

January 29, 2001

Mr. R. G. Lizotte
Master Process Owner - Assessment
c/o Mr. David A. Smith
Northeast Nuclear Energy Company
P. O. Box 128
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SUBJECT: MILLSTONE NUCLEAR POWER STATION, UNIT NO. 3 - ISSUANCE OF
AMENDMENT RE: ELECTRICAL EQUIPMENT PROTECTIVE DEVICES (TAC
NO. MA9138)

Dear Mr. Lizotte:

The Commission has issued the enclosed Amendment No. 193 to Facility Operating License No. NPF-49 for the Millstone Nuclear Power Station, Unit No. 3, in response to your application dated June 1, 2000.

The amendment approves changes to Technical Specifications 3.3.3.2, "Instrumentation, Movable Incore Detectors;" 3.3.3.3 "Instrumentation, Seismic Instrumentation;" 3.3.3.4, "Instrumentation, Meteorological Instrumentation;" 3.3.3.8, "Loose-Part Detection System;" 3.3.4, "Turbine Overspeed Protection;" and Index Pages vi and vii. The changes will relocate the requirements for the incore detectors, seismic instrumentation, meteorological instrumentation, loose-part detection system, and turbine overspeed protection system from the Technical Specifications (TSs) to the Technical Requirements Manual. The Bases for these TSs have been modified to reflect the TS changes.

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,

/RA/

Victor Nerses, Sr. 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. 193 to NPF-49
2. Safety Evaluation

cc w/encls: See next page

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Unit 3

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Millstone Nuclear Power Station
Unit 3

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January 29, 2001

SUBJECT: MILLSTONE NUCLEAR POWER STATION, UNIT NO. 3 - ISSUANCE OF
AMENDMENT RE: ELECTRICAL EQUIPMENT PROTECTIVE DEVICES (TAC
NO. MA9138)

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The amendment approves changes to Technical Specifications 3.3.3.2, "Instrumentation, Movable Incore Detectors;" 3.3.3.3 "Instrumentation, Seismic Instrumentation;" 3.3.3.4, "Instrumentation, Meteorological Instrumentation;" 3.3.3.8, "Loose-Part Detection System;" 3.3.4, "Turbine Overspeed Protection;" and Index Pages vi and vii. The changes will relocate the requirements for the incore detectors, seismic instrumentation, meteorological instrumentation, loose-part detection system, and turbine overspeed protection system from the Technical Specifications (TSs) to the Technical Requirements Manual. The Bases for these TSs have been modified to reflect the TS changes.

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Sincerely,

/RA/

Victor Nerses, Sr. 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. 193 to NPF-49
2. Safety Evaluation

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NORTHEAST NUCLEAR ENERGY COMPANY, ET AL.

DOCKET NO. 50-423

MILLSTONE NUCLEAR POWER STATION, UNIT NO. 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 193
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 1, 2000, 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. 193 , 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, and shall be implemented within 60 days of issuance, including the relocation to the TRM as specified in the licensee's application dated June 1, 2000.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

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: January 29, 2001

ATTACHMENT TO LICENSE AMENDMENT NO. 193

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>
vi	vi
vii	vii
3/4 3-46	3/4 3-46
3/4 3-47	3/4 3-47
3/4 3-48	3/4 3-48
3/4 3-49	3/4 3-48
3/4 3-50	3/4 3-50
3/4 3-51	3/4 3-51
3/4 3-52	3/4 3-52
3/4 3-68	3/4 3-68
3/4 3-81	3/4 3-81
B 3/4 3-4	B 3/4 3-4
B 3/4 3-6	B 3/4 3-6

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 193

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 1, 2000, the Northeast Nuclear Energy Company, et al. (the licensee), submitted a request for changes to the Millstone Nuclear Power Station, Unit No. 3 (Millstone 3) Technical Specifications (TSs). The requested changes would make changes to TSs 3.3.3.2, "Instrumentation, Movable Incore Detectors;" 3.3.3.3 "Instrumentation, Seismic Instrumentation;" 3.3.3.4, "Instrumentation, Meteorological Instrumentation;" 3.3.3.8, "Loose-Part Detection System;" 3.3.4, "Turbine Overspeed Protection;" and Index Pages vi and vii. The changes will relocate the requirements for the incore detectors, seismic instrumentation, meteorological instrumentation, loose-part detection system, and turbine overspeed protection system from the TSs to the Technical Requirements Manual (TRM). The Bases for these TSs have also been modified to reflect the TS changes.

2.0 BACKGROUND

The U.S. Nuclear Regulatory Commission (NRC) issued the Generic Letter (GL) 95-10, "Relocation of Selected Technical Specifications Requirements Related to Instrumentation," which provides the guideline for preparing a proposed license amendment to relocate from TS selected requirements related to instrumentation. In accordance with GL 95-10, the license amendment request should contain a commitment to relocate each selected requirement to particular licensee-controlled document or program. The commitment should also address the submittal of the revised documents to the NRC in accordance with the applicable regulation. In the amendment request, the licensee should also clearly describe the program it will use to control changes to relocated provisions. Control of the relocated provisions in accordance with the applicable regulation ensures that NRC review and approval will be requested for changes exceeding the stated regulatory threshold.

Section 50.36c(2)(ii) of Title 10 of the *Code of Federal Regulations* (10 CFR 50.36c(2)(ii)) contains the requirements for items that must be in TSs. This regulation provides four criteria that can be used to determine the requirements that must be included in the TSs.

A TS limiting condition for operation (LCO) of a nuclear reactor must be established for each item meeting one or more of the following criteria:

- Criterion 1: Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.
- Criterion 2: A process variable, design feature, or operating restriction that is an initial condition of a design basis accident or transient analysis that either assumes the failure of, or presents a challenge to the integrity of a fission product barrier.
- Criterion 3: A structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a design basis accident or transient that either assumes the failure of, or presents a challenge to the integrity of a fission product barrier.
- Criterion 4: A structure, system, or component which operating experience or probabilistic risk assessment has shown to be significant to public health and safety.

Items not meeting any of these four criteria can be relocated from the TSs to a licensee-controlled document. The licensee can then change the relocated requirements, if necessary, in accordance with 10 CFR 50.59. The staff's evaluation of each TS proposed for relocation to the TRM are discussed below.

3.0 EVALUATION

TS Section 3.3.3.2

The movable incore detector instrumentation is used periodically to calculate power peaking factors to verify nuclear design predictions, to ensure operation within established fuel performance limits, and to calibrate other nuclear instrumentation. The measurements are used in a confirmatory manner and do not provide direct input to reactor protection system or engineered safety features actuation system functions, and neither operating experience or probabilistic risk assessment has shown these instruments to be significant to public health and safety (Criterion 4).

These instruments are not used for, and are not capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary (Criterion 1) before a design-basis accident. These instruments do not function as a primary success path to mitigate events which assume a failure of, or challenge to, the integrity of fission product barriers (Criterion 3). Core power distributions (measured by the incore detectors) constitute an important initial condition to design-basis accidents and therefore need to be addressed by the TSs. However, the detectors themselves are not an active design feature needed to preclude analyzed accidents or transients (Criterion 2). The staff finds that the requirements contained in this specification do not meet any of the 10 CFR 50.36c(2)(ii) criteria on items for which TSs must be established. So this instrumentation does not warrant inclusion in the TSs in accordance with the 10 CFR 50.36 criteria. Therefore, the proposed relocation of TS 3.3.3.2 to the TRM is consistent with the guidance in the GL 95-10 and is acceptable.

Technical Specification Section 3.3.3.3

The seismic monitoring instrumentation is used to record data for use in evaluating the effect of a seismic event. The seismic monitoring instrumentation is not used to mitigate a design-basis accident (DBA) or transient (Criterion 3). The seismic monitoring instrumentation is not installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary (Criterion 1). The "NRC Final Policy Statement on Technical Specification Improvements for Nuclear Power Reactors" published on July 22, 1993 (58 FR 39132) explained that instrumentation to detect precursors to reactor coolant pressure boundary leakage, such as seismic instrumentation, is not included in the first criterion.

The capability of the plant to withstand a seismic event or other design-basis accident is determined by the initial design and construction of systems, structures, and components. The instrumentation is used to alert operators to the seismic event and evaluate the plant response, and neither operating experience or probabilistic risk assessment has shown these instruments to be significant to public health and safety (Criterion 4). The seismic instrumentation is not a protective design feature or as previously discussed, part of a primary success path for events that challenge fission product barriers (Criterion 2). The staff finds that the requirements contained in this specification do not meet any of the 10 CFR 50.36c(2)(ii) criteria on items for which TSs must be established. So this instrumentation does not warrant inclusion in the TSs in accordance with the 10 CFR 50.36 criteria. Therefore, the proposed relocation of TS 3.3.3.3 to the TRM is consistent with the guidance in GL 95-10 and is acceptable.

Technical Specification Section 3.3.3.4

A knowledge of meteorological conditions in the vicinity of the reactor is important in providing a basis for estimating radiation doses resulting from radioactive materials released in airborne effluents. Accordingly, the meteorological monitoring instrumentation serves a useful function in estimating radiation doses to the public from either routine or accidental releases of radioactive materials to the atmosphere. The meteorological monitoring instrumentation is not installed instrumentation that is used to detect and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary (Criterion 1). It is not a process variable, design feature, or operating restriction that is an initial condition of a DBA or transient analysis that either assumes the failure of, or presents a challenge to the integrity of a fission product barrier (Criterion 2).

The meteorological instrumentation does not serve a primary protective function, and neither operating experience or probabilistic risk assessment has shown these instruments to be significant to public health and safety (Criterion 4). The instrumentation does not serve to ensure that the plant is operated within the bounds of initial conditions assumed in design-basis accident and transient analyses or that the plant will be operated to preclude transients or accidents. The meteorological instrumentation does not serve as part of the primary success path of a safety sequence analysis used to demonstrate that the consequences of these events are within the appropriate acceptance criteria (Criterion 3). The staff finds that the requirements contained in this specification do not meet any of the 10 CFR 50.36c(2)(ii) criteria on items for which TSs must be established. So this instrumentation does not warrant inclusion in the TSs in accordance with the 10 CFR 50.36 criteria. Therefore, the proposed relocation of TS 3.3.3.4 to the TRM is consistent with the guidance in GL 95-10 and is acceptable.

Technical Specification Section 3.3.3.8

The loose-part detection instrumentation identifies the existence of possible loose parts in the reactor coolant system (RCS) and is not used to detect significant degradation of the reactor coolant pressure boundary (Criterion 1). This specification ensures that sufficient capability is available to detect loose metallic parts in the RCS and avoid or mitigate damage to internal RCS components. Early detection can give operators time to take corrective actions and avoid or mitigate damage or malfunctions of primary system components.

The loose-part detection instrumentation does not serve a primary protective function, and neither operating experience or probabilistic risk assessment has shown these instruments to be significant to public health and safety (Criterion 4). The instrumentation does not serve to ensure that the plant is operated within the bounds of initial conditions assumed in design-basis accident and transient analyses (Criterion 2) or that the plant will be operated to preclude transients or accidents. The loose-part detection instrumentation does not serve as part of the primary success path of a safety sequence analysis used to demonstrate that the consequences of these events are within the acceptance criteria (Criterion 3). The staff finds that the requirements contained in this specification do not meet any of the 10 CFR 50.36c(2)(ii) criteria on items for which TSs must be established. So this instrumentation does not warrant inclusion in the TSs in accordance with the 10 CFR 50.36 criteria. Therefore, the proposed relocation of TS 3.3.3.8 to the TRM is consistent with the guidance in GL 95-10 and is acceptable.

Technical Specification Section 3.3.4

The turbine is equipped with control valves and stop valves that control turbine speed during normal plant operation and protect it from overspeed during abnormal conditions. The turbine overspeed protection instrumentation consists of separate mechanical and electrical sensing mechanisms which are capable of initiating fast closure of the control and stop valves and is not used to detect significant degradation of the reactor coolant pressure boundary (Criterion 1).

The turbine overspeed protection instrumentation does not serve a primary protective function, and neither operating experience or probabilistic risk assessment has shown these instruments to be significant to public health and safety (Criterion 4). The instrumentation does not serve to ensure that the plant is operated within the bounds of initial conditions assumed in design-basis accident and transient analyses (Criterion 2) or that the plant will be operated to preclude transients or accidents. The turbine overspeed protection instrumentation does not serve as part of the primary success path of a safety sequence analysis used to demonstrate that the consequences of these events are within the appropriate acceptance criteria (Criterion 3). The staff finds that the requirements contained in this specification do not meet any of the 10 CFR 50.36c(2)(ii) criteria on items for which TSs must be established. So this instrumentation does not warrant inclusion in the TSs in accordance with the 10 CFR 50.36 criteria. Therefore, the proposed relocation of TS 3.3.4 to the TRM is consistent with the guidance in GL 95-10 and is 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 relates to changes in recordkeeping, reporting, or administrative procedures or requirements. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(10). 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: January 29, 2001