it is necessary for the plant to enter Modes 2 or 1 in order to perform the channel calibration for power range neutron detectors.

Discussion -

The Millstone 3 TS Section 4.3.1.1 requires that each reactor trip system instrumentation channel and interlock and the automatic trip logic be demonstrated operable by performance of surveillances specified in

Table 4.3-1. Table 4.3-1 requires, in part, that the channel calibration for Functional Units 2, 3, 4, 5, and 6 be performed once per 18 months. The channel calibration for the source range, intermediate range, and power range neutron detectors consists of obtaining the detector plateau curves, evaluating those curves, and comparing the curves to the manufacturer's data. The licensee must perform these calibrations before entering plant Modes 2 and 1. Note 5 has been added to Functional Unit 2a and 5 to specify that the provisions of TS 4.0.4 are not applicable for entry into Mode 2 or Mode 1. Entry into Modes 2 or 1 can be made before performing the calibrations for these two functions. However, an exception to TS 4.0.4 for Functional Unit 2b, Functional Unit 3, and Functional Unit 4 is not included in Table 4.3-1. The licensee proposed to modify Table 4.3-1 by adding Note 5 to Functional Units 2b, 3, and 4. This will allow the plant to enter Mode 2 or Mode 1 before performing the channel calibration of the power range neutron detectors without a violation of TS 4.0.4.

The licensee has also proposed to add "Source Range" to Note 5. This is an administrative change in that Functional Unit 6, Source Range Neutron Flux, already contains Note 5. This administrative change will make Note 5 consistent with functional Unit 6 of Table 4.3-1.

The proposed changes to Functional Units 2b, 3, and 4 of Table 4.3-1 will allow an exception from the provisions of TS 4.0.4 for entry into Mode 2 or Mode 1 before performing appropriate calibrations for these three functions. These changes are consistent with the new improved Standard Technical Specification (STS) for the Westinghouse plants (NUREG-1431). The staff has concluded that these changes are acceptable.

### 3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Connecticut State official was notified of the proposed issuance of the amendment. The State official had no comments.

### 4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes surveillance requirements. The NRC staff has 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 Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (60 FR 6304). 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.

## 5.0 CONCLUSION

The Commission has 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, (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.

Principal Contributor: S. Rhow

Date: April 26, 1995