

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

July 13, 1999

SUBJECT: MILLSTONE NUCLEAR POWER STATION, UNIT NO. 2 - ISSUANCE OF
AMENDMENT RE: RELOCATING TECHNICAL SPECIFICATIONS TO
TECHNICAL REQUIREMENTS MANUAL (TAC NO. MA5042)

Dear Mr. Necci:

The Commission has issued the enclosed Amendment No. 237 to Facility Operating License No. DPR-65 for the Millstone Nuclear Power Station, Unit 2, in response to your application dated March 19, 1999.

The amendment relocates Technical Specifications (TS) Sections 3.3.3.2, "Instrumentation, Incore Detectors," 3.3.3.3, "Instrumentation, Seismic Instrumentation," and 3.3.3.4, "Instrumentation, Meteorological Instrumentation," to the Millstone, Unit No. 2 Technical Requirements Manual. Index page V and TS Bases have been revised to reflect the above relocations.

Sincerely,

ORIGINAL SIGNED BY: J. Nakoski for
Ronald B. Eaton, Senior Project Manager, Section 2
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-336

Enclosures: 1. Amendment No. 237 to DPR-65
2. Safety Evaluation

cc w/encls: See next page

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

July 13, 1999

Mr. Raymond P. Necci
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Northeast Nuclear Energy Company
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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,

A handwritten signature in dark ink, appearing to read "Ronald B. Eaton", is written over the typed name. The signature is fluid and cursive.

Ronald B. Eaton, Senior Project Manager, Section 2
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-336

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2. Safety Evaluation

cc w/encls: See next page

Millstone Nuclear Power Station
Unit 2

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Millstone Nuclear Power Station
Unit 2

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

NORTHEAST NUCLEAR ENERGY COMPANY
THE CONNECTICUT LIGHT AND POWER COMPANY
THE WESTERN MASSACHUSETTS ELECTRIC COMPANY
DOCKET NO. 50-336
MILLSTONE NUCLEAR POWER STATION, UNIT NO. 2
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 237
License No. DPR-65

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 March 19, 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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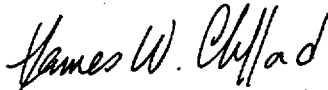
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-65 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 237, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. The license amendment is effective as of its date of issuance and shall be implemented at the facility within 60 days (including issuance of Technical Requirements Manual for use by licensee personnel). In addition, the licensee shall include the relocated information in the Updated Final Safety Analysis Report submitted to the NRC, pursuant to 10 CFR 50.71(e), as was described in the licensee's application dated March 19, 1999, and evaluated in the staff's safety evaluation dated

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: July 13, 1999

ATTACHMENT TO LICENSE AMENDMENT NO. 237

FACILITY OPERATING LICENSE NO. DPR-65

DOCKET NO. 50-336

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>
V	V
3/4 3-30	3/4 3-30
3/4 3-32	3/4 3-32
3/4 3-33	3/4 3-33
3/4 3-34	3/4 3-34
3/4 3-35	3/4 3-35
3/4 3-36	3/4 3-36
3/4 3-37	3/4 3-37
3/4 3-38	3/4 3-38
B 3/4 3-3	B 3/4 3-3

INDEX

LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

<u>SECTION</u>	<u>PAGE</u>
<u>3/4.2 POWER DISTRIBUTION LIMITS</u>	
3/4.2.1 LINEAR HEAT RATE	3/4 2-1
3/4.2.2 Deleted	
3/4.2.3 TOTAL INTEGRATED RADIAL PEAKING FACTOR - F_r^T	3/4 2-9
3/4.2.4 AZIMUTHAL POWER TILT	3/4 2-10
3/4.2.5 Deleted	
3/4.2.6 DNB MARGIN	3/4 2-13
<u>3/4.3 INSTRUMENTATION</u>	
3/4.3.1 REACTOR PROTECTIVE INSTRUMENTATION	3/4 3-1
3/4.3.2 ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION	3/4 3-10
3/4.3.3 MONITORING INSTRUMENTATION	3/4 3-26
Radiation Monitoring	3/4 3-26
Remote Shutdown Instrumentation	3/4 3-39
Accident Monitoring	3/4 3-46
Radioactive Liquid Effluent Monitoring Instrumentation .	3/4 3-50
Radioactive Gaseous Effluent Monitoring Instrumentation .	3/4 3-56
<u>3/4.4 REACTOR COOLANT SYSTEM</u>	
3/4.4.1 COOLANT LOOPS AND COOLANT CIRCULATION	3/4 4-1
Startup and Power Operation	3/4 4-1
Hot Standby	3/4 4-1a
Shutdown	3/4 4-1b
Reactor Coolant Pumps - Shutdown	3/4 4-1d

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INSTRUMENTATION

BASES

3/4.3.3.2 - DELETED

3/4.3.3.3 - DELETED

3/4.3.3.4 - DELETED

3/4.3.3.5 REMOTE SHUTDOWN INSTRUMENTATION

The OPERABILITY of the remote shutdown instrumentation ensures that sufficient capability is available to permit shutdown and maintenance of HOT SHUTDOWN of the facility from locations outside of the control room. This capability is required in the event control room habitability is lost and is consistent with General Design Criteria 19 of 10 CFR 50.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 237

TO FACILITY OPERATING LICENSE NO. DPR-65

NORTHEAST NUCLEAR ENERGY COMPANY

MILLSTONE NUCLEAR POWER STATION, UNIT NO. 2

DOCKET NO. 50-336

1.0 INTRODUCTION

By application dated March 19, 1999, the Northeast Nuclear Energy Company (NNECO or the licensee) proposed an amendment to the Appendix A Technical Specifications (TSs) for the Millstone Nuclear Power Station, Unit 2. The proposed amendment would relocate certain instrumentation requirements stated in TS 3.3.3.2, "Instrumentation, Incore Detectors," 3.3.3.3, "Instrumentation, Seismic Instrumentation," 3.3.3.4, "Instrumentation, Meteorological Instrumentation," and Index Page V, in accordance with the guidance in Generic Letter 95-10, "Relocation of Selected Technical Specifications Requirements Related to Instrumentation." The licensee has committed to relocate these requirements to the Millstone, Unit 2 Technical Requirements Manual (TRM) which is incorporated into the Final Safety Analysis Report such that future changes could be made under 10 CFR 50.59. The associated bases for the TS requirements would be removed also, and will be incorporated into the TRM. The following Limiting Conditions for Operation (LCOs) and associated Surveillance Requirements (SRs) would be relocated to the TRM.

<u>Technical Specification</u>	<u>Title</u>
LCO 3.3.3.2	Instrumentation, Incore Detectors
LCO 3.3.3.3 and associated SRs & Tables	Instrumentation, Seismic Instrumentation
LCO 3.3.3.4 and associated SRs & Tables	Instrumentation, Meteorological Instrumentation

2.0 BACKGROUND

Section 182a of the Atomic Energy Act of 1954, as amended (the Act) requires applicants for nuclear power plant operating licenses to include technical specifications as part of the license. The Commission's regulatory requirements related to the content of technical specifications are set forth in 10 CFR 50.36. The regulation requires that the technical specifications include items in five specific categories, including (1) safety limits, limiting safety system settings and limiting control settings; (2) limiting conditions for operation; (3) surveillance requirements; (4) design features; and (5) administrative controls. The regulation does not specify the particular requirements to be included in the TSs.

The four criteria defined by 10 CFR 50.36 for determining whether a particular matter is required to be included in the TS LCOs, are as follows:

- (1) Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary;
- (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;
- (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;
- (4) a structure, system, or component which operating experience or probabilistic risk assessment has shown to be significant to public health and safety.

Existing TS requirements which fall within or satisfy any of the above criteria must be retained in the TSs; those requirements which do not fall within or satisfy these criteria may be relocated to other licensee-controlled documents.

3.0 EVALUATION

3.1 Incore detector system

NNECO has proposed to remove LCO 3.3.3.2, "Instrumentation, Incore Detector System," from the TSs and relocate corresponding requirements for the system in the TRM. Incore instrumentation is used periodically to calculate reactor core power peaking factors to verify nuclear design predictions, ensure operation within established fuel performance limits, and 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.

These instruments are not used for and are not capable of detecting a significant abnormal degradation of the reactor coolant pressure boundary before a design-basis accident. These instruments do not function as a primary success path to mitigate events which assume a

failure of or a challenge to the integrity of fission product barriers. 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. Therefore, the staff finds that the incore detector requirements do not meet the criteria of 10 CFR 50.36 for inclusion in the TSs. Therefore, removal of the incore instrumentation requirements from the TSs and relocation of corresponding requirements to the TRM is acceptable. Any subsequent changes to the provisions may be controlled pursuant to 10 CFR 50.59.

3.2 Seismic Instrumentation

NNECO has proposed to remove LCO 3.3.3.3, "Instrumentation, Seismic Instrumentation," and associated SRs and tables from the TSs; corresponding requirements would be relocated in the TRM. Section VI(a)(3) of Appendix A to 10 CFR Part 100 requires that seismic monitoring instrumentation be provided to determine promptly the response of those nuclear power plant features important to safety in the event of an earthquake. This capability is required to allow for a comparison of the measured response to that used in the design basis for the unit. Comparison of such data is needed to (1) determine whether the plant can continue to be operated safely and (2) permit such timely action as may be appropriate. However the seismic instrumentation does not actuate any protective equipment or serve any direct role in the mitigation of an accident.

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. 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. As discussed above, the seismic instrumentation is not a protective design feature or part of a primary success path for events that challenge fission product barriers. The staff has concluded that the seismic monitoring instrumentation does not satisfy the criteria stated in 10 CFR 50.36. Therefore, removal of seismic monitoring instrumentation requirements from the TSs and relocation of corresponding requirements to the TRM is acceptable. Any subsequent changes to the provisions may be controlled pursuant to 10 CFR 50.59.

3.3 Meteorological Instrumentation

NNECO has proposed to remove LCO 3.3.3.4, "Instrumentation, Meteorological Instrumentation," and associated SRs and tables from the TSs; corresponding requirements would be relocated in the TRM. In 10 CFR 50.47, "Emergency Plans," and 10 CFR Part 50, Appendix E, "Emergency Planning and Preparedness for Production and Utilization Facilities," the Commission requires power plant licensees to provide reasonable assurance that adequate protection measures can and will be taken in the event of a radiological emergency. Timely access to accurate local meteorological data is important for estimating potential radiation doses to the public and for determining appropriate protective measures.

In 10 CFR 50.36a(a)(2), the Commission requires nuclear power plant licensees to submit annual reports specifying the quantity of each of the principal radionuclides released to unrestricted areas in liquid and airborne effluents and such other information as may be required by the Nuclear Regulatory Commission (NRC) to estimate maximum potential annual radiation doses to the public. A knowledge of meteorological conditions in the vicinity of the reactor is important in providing a basis for estimating annual radiation doses resulting from radioactive materials released in airborne effluents. Accordingly, the meteorological 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 instrumentation does not serve a primary protective function so as to warrant inclusion in the TSs in accordance with the 10 CFR 50.36 criteria. 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. Accordingly, the staff has concluded that the meteorological instrumentation does not meet the 10 CFR 50.36 criteria and need not be included in the TSs.

Therefore, removal of the meteorological instrumentation requirements from the TSs and relocation of corresponding requirements to the TRM is acceptable. Any subsequent changes to the provisions may be controlled pursuant to 10 CFR 50.59.

3.4 Index Page V

Index page V will be revised by eliminating the sections corresponding to Incore Detectors (page 3/4 3-30), Seismic Instrumentation (page 3/4 3-32), and Meteorological Instrumentation (page 3/4 3-36). These sections will be relocated to the TRM. The NRC staff finds this administrative change acceptable.

3.5 Bases Sections

The proposed change to Bases Sections 3/4.3.3.2, 3/4.3.3.3, and 3/4.3.3.4 will delete the text associated with each section and replace the section title with the sentence, "This page intentionally left blank." These sections will be relocated to the TRM. The NRC staff finds this administrative change acceptable.

4.0 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.

5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes requirements 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 19560). 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.

6.0 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: Bartholomew C. Buckley

Date: July 13, 1999