Mr. John F. Opeka Executive Vice President, Nuclear Connecticut Yankee Atomic Power Company Northeast Nuclear Energy Company Post Office Box 270 Hartford, CT 06141-0270

SUBJECT:

ISSUANCE OF AMENDMENT (TAC NO. M89850)

Dear Mr. Opeka:

The Commission has issued the enclosed Amendment No. 98 to Facility Operating License No. NPF-49 for the Millstone Nuclear Power Station, Unit No. 3, in response to your application dated June 30, 1994.

The amendment revises the Technical Specifications (TS) to change the trip setpoint for the 4kV bus undervoltage relay (for the grid degraded voltage) from its current value of  $\geq$  3710 volts to its new setting of  $\geq$  3730 volts.

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:

Vernon L. Rooney, Senior Project Manager Project Directorate I-4 Division of Reactor Projects - I/II Office of Nuclear Reactor Regulation

Docket No. 50-423

Enclosures: 1. Amendment No. 98 to NPF-49

Safety Evaluation

cc w/encls: See next page

Distribution:

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DATE	11/22/94	11/494	11/2/94	11/24/94	11/ /94

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## UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

November 30, 1994

Mr. John F. Opeka
Executive Vice President, Nuclear
Connecticut Yankee Atomic Power Company
Northeast Nuclear Energy Company
Post Office Box 270
Hartford, CT 06141-0270

SUBJECT:

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Vernon L. Rooney, Senior Project Manager

Project Directorate I-4

Division of Reactor Projects - I/II Office of Nuclear Reactor Regulation

Docket No. 50-423

Enclosures: 1. Amendment No. 98 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

cc:

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Massachusetts Municipal Wholesale
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Ludlow, Massachusetts 01056



# 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. 98 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 30, 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) <u>Technical Specifications</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 98 , 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-4

Division of Reactor Projects - I/II Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical

Specifications

Date of Issuance: November 30, 1994

### ATTACHMENT TO LICENSE AMENDMENT NO. 98

### FACILITY OPERATING LICENSE NO. NPF-49

### **DOCKET NO. 50-423**

Replace the following page of the Appendix A Technical Specifications with the enclosed page. The revised page is identified by amendment number and contain vertical lines indicating the areas of change.

Remove 3/4 3-30

<u>Insert</u> 3/4 3-30

TABLE 3.3-4 (Continued)

## ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION TRIP SETPOINTS

FUNC	CTIONAL UNIT	TOTAL ALLOWANCE (TA)	2	SENSOR ERROR _(S)	TRIP SETPOINT	<u>allowable value</u>
8.	Loss of Power		•			
	a. 4 kV Bus Undervoltage (Loss of Voltage)	N.A.	N.A.	N.A.	$\geq$ 2800 volts with a $\leq$ 2 second time delay.	$\geq$ 2720 volts with a $\leq$ 2 second time delay.
	b. 4 kV Bus Undervoltage (Grid Degraded Voltage)	N.A.	N.A.	N.A.	≥ 3730 volts with a ≤ 8 second time delay with ESF actuation or ≤ 300 second time delay without ESF actuation.	≥ 3706 volts with a ≤ 8 second time delay with ESF actuation or ≤ 300 second time delay without ESF actuation.
9.	Engineered Safety Features Actuation System Interlocks	•				
	a. Pressurizer Pressure, P-11	l N.A.	N.A.	N.A.	≤ 1985 psig	≤ 1995 psig
	b. Low-Low Tavg, P-12	N.A.	N.A.	N.A.	≥ 553°F	≥ 549.6°F
	c. Reactor Trip, P-4	N.A.	N.A.	N.A.	N.A.	N.A.
10.	Emergency Generator Load Sequencer	N.A.	N.A.	N.A.	N.A.	N.A.



## UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

### SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 98

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 June 30, 1994, Northeast Nuclear Energy Company, the licensee for Millstone Nuclear Power Station, Unit 3, proposed a change to Technical Specification (TS) Table 3.3-4, "Engineered Safety Features Actuation System Instrumentation Trip Setpoints." This request was submitted to resolve an issue raised during the electrical distribution system functional inspection (EDSFI) team evaluation concerning the degraded voltage protection relay setpoint on the 4kV safety buses. Also, there were followup teleconferences between representatives of the licensee and the NRC staff on August 15, October 24, and October 26, 1994, to discuss the above change.

The licensee proposes to revise TS Table 3.3-4, by revising the trip setpoint for the 4Kv bus degraded grid (undervoltage) relay from its current value of  $\geq \!\! 3710$  volts to its new setting of  $\geq \!\! 3730$  volts. This proposed revision is based on the new calculation which was done as a result of the EDSFI team evaluation. The team found that the licensee's original calculation did not account for the potential transformer ratio error of  $\pm$  0.6% and that no allowance had been made for the relay setpoint tolerance range of  $\pm$  0.5 volts. The revision to the calculation affects the TS "Trip Setpoint" only and does not affect the TS "Allowable Value" because the existing value was already set conservatively higher than that required by the calculation.

### 2.0 **EVALUATION**

### Revision to Existing TS Table 3.3-4

Table 3.3-4.8.b: Fifth column under "TRIP SETPOINT" change "3710" to "3730" volts.

The revision to the calculation, which was done as a result of the EDSFI team evaluation, results in a modification of the degraded grid (undervoltage) relay trip setpoint from  $\geq 3710$  volts to  $\geq 3730$  volts. However, the actual field settings of the undervoltage relays do not require any changes because they are currently conservatively set at 3745 volts. This actual field setting was used to establish additional conservatism, yet still ensures that plant transients would not needlessly occur due to the settings being too

9412050275 941130 PDR ADDCK 05000423 PDR high. Therefore, no modification to the actual field setting is required. As a result, the higher trip setpoint value will not cause any additional actuations of the engineered safety features systems.

Branch Technical Position (BTP) PSB-1 "Adequacy of Station Electrical Distribution System Voltages," provides the criteria for determining adequate degraded voltage protection. The licensee has conducted an engineering review and reanalysis of the Electrical Distribution System, which involved adequately addressing the EDSFI results and the requirements of BTP PSB-1, in order to establish the TS trip setpoint and allowable value for the degraded grid (undervoltage) relays. The proposed revision does not change the design, function or method of operation of Class 1E equipment at Millstone, Unit 3. Staff analysis confirmed the licensee's engineering review.

Based on the above, the staff finds the proposed change to Millstone, Unit 3 TS to be 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 a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. 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 (59 FR 39594). 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: Charles Thomas

Date: November 30, 1994