

May 10, 1999

Mr. Raymond P. Necci
Vice President-Nuclear Oversight and Regulatory Affairs
Northeast Nuclear Energy Company
c/o Mr. David A. Smith
Manager - Regulatory Affairs
P. O. Box 128
Waterford, CT 06385

SUBJECT: MILLSTONE NUCLEAR POWER STATION, UNIT NO. 3, ISSUANCE OF
AMENDMENT RE: HEAT FLUX HOT CHANNEL FACTOR (TAC NO. MA4574)

Dear Mr. Necci:

The Commission has issued the enclosed Amendment No. 170 to Facility Operating License No. NPF-49 for the Millstone Nuclear Power Station, Unit No. 3, in response to your application dated January 18, 1999.

The amendment modifies Technical Specification (TS) 3/4.2.2 to be in accordance with NRC-approved Westinghouse methodologies for the heat flux hot channel factor - $F_q(Z)$. In addition, the amendment makes changes to the core operating limits and the analytical methods used to determine core operating limits contained in Section 6.9.1.6.a and b, respectively, by adding, modifying, or deleting references.

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:
John A. Nakoski, Project Manager, Section 2
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-423

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Enclosures: 1. Amendment No. 170 to NPF-49
2. Safety Evaluation

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DATE	4/7/99	4/17/99	4/20/99	4/30/99	

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UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

May 10, 1999

Mr. Raymond P. Necci
Vice President-Nuclear Oversight and Regulatory Affairs
Northeast Nuclear Energy Company
c/o Mr. David A. Smith
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Sincerely,

A handwritten signature in black ink, appearing to read "John A. Nakoski".

John A. Nakoski, Project Manager, Section 2
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-423

Enclosures: 1. Amendment No. 170 to NPF-49
2. Safety Evaluation

cc w/encls: See next page

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Unit 3

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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. 170
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 January 18, 1999, 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.

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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. 170 , 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 issuance, to be implemented within 30 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



James W. Clifford, Chief, Section 2
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical
Specifications

Date of Issuance: May 10, 1999

ATTACHMENT TO LICENSE AMENDMENT NO. 170

FACILITY OPERATING LICENSE NO. NPF-49

DOCKET NO. 50-423

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

<u>Remove</u>	<u>Insert</u>
3/4 2-5	3/4 2-5
3/4 2-6	3/4 2-6
3/4 2-7	3/4 2-7
3/4 2-8	3/4 2-8
3/4 2-10	3/4 2-10
3/4 2-11	3/4 2-11
6-20	6-20
6-20a	6-20a
B 3/4 2-4	B 3/4 2-4

POWER DISTRIBUTION LIMITS

3/4.2.2 HEAT FLUX HOT CHANNEL FACTOR - F_Q(Z)

FOUR LOOPS OPERATING

LIMITING CONDITION FOR OPERATION

3.2.2.1 F_Q(Z) shall be limited by the following relationships:

$$F_Q(Z) \leq \frac{F_Q^{RTP}}{P} K(Z) \text{ for } P > 0.5$$

$$F_Q(Z) \leq \frac{F_Q^{RTP}}{0.5} K(Z) \text{ for } P \leq 0.5$$

F_Q^{RTP} = the F_Q limit at RATED THERMAL POWER (RTP) provided in the core operating limits report (COLR).

$$\text{Where: } P = \frac{\text{THERMAL POWER}}{\text{RATED THERMAL POWER}}, \text{ and}$$

K(Z) = the normalized F_Q(Z) as a function of core height specified in the COLR.

APPLICABILITY: MODE 1.

ACTION:

With F_Q(Z) exceeding its limit:

- a. For RAOC operation with Specification 4.2.2.1.2.b not being satisfied or for base load operation with Specification 4.2.2.1.4.b not being satisfied:
 - (1) Reduce THERMAL POWER at least 1% for each 1% F_Q(Z) exceeds the limit within 15 minutes and similarly reduce the Power Range Neutron Flux-High Trip Setpoints within the next 4 hours; POWER OPERATION may proceed for up to a total of 72 hours; subsequent POWER OPERATION may proceed provided the Overpower ΔT Trip setpoints have been reduced at least 1% for each 1% F_Q(Z) exceeds the limit, and

POWER DISTRIBUTION LIMITS

LIMITING CONDITION FOR OPERATION (Continued)

- (2) Identify and correct the cause of the out-of-limit condition prior to increasing THERMAL POWER above the reduced limit required by item (1) above; THERMAL POWER may then be increased provided $F_Q(Z)$ is demonstrated through incore mapping to be within its limits.
- b. For RAOC operation with Specification 4.2.2.1.2.c not being satisfied, one of the following actions shall be taken:
- (1) Within 15 minutes, control the AFD to within new AFD limits which are determined by reducing the AFD limits specified in the CORE OPERATING LIMITS REPORT by at least 1% AFD for each percent $F_Q(Z)$ exceeds its limits. Within 8 hours, reset the AFD alarm setpoints to these modified limits, or
- (2) Verify that the requirements of Specification 4.2.2.1.3 for base load operation are satisfied and enter base load operation.

Where it is necessary to calculate the percent that $F_Q(Z)$ exceeds the limits for item (1) above, it shall be calculated as the maximum percent over the core height (Z), consistent with Specification 4.2.2.1.2.f, that $F_Q(Z)$ exceeds its limit by the following expression:

$$\left[\left[\frac{F_Q^M(Z) \times W(Z)}{\frac{F_Q^{RTP}}{P} \times K(Z)} \right] - 1 \right] \times 100 \text{ for } P > 0.5$$

$$\left[\left[\frac{F_Q^M(Z) \times W(Z)}{\frac{F_Q^{RTP}}{0.5} \times K(Z)} \right] - 1 \right] \times 100 \text{ for } P \leq 0.5$$

- c. For base load operation with Specification 4.2.2.1.4.c not being satisfied, one of the following actions shall be taken:
- (1) Place the core in an equilibrium condition where the limit in 4.2.2.1.4.c is satisfied, and remeasure $F_Q^M(Z)$, or

POWER DISTRIBUTION LIMITS

LIMITING CONDITION FOR OPERATION (Continued)

- (2) Reduce THERMAL POWER at least 1% for each 1% $F_Q(Z)$ exceeds the limit within 15 minutes and similarly reduce the Power Range Neutron Flux-High Trip Setpoints within the next 4 hours; POWER OPERATION may proceed provided the Overpower ΔT Trip Setpoints have been reduced at least 1% for each 1% $F_Q(Z)$ exceeds its limit shall be calculated as the maximum percent over the core height (Z), consistent with Specification 4.2.2.1.4.f, by the following expression:

$$\left[\left[\frac{F_Q^M(Z) \times W(Z)_{BL}}{F_Q^{RTP}} - 1 \right] \times 100 \text{ for } P \geq APL^{ND} \right. \\ \left. \frac{P}{K(Z)} \right]$$

SURVEILLANCE REQUIREMENTS

- 4.2.2.1.1 The provisions of Specification 4.0.4 are not applicable.
- 4.2.2.1.2 For RAOC operation, $F_Q(Z)$ shall be evaluated to determine if $F_Q(Z)$ is within its limit by:
- a. Using the movable incore detectors to obtain a power distribution map at any THERMAL POWER greater than 5% of RATED THERMAL POWER.
 - b. Evaluate the computed heat flux hot channel factor by performing both of the following:
 - (1) Determine the computed heat flux hot channel Factor, $F_Q^M(Z)$ by increasing the measured $F_Q(Z)$ component of the power distribution map by 3% to account for manufacturing tolerances and further increase the value by 5% to account for measurement uncertainties, and
 - (2) Verify that $F_Q^M(Z)$ satisfies the requirements of Specification 3.2.2.1 for all core plane regions, i.e. 0-100% inclusive.

POWER DISTRIBUTION LIMITS

SURVEILLANCE REQUIREMENTS (Continued)

c. Satisfying the following relationship:

$$F_Q^M(Z) \leq \frac{F_Q^{RTP} \times K(Z)}{P \times W(Z)} \text{ for } P > 0.5$$

$$F_Q^M(Z) \leq \frac{F_Q^{RTP} \times K(Z)}{W(Z) \times 0.5} \text{ for } P \leq 0.5$$

where $F_Q^M(Z)$ is the measured $F_Q(Z)$ increased by the allowances for manufacturing tolerances and measurement uncertainty, F_Q^{RTP} is the F_Q limit, $K(Z)$ is the normalized $F_Q(Z)$ as a function of core height, P is the relative THERMAL POWER, and $W(Z)$ is the cycle-dependent function that accounts for power distribution transients encountered during normal operation. F_Q^{RTP} , $K(Z)$, and $W(Z)$ are specified in the CORE OPERATING LIMITS REPORT as per Specification 6.9.1.6.

d. Measuring $F_Q^M(Z)$ according to the following schedule:

- (1) Upon achieving equilibrium conditions after exceeding by 10% or more of RATED THERMAL POWER, the THERMAL POWER at which $F_Q(Z)$ was last determined,* or
- (2) At least once per 31 Effective Full Power Days, whichever occurs first.

e. With the maximum value of

$$\frac{F_Q^M(Z)}{K(Z)}$$

over the core height (Z) increasing since the previous determination of $F_Q^M(Z)$, either of the following actions shall be taken:

- (1) Increase $F_Q^M(Z)$ by an appropriate factor specified in the COLR and verify that this value satisfies the relationship in Specification 4.2.2.1.2.c, or

* During power escalation at the beginning of each cycle, power level may be increased until a power level for extended operation has been achieved and power distribution map outlined.

POWER DISTRIBUTION LIMITS

SURVEILLANCE REQUIREMENTS (Continued)

- b. During base load operation, if the THERMAL POWER is decreased below APL^{ND} then the conditions of 4.2.2.1.3.a shall be satisfied before reentering base load operation.

4.2.2.1.4 During base load operation $F_Q(Z)$ shall be evaluated to determine if $F_Q(Z)$ is within its limit by:

- a. Using the movable incore detectors to obtain a power distribution map at any THERMAL POWER above APL^{ND} .
- b. Evaluate the computed heat flux hot channel factor by performing both of the following:
- (1) Determine the computed heat flux hot channel factor, $F_Q^M(Z)$, by increasing the measured $F_Q^M(Z)$ component of the power distribution map by 3% to account for manufacturing tolerances and further increase the value by 5% to account for measurement uncertainties, and
 - (2) Verify that $F_Q^M(Z)$ satisfies the requirements of Specification 3.2.2.1 for all core plane regions, i.e., 0 - 100% inclusive.
- c. Satisfying the following relationship:

$$F_Q^M(Z) \leq \frac{F_Q^{RTP} \times K(Z)}{P \times W(Z)_{BL}} \text{ for } P > APL^{ND}$$

where: $F_Q^M(Z)$ is the measured $F_Q(Z)$ increased by the allowances for manufacturing tolerances and measurement uncertainty, F_Q^{RTP} is the F_Q limit, $K(Z)$ is the normalized $F_Q(Z)$ as a function of core height, P is the relative THERMAL POWER, and $W(Z)_{BL}$ is the cycle-dependent function that accounts for limited power distribution transients encountered during base load operation. F_Q^{RTP} , $K(Z)$, and $W(Z)_{BL}$ are specified in the COLR as per Specification 6.9.1.6.

- d. Measuring $F_Q^M(Z)$ in conjunction with target flux difference determination according to the following schedule:
- (1) Prior to entering base load operation after satisfying Section 4.2.2.1.3 unless a full core flux map has been taken in the previous 31 EFPD with the relative thermal power having been maintained above APL^{ND} for the 24 hours prior to mapping, and
 - (2) At least once per 31 Effective Full Power Days.

POWER DISTRIBUTION LIMITS

SURVEILLANCE REQUIREMENTS (Continued)

- e. With the maximum value of

$$\frac{F_{\alpha}^M(Z)}{K(Z)}$$

over the core height (Z) increasing since the previous determination of $F_{\alpha}^M(Z)$, either of the following actions shall be taken:

- (1) Increase $F_{\alpha}^M(Z)$ by appropriate factor specified in the COLR and verify that this value satisfies the relationship in Specification 4.2.2.1.4.c, or
- (2) $F_{\alpha}^M(Z)$ shall be measured at least once per 7 Effective Full Power Days until 2 successive maps indicate that the maximum value of

$$\frac{F_{\alpha}^M(Z)}{K(Z)}$$

over the core height (Z) is not increasing.

- f. The limits specified in 4.2.2.1.4.c and 4.2.2.1.4.e are not applicable in the following core plane regions:
- (1) Lower core region 0% to 15%, inclusive.
 - (2) Upper core region 85% to 100%, inclusive.

4.2.2.1.5 When $F_{\alpha}(Z)$ is measured for reasons other than meeting the requirements of Specifications 4.2.2.1.2 or 4.2.2.1.4, an overall measured $F_{\alpha}(Z)$ shall be obtained from a power distribution map and increased by 3% to account for manufacturing tolerances and further increased by 5% to account for measurement uncertainty.

ADMINISTRATIVE CONTROLS

CORE OPERATING LIMITS REPORT (Cont.)

2. Shutdown Rod Insertion Limit for Specification 3/4.1.3.5,
3. Control Rod Insertion Limits for Specification 3/4.1.3.6,
4. Axial Flux Difference Limits, target band, and APLND for Specifications 3/4.2.1.1 and 3/4.2.1.2,
5. Heat Flux Hot Channel Factor, $K(z)$, $W(z)$, APLND, and $W(z)_{BL}$ for Specifications 3/4.2.2.1 and 3/4.2.2.2.
6. Nuclear Enthalpy Rise Hot Channel Factor, Power Factor Multiplier for Specification 3/4.2.3.
7. Shutdown Margin Monitor minimum count rate for Specification 3/4.3.5. |

6.9.1.6.b The analytical methods used to determine the core operating limits shall be those previously reviewed and approved by the NRC in:

1. WCAP-9272-P-A, "WESTINGHOUSE RELOAD SAFETY EVALUATION METHODOLOGY," July 1985 (W Proprietary). (Methodology for Specifications 3.1.1.3--Moderator Temperature Coefficient, 3.1.3.5--Shutdown Bank Insertion Limit, 3.1.3.6--Control Bank Insertion Limits, 3.2.1--Axial Flux Difference, 3.2.2--Heat Flux Hot Channel Factor, 3.2.3--Nuclear Enthalpy Rise Hot Channel Factor.) |
2. T. M. Anderson to K. Kniel (Chief of Core Performance Branch, NRC), January 31, 1980--Attachment: Operation and Safety-Analysis Aspects of an Improved Load Follow Package. |
3. NUREG-800, Standard Review Plan, U.S. Nuclear Regulatory Commission, Section 4.3, Nuclear Design, July 1981 Branch Technical Position CPB 4.3-1, Westinghouse Constant Axial Offset Control (CAOC), Revision 2, July 1981. |
4. WCAP-10216-P-A-RIA, "RELAXATION OF CONSTANT AXIAL OFFSET CONTROL FQ SURVEILLANCE TECHNICAL SPECIFICATION," Rev. 1, February 1994 (W Proprietary). (Methodology for Specifications 3.2.1--Axial Flux Difference [Relaxed Axial Offset Control] and 3.2.2--Heat Flux Hot Channel Factor [$W(z)$ surveillance requirements for F_Q Methodology].) |
5. WCAP-9561-P-A, ADD. 3, Rev. 1, "BART A-1: A COMPUTER CODE FOR THE BEST ESTIMATE ANALYSIS OF REFLOOD TRANSIENTS--SPECIAL REPORT: THIMBLE MODELING W ECCS EVALUATION MODEL," July 1986 (W Proprietary). (Methodology for Specification 3.2.2--Heat Flux Hot Channel Factor.) |
6. WCAP-10266-P-A, Addendum 1, Rev. 2-P-A, "THE 1981 VERSION OF THE WESTINGHOUSE ECCS EVALUATION MODEL USING THE BASH CODE," March 1987 (W Proprietary). (Methodology for Specification 3.2.2--Heat Flux Hot Channel Factor.) |

ADMINISTRATIVE CONTROLS

CORE OPERATING LIMITS REPORT (Cont.)

7. WCAP-11946, "Safety Evaluation Supporting a More Negative EOL Moderator Temperature Coefficient Technical Specification for the Millstone Nuclear Power Station Unit 3," September 1988 (W Proprietary).
8. WCAP-10054-P-A, "WESTINGHOUSE SMALL BREAK ECCS EVALUATION MODEL.17 USING THE NOTRUMP CODE," August 1985 (W Proprietary). (Methodology for Specification 3.2.2 - Heat Flux Hot Channel Factor.)
9. WCAP-10079-P-A, "NOTRUMP - A NODAL TRANSIENT SMALL BREAK AND GENERAL NETWORK CODE," August 1985 (W Proprietary). (Methodology for Specification 3.2.2 - Heat Flux Hot Channel Factor.)
10. WCAP-12610, "VANTAGE+ Fuel Assembly Report," June 1990 (W Proprietary). (Methodology for Specification 3.2.2 - Heat Flux Hot Channel Factor.)
11. Letter from V. L. Rooney (USNRC) to J. F. Opeka, "Safety Evaluation for Topical Report, NUSCO-152, Addendum 4, 'Physics Methodology for PWR Reload Design,' TAC No. M91815," July 8, 1995.
12. Letter from E. J. Mroczka to the USNRC, "Proposed Changes to Technical Specifications, Cycle 4 Reload Submittal - Boron Dilution Analysis," B13678, December 4, 1990.
13. Letter from D. H. Jaffe (USNRC) to E. J. Mroczka, "Issuance of Amendment (TAC No. 77924)," March 11, 1991.
14. Letter from M. H. Brothers to the USNRC, "Proposed Revision to Technical Specification, Shutdown Margin Requirements and Shutdown Margin Monitor Operability for Modes 3, 4, and 5 (PTSCR 3-16-97), B16447, May 9, 1997.
15. Letter from J. W. Anderson (USNRC) to M. L. Bowling (NNECO), "Issuance of Amendment - Millstone Nuclear Power Station, Unit No. 3 (TAC No. M98699)," October 21, 1998.

POWER DISTRIBUTION LIMITS

BASES

3/4.2.2 and 3/4.2.3 HEAT FLUX HOT CHANNEL FACTOR and RCS FLOW RATE AND NUCLEAR ENTHALPY RISE HOT CHANNEL FACTOR (Continued)

Margin is maintained between the safety analysis limit DNBR and the design limit DNBR. This margin is more than sufficient to offset any rod bow penalty and transition core penalty. The remaining margin is available for plant design flexibility.

When an F_Q measurement is taken, an allowance for both experimental error and manufacturing tolerance must be made. An allowance of 5% is appropriate for a full core map taken with the incore detector flux mapping system and a 3% allowance is appropriate for manufacturing tolerance.

The heat flux hot channel factor, $F_Q(Z)$, is measured periodically using the incore detector system. These measurements are generally taken with the core at or near steady state conditions. Using the measured three dimensional power distributions, it is possible to derive $F_Q^M(Z)$, a computed value of $F_Q(Z)$. However, because this value represents a steady state condition, it does not include the variations in the value of $F_Q(Z)$ that are present during nonequilibrium situations.

To account for these possible variations, the steady state limit of $F_Q(Z)$ is adjusted by an elevation dependent factor appropriate to either RAOC or base load operation, $W(Z)$ or $W(Z)_{BL}$, that accounts for the calculated worst case transient conditions. The $W(Z)$ and $W(Z)_{BL}$ factors described above for normal operation are specified in the COLR per Specification 6.9.1.6. Core monitoring and control under nonsteady state conditions are accomplished by operating the core within the limits of the appropriate LCOs, including the limits on AFD, QPTR, and control rod insertion. Evaluation of the steady state $F_Q(Z)$ limit is performed in Specification 4.2.2.1.2.b and 4.2.2.1.4.b while evaluation nonequilibrium limits are performed in Specification 4.2.2.1.2.c and 4.2.2.1.4.c.

When RCS flow rate and $F_{\Delta H}^N$ are measured, no additional allowances are necessary prior to comparison with the limits of the Limiting Condition for Operation. Measurement errors of 2.4% for four loop flow and 2.8% for three loop flow for RCS total flow rate and 4% for $F_{\Delta H}^N$ have been allowed for in determination of the design DNBR value.

The measurement error for RCS total flow rate is based upon performing a precision heat balance and using the result to calibrate the RCS flow rate indicators. Potential fouling of the feedwater venturi which might not be detected could bias the result from the precision heat balance in a non-conservative manner. Therefore, a penalty of 0.1% for undetected fouling of the feedwater venturi will be added if venturis are not inspected and cleaned at least once for 18 months. Any fouling which might bias the RCS flow rate measurement greater than 0.1% can be detected by monitoring and trending various plant performance parameters. If detected, action shall be taken before performing subsequent precision heat balance measurements, i.e., either the effect of the fouling shall be quantified and compensated for in the RCS flow rate measurement or the venturi shall be cleaned to eliminate the fouling.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 170

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 January 18, 1999, the Northeast Nuclear Energy Company, et al. (the licensee), submitted a request for a change to the Millstone Nuclear Power Station, Unit No. 3 Technical Specifications (TS). The requested change would modify TS 3/4.2.2 to be in accordance with NRC-approved Westinghouse methodologies for the heat flux hot channel factor - $F_Q(Z)$. In addition, the proposed amendment would make changes to the core operating limits and the analytical methods used to determine core operating limits contained in Section 6.9.1.6.a and b, respectively, by adding, modifying, or deleting references.

2.0 EVALUATION

2.1 Changes to TS 3/4.2.2

In its letter dated January 18, 1999, the licensee stated that the proposed change to TS 3/4.2.2 modifies the existing heat flux hot channel factor to be in accordance with NRC-approved Westinghouse methodologies for $F_Q(Z)$ surveillance (WCAP-10216-P-A, Revision 1A, "Relaxation of Constant Axial Offset Control, FQ Surveillance Technical Specification," February 1994 (W Proprietary)).

The staff reviewed the information in the licensee's submittal and has determined that the changes are consistent with WCAP-10216-P-A, Revision 1A, and direct the licensee to take the proper actions to maintain peaking factors within the limits assumed in the Millstone Unit 3 accident analysis. The changes to the associated Bases explain the various surveillance requirements. Therefore, the staff finds the proposed changes to TS 3/4.2.2 and the associated Bases to be acceptable.

2.2 Changes to TS 6.9.1.6.a

In its letter dated January 18, 1999, the licensee stated that TS 6.9.1.6.a does not administratively reflect each item that the TS reference in the core operating limits report (COLR). Specifically, shutdown margin monitor minimum count rates required in TS 3.3.5, "Shutdown Margin Monitor," are listed in the COLR but not identified as a core operating limit in

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TS 6.9.1.6.a. The licensee proposed adding the shutdown margin minimum count rate to the list of core operating limits. The staff finds this change to be acceptable.

2.3 Changes to TS 6.9.1.6.b

TS 6.9.1.6.b contains references to the NRC-approved analytical methods, that the licensee used to determine the core operating limits. In its letter dated January 18, 1999, the licensee proposed making changes to this section by adding, modifying, or deleting references. This included (1) adding a reference to the NRC Safety Evaluation Report on NUSCO-152, Addendum 4, which approved Northeast Utilities ability to perform pressurized water reactor physics calculations for Millstone Unit 3, (2) adding references to the licensee's shutdown margin analysis methods which were approved by the NRC and bring conformity between the references in the TS and the cycle-specific parameters in the COLR, (3) deleting a reference that is no longer applicable in determining core operating limits, and (4) making other editorial changes. The staff has reviewed the changes to this section, determined the changes are administrative in nature, and finds them 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 and 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 (64 FR 6705). 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.

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Date: May 10, 1999