

January 16, 2001

Mr. R. G. Lizotte
Master Process Owner - Assessment
c/o Mr. David A. Smith
Northeast Nuclear Energy Company
P. O. Box 128
Waterford, CT 06385-0128

SUBJECT: MILLSTONE NUCLEAR POWER STATION, UNIT NO. 3 - ISSUANCE OF
AMENDMENT RE: RELOCATION OF SELECTED TECHNICAL
SPECIFICATIONS RELATED TO INSTRUMENTATION (TAC NO. MA8747)

Dear Mr. Lizotte:

The Commission has issued the enclosed Amendment No. 192 to Facility Operating License No. NPF-49 for the Millstone Nuclear Power Station, Unit No. 3, in response to your application dated April 19, 2000.

The amendment modifies Technical Specifications (TSs) 3.8.4.1, "Electrical Power System - Containment Penetration Conductor Overcurrent Protective Devices;" 3.8.4.2.1, "Electrical Power Systems - Motor-Operated Valves Thermal Overload Protections;" and 3.8.4.2.2, "Electrical Power Systems - Motor-Operated Valves Thermal Overload Protection Not Bypassed," by relocating the requirements for containment penetration conductor overcurrent and motor-operated valve thermal overload protective devices from the TSs to the licensee's Technical Requirements Manual (TRM). The Bases for these TSs would also be relocated to the TRM.

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. 192 to NPF-49
2. Safety Evaluation

cc w/encls: See next page

Mr. R.G. Lizotte
Master Process Owner - Assessment
c/o Mr. David A. Smith
Northeast Nuclear Energy Company
P. O. Box 128
Waterford, CT 06385-0128

January 16, 2001

SUBJECT: MILLSTONE NUCLEAR POWER STATION, UNIT NO. 3 - ISSUANCE OF
AMENDMENT RE: RELOCATION OF SELECTED TECHNICAL
SPECIFICATIONS RELATED TO INSTRUMENTATION (TAC NO. MA8747)

Dear Mr. Lizotte:

The Commission has issued the enclosed Amendment No. 192 to Facility Operating License No. NPF-49 for the Millstone Nuclear Power Station, Unit No. 3, in response to your application dated April 19, 2000.

The amendment modifies Technical Specifications (TSs) 3.8.4.1, "Electrical Power System - Containment Penetration Conductor Overcurrent Protective Devices;" 3.8.4.2.1, "Electrical Power Systems - Motor-Operated Valves Thermal Overload Protections;" and 3.8.4.2.2, "Electrical Power Systems - Motor-Operated Valves Thermal Overload Protection Not Bypassed," by relocating the requirements for containment penetration conductor overcurrent and motor-operated valve thermal overload protective devices from the TSs to the licensee's Technical Requirements Manual (TRM). The Bases for these TSs would also be relocated to the TRM.

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. 192 to NPF-49
2. Safety Evaluation

cc w/encls: See next page

DISTRIBUTION:

PUBLIC OGC PDI-2 R/F RSummers, RI AWang
EAdensam (E-mail EGA1) JLinville, RI TClark ACRS VNerses
GHill (2) WBeckner JClifford JLinville, RI
DOCUMENT NAME: C:\amda8747.wpd *See SE dated 10/31/00

OFFICE	PDI-2/PM	PDI-2/LA	EEIB*	OGC	PDI-2/PM	RTSB	PDI-2/SC
NAME	VNerses	TClark	JCalvo	RHoefling	AWang	WBeckner	JZimmerman for JClifford
DATE	1/9/01	12/15/00	10/31/00	12/20/00	12/15/00	1/7/2001	01/10/01

OFFICIAL RECORD COPY

NORTHEAST NUCLEAR ENERGY COMPANY, ET AL.

DOCKET NO. 50-423

MILLSTONE NUCLEAR POWER STATION, UNIT NO. 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 192
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 April 19, 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. 192, 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 relocations to the Technical Requirements Manual (TRM) as specified in the licensee's application dated April 19, 2000.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA by Jacob I. Zimmerman for/

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 16, 2001

ATTACHMENT TO LICENSE AMENDMENT NO. 192

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.

Remove

xi
xv
3/4 8-19
3/4 8-20
3/4 8-21
3/4 8-22
B 3/4 8-3

Insert

xi
xv
3/4 8-19
3/4 8-20
3/4 8-21
3/4 8-22
B 3/4 8-3

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 192

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 April 19, 2000, the Northeast Nuclear Energy Company, et al. (the licensee), submitted a request for changes to the Millstone Nuclear Power Station, Unit No. 3 Technical Specifications (TSs). The amendment would modify TSs 3.8.4.1, "Electrical Power System - Containment Penetration Conductor Overcurrent Protective Devices;" 3.8.4.2.1, "Electrical Power Systems - Motor-Operated Valves Thermal Overload Protections;" and 3.8.4.2.2, "Electrical Power Systems - Motor-Operated Valves Thermal Overload Protection Not Bypassed," by relocating the requirements for containment penetration conductor overcurrent and motor-operated valve thermal overload protective devices from the TSs to the licensee's Technical Requirements Manual (TRM). The Bases for these TSs would also be relocated to the TRM.

2.0 BACKGROUND

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 criteria and staff's evaluation of each TS proposed for relocation to the TRM are discussed below.

3.0 EVALUATION

TS 3.8.4.1

Currently, TS 3.8.4.1 requires that all containment penetration conductor overcurrent protective devices be operable. These devices are installed to minimize the damage from a fault in a component inside containment or in the cabling that penetrates containment. This prevents an electrical penetration from being damaged in such a way that the containment structure could be breached. The proposed TS would relocate these devices to the TRM.

Criterion 1 addresses instrumentation installed to detect excessive reactor coolant system (RCS) leakage. TS 3.8.4.1, which addresses the containment penetration conductor overcurrent protective devices, does not cover installed instrumentation that is used to detect, and indicate in the control room, a significant degradation of the reactor coolant pressure boundary. Thus, the containment penetration conductor overcurrent devices do not satisfy Criterion 1.

The purpose of Criterion 2 is to capture those process variables that have initial values assumed in the design basis accident and transient analyses and that are monitored and controlled during power operation. This criterion also includes active design features (e.g., high-pressure/low-pressure system valves and interlocks) and operating restrictions (pressure/temperature limits) needed to preclude unanalyzed accidents and transients. The containment penetration conductor overcurrent protective devices do help preserve the assumptions of the accident analysis by enhancing proper equipment operation. However, they are not 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. Thus, the containment penetration conductor overcurrent protective devices do not satisfy Criterion 2.

The purpose of Criterion 3 is to capture only those structures, systems, and components that are part of the primary success path of the safety analysis (an examination of the actions required to mitigate the consequences of the design basis accident and transients). The primary success path of a safety analysis consists of the combinations and sequences of equipment needed to operate so that the plant responses to the design basis accident and the transients limiting the consequences of these events are within the appropriate acceptance criteria. Also captured by this criterion are those support and actuation systems that are necessary in the primary success path, but this criterion does not include backup and diverse equipment. These conductor overcurrent protective devices are installed to minimize the damage from a fault in a component inside containment or in conductors that penetrate containment. However, they are not a structure, system, or component that is part of the primary success path whose function or actuation mitigates a design bases accident or transient that either assumes the failure of, or presents a challenge to, the integrity of a fission

product barrier. Thus, the containment penetration conductor overcurrent protective devices do not satisfy Criterion 3.

The purpose of Criterion 4 is to capture only those structures, systems, and components that either operating experience or probabilistic safety assessment has shown to be significant to the public health and safety. The conductor overcurrent protective devices are not a structure, system, or component that operating experience or probabilistic safety assessment has shown to be significant to the public health and safety. The Maintenance Rule (10 CFR 50.65) does not require these protective devices to be monitored for unavailability. In addition, the licensee indicated that its review of industry operating experience did not produce any examples where containment penetration breakers have had a significant adverse effect on public health and safety. Thus, the containment penetration conductor overcurrent protective devices do not meet Criterion 4.

The requirement contained in this specification for the containment penetration conductor overcurrent protective devices does not meet any of the 10 CFR 50.36c(2)(ii) criteria for items that must be in the TSs. In addition, Standard TS Section 3.8, Electrical Power Systems, does not contain an LCO for the containment penetration conductor overcurrent protective devices. Therefore, these TS requirements can be relocated.

TS 3.8.4.2.1

Motor-operated valve thermal overload protection provides equipment protection in addition to that provided by the design of the distribution system. Bypassing the thermal overload protection of certain motor-operated valves (MOVs) during accident conditions minimizes the potential that the actuation of a thermal overload device could prevent a vital piece of equipment from performing its intended function.

Criterion 1 addresses instrumentation installed to detect excessive reactor coolant system (RCS) leakage. TS 3.8.4.2.1 does not cover installed instrumentation that is used to detect and indicate in the control room, a significant degradation of the reactor coolant pressure boundary. MOV thermal overload protection and the need to bypass that protection during accident conditions does not satisfy Criterion 1.

The purpose of Criterion 2 is to capture those process variables that have initial values assumed in the design-basis accident and transient analyses and that are monitored and controlled during power operation. This criterion also includes active design features (e.g., high-pressure/low-pressure system valves and interlocks) and operating restrictions (pressure/temperature limits) needed to preclude unanalyzed accidents and transients. Bypassing the MOV thermal overload protection for certain valves during accident situations helps preserve the assumptions of the accident analysis by enhancing proper equipment operation. However, MOV thermal overload protection is not 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. MOV thermal overload protection and the need to bypass that protection during accident conditions does not satisfy Criterion 2.

The purpose of Criterion 3 is to capture only those structures, systems, and components that are part of the primary success path of the safety analysis (an examination of the actions required to mitigate the consequences of the design-basis accident and transients). The primary success path of a safety analysis consists of the combinations and sequences of

equipment needed to operate so that the plant responds to the design basis accident and the transients limiting the consequences of these events to within the appropriate acceptance criteria. Also captured by this criterion are those support and actuation systems that are necessary in the primary success path, but the criterion does not include backup and diverse equipment. MOV thermal overload protection is installed to provide equipment protection. Bypassing the thermal overload protection of certain MOVs during accident conditions minimizes the potential that the actuation of a thermal overload device could prevent a vital piece of equipment from performing its intended function. However, the MOV thermal overload protection is not a structure, system, or component that is part of the primary success path whose function or actuation mitigates a design basis accident or transient that either assumes the failure of, or presents a challenge to, the integrity of a fission product barrier. Thus, MOV thermal overload protection and the need to bypass that protection during accident conditions does not satisfy Criterion 3.

The purpose of Criterion 4 is to capture only those structures, systems, and components that operating experience or probabilistic safety assessment has shown to be significant to public health and safety. MOV thermal overload protection and the need to bypass that protection during accident conditions is not a structure, system, or component that operating experience or probabilistic safety assessment has shown to be significant to public health and safety. The Maintenance Rule (10 CFR 50.65) does not require this type of protection to be monitored for unavailability. In addition, the licensee indicated that its review of industry operating experience did not produce any examples where MOV thermal overload protection has had a significant adverse effect on public health and safety. Thus, MOV thermal overload protection and the need to bypass that protection during accident conditions does not meet Criterion 4.

The requirements contained in the TS 3.8.4.2.1 for MOV thermal overload protection that are bypassed under accident conditions do not meet any of the 10 CFR 50.36c(2)(ii) criteria for items that must be in the TSs. In addition, Standard TS Section 3.8, Electrical Power Systems, does not contain an LCO for MOV thermal overload protection and the need to bypass that protection during accident conditions. Therefore, the TS requirements can be relocated.

TS 3.8.4.2.2

MOV thermal overload protection provides equipment protection in addition to that provided by the design of the distribution system. This additional protection, which is not bypassed during accident conditions, enhances equipment availability.

Criterion 1 addresses instrumentation installed to detect excessive RCS leakage. TS 3.8.4.2.2, which addresses MOV thermal overload protection, does not cover installed instrumentation that is used to detect and indicate in the control room, a significant degradation of the reactor coolant pressure boundary. The MOV thermal overload protection not bypassed during accident conditions does not satisfy Criterion 1.

The purpose of Criterion 2 is to capture those process variables that have initial values assumed in the design basis accident and transient analyses and that are monitored and controlled during power operation. This criterion also includes active design features (e.g., high-pressure/low-pressure system valves and interlocks) and operating restrictions (pressure/temperature limits) needed to preclude unanalyzed accidents and transients. The MOV thermal overload protection helps preserve the assumption of the accident analysis by providing equipment protection and enhancing equipment availability. However, MOV thermal overload protection is not 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. The MOV thermal overload protection not bypassed during accident conditions does not satisfy Criterion 2.

The purpose of Criterion 3 is to capture only those structures, systems, and components that are part of the primary success path of the safety analysis (an examination of the actions required to mitigate the consequences of the design basis accident and transients). The primary success path of a safety analysis consists of the combinations and sequences of equipment needed to operate so that the plant responds to the design basis accident and transients limiting the consequences of these events to within the appropriate acceptance criteria. Also captured by this criterion are those support and actuation systems that are necessary or items in the primary success path to successfully function, but the criterion does not include backup and diverse equipment. MOV thermal overload protection is installed to provide equipment protection and enhance equipment availability. However, MOV thermal overload protection is not a structure, system, or component that is part of the primary success path whose functions or actuations mitigate a design bases accident or transient that either assumes the failure of, or presents a challenge to, the integrity of a fission product barrier. The MOV thermal overload protection not bypassed during accident conditions does not satisfy Criterion 3.

The purpose of Criterion 4 is to capture only those structures, systems, and components that operating experience or probabilistic safety assessment has shown to be significant to the public health and safety. MOV thermal overload protection is not a structure, system, or component that operating experience or probabilistic safety assessment has shown to be significant to public health and safety. The Maintenance Rule (10 CFR 50.65) does not require this type of protection to be monitored for unavailability. In addition, the licensee indicated that its review of industry operating experience did not produce any examples where MOV thermal overload protection has had a significant adverse effect on public health and safety. Thus, MOV thermal overload protection not bypassed during accident conditions does not meet Criterion 4.

The requirements contained in this specification for MOV thermal overload protection that is not bypassed under accidents do not meet any of the 10 CFR 50.36c(2)(ii) criteria for items that must be in the TSs. In addition, Standard TS Section 3.8, Electrical Power Systems, does not contain an LCO for MOV thermal overload protection that is not bypassed under accident conditions. Therefore, TS 3.8.4.2.2 requirements can be relocated.

Bases Section 3/4.8.4

Bases Section 3/4.8.4, "Electrical Equipment Protective Devices," is being relocated to the TRM. This is consistent with the above TS changes and the staff does not object to the proposed TS Bases relocation.

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

This amendment relates to changes in recordkeeping, reporting, or administrative procedures or requirements. Accordingly, this 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 this 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: D. Nguyen

Date: January 16, 2001

Millstone Nuclear Power Station
Unit 3

cc:

Ms. L. M. Cuoco
Senior Nuclear Counsel
Northeast Utilities Service Company
P. O. Box 270
Hartford, CT 06141-0270

Edward L. Wilds, Jr., Ph.D.
Director, Division of Radiation
Department of Environmental Protection
79 Elm Street
Hartford, CT 06106-5127

Regional Administrator, Region I
U.S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

First Selectmen
Town of Waterford
15 Rope Ferry Road
Waterford, CT 06385

Mr. J. T. Carlin
Vice President - Human Services - Nuclear
Northeast Nuclear Energy Company
P. O. Box 128
Waterford, CT 06385

Mr. F. C. Rothen
Vice President - Nuclear Work Services
Northeast Nuclear Energy Company
P. O. Box 128
Waterford, CT 06385

Ernest C. Hadley, Esquire
1040 B Main Street
P.O. Box 549
West Wareham, MA 02576

Deborah Katz, President
Citizens Awareness Network
P.O. Box 83
Shelburne Falls, MA 03170

Mr. Allan Johanson, Assistant Director
Office of Policy and Management
Policy Development & Planning Division
450 Capitol Avenue - MS# 52ERN
P. O. Box 341441
Hartford, CT 06134-1441

Ms. Terry Concannon
Co-Chair
Nuclear Energy Advisory Council
41 South Buckboard Lane
Marlborough, CT 06447

Mr. R. P. Necci
Vice President - Nuclear Technical Services
Northeast Nuclear Energy Company
P. O. Box 128
Waterford, CT 06385

Mr. Evan W. Woollacott
Co-Chair
Nuclear Energy Advisory Council
128 Terry's Plain Road
Simsbury, CT 06070

Mr. John W. Beck, President
Little Harbor Consultants, Inc.
44 Nichols Road
Cohasset, MA 02025-1166

Mr. L. J. Olivier
Senior Vice President and
Chief Nuclear Officer - Millstone
Northeast Nuclear Energy Company
P.O. Box 128
Waterford, CT 06385

Mr. C. J. Schwarz
Master Process Owner - Operate the Asset
Northeast Nuclear Energy Company
P.O. Box 128
Waterford, CT 06385

Millstone Nuclear Power Station
Unit 3

cc:

Senior Resident Inspector
Millstone Nuclear Power Station
c/o U.S. Nuclear Regulatory Commission
P. O. Box 513
Niantic, CT 06357

Nicholas J. Scobbo, Jr., Esquire
Ferriter, Scobbo, Caruso, & Rodophele, P.C.
75 State Street, 7th Floor
Boston, MA 02108-1807

Mr. G. D. Hicks
Master Process Owner - Training
Northeast Nuclear Energy Company
P.O. Box 128
Waterford, CT 06385

Citizens Regulatory Commission
ATTN: Ms. Geri Winslow
P. O. Box 199
Waterford, CT 06385

Mr. B. D. Kenyon
President and Chief Executive Officer-
NNECO
Northeast Nuclear Energy Company
P.O. Box 270
Hartford, CT 06141-0270

Mr. D. A. Smith
Process Owner - Regulatory Affairs
Northeast Nuclear Energy Company
P. O. Box 128
Waterford, CT 06385

Ms. Nancy Burton
147 Cross Highway
Redding Ridge, CT 00870