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The Northeast Utilities System

APR 10 1997

Docket No. 50-336
B16344

Re: 10CFR50.90

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555

Millstone Nuclear Power Station, Unit No. 2
Proposed Revision to Technical Specifications
Enclosure Building

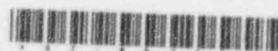
Pursuant to 10CFR50.90, Northeast Nuclear Energy Company (NNECO) hereby proposes to amend its Operating License, DPR-65, by incorporating the attached proposed changes into the Millstone Unit No. 2 Technical Specifications. The proposed changes relocate the Surveillance Requirement for attaining a negative pressure in the Enclosure Building (4.6.5.1.d.3) from Technical Specification 3.6.5.1, "Enclosure Building Filtration System," to Technical Specification 3.6.5.2, "Enclosure Building Integrity" (4.6.5.2.2). Surveillance Requirement 4.6.5.2 is being renumbered as 4.6.5.2.1 and is being modified to require each Enclosure Building access opening to be closed, instead of requiring each door in each Enclosure Building access opening to be closed. Technical Specification 3.6.5.2 is also being modified to include Enclosure Building Operability, in addition to Enclosure Building Integrity. Definition 1.25, "Enclosure Building Integrity" is being deleted and included in the Bases for Section 3.6.5.2, "Enclosure Building."

Editorial changes are being made to Technical Specifications 3.6.5.1, 3.6.5.2, and 3.9.15 to standardize the terminology used. Additional information is being added, and modifications made, to the Bases of the Technical Specifications affected by this proposed change.

Attachment 1 provides a discussion of the proposed changes. Attachment 2 provides the Significant Hazards Consideration. Attachment 3 provides the marked-up version of the appropriate pages of the current Technical Specifications. Attachment 4 provides the retyped pages of the Technical Specifications.

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Environmental Considerations

NNECO has reviewed the proposed license amendment request against the criteria of 10CFR51.22 for environmental considerations. The proposed changes relocate the surveillance requirement for attaining a negative pressure in the Enclosure Building and modify the requirement for Enclosure Building access openings such that each Enclosure Building access opening is required to be closed, instead of requiring each door in each Enclosure Building access opening to be closed. These changes do not significantly increase the type and amounts of effluents that may be released off site. In addition, this amendment request will not significantly increase individual or cumulative occupational radiation exposures. Therefore, NNECO has determined the proposed changes will not have a significant effect on the quality of the human environment.

Conclusions

The proposed changes were evaluated utilizing the criteria of 10CFR50.59, and were determined **not** to involve an unreviewed safety question. Additionally, we have concluded that the proposed changes **are safe**.

The proposed changes **do not** involve a significant impact on public health and safety (see the Safety Assessment provided in Attachment 1) and **do not** involve a Significant Hazards Consideration pursuant to the provisions of 10CFR50.92 (see the Significant Hazards Consideration provided in Attachment 2).

Plant Operations Review Committee and Nuclear Safety Assessment Board

The Plant Operations Review Committee and Nuclear Safety Assessment Board have reviewed and concurred with the determinations.

Schedule

We request issuance at your earliest convenience, with the amendment to be implemented within 30 days of issuance.

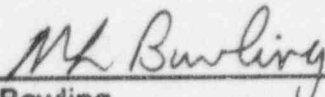
State Notification

In accordance with 10CFR50.91(b), a copy of this license amendment request is being provided to the State of Connecticut.

If you should have any questions on the above, please contact Mr. Ravi Joshi at (860) 440-2080.

Very truly yours,

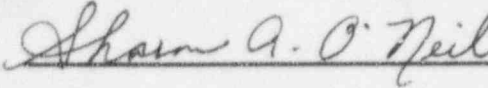
NORTHEAST NUCLEAR ENERGY COMPANY



M. L. Bowling
Millstone Unit No. 2 Recovery Officer

Subscribed and sworn to before me

this 10 day of April, 1997



Date Commission expires ~~My Commission Expires March 31, 2002~~

Attachments (4)

My Commission Expires March 31, 2002

cc: H. J. Miller, Region I Administrator
D. G. McDonald, Jr., NRC Project Manager, Millstone Unit No. 2
D. P. Beaulieu, Senior Resident Inspector, Millstone Unit No. 2
W. D. Travers, PhD, Director, Special Projects
W. D. Lanning, Director, Millstone Assessment Team
Mr. Kevin T. A. McCarthy, Director, Monitoring and Radiation Division,
Department of Environmental Protection

Attachment 1

Millstone Nuclear Power Station, Unit No. 2
Proposed Revision to Technical Specifications
Enclosure Building
Discussion of Proposed Changes

April 1997

**Proposed Revision to Technical Specifications
Enclosure Building
Discussion of Proposed Changes**

Introduction

Pursuant to 10CFR50.90, Northeast Nuclear Energy Company (NNECO) hereby proposes to amend its Operating License, DPR-65, by incorporating the attached proposed changes into the Millstone Unit No. 2 Technical Specifications. The proposed changes relocate the Surveillance Requirement for attaining a negative pressure in the Enclosure Building (4.6.5.1.d.3) from Technical Specification 3.6.5.1, "Enclosure Building Filtration System," to Technical Specification 3.6.5.2, "Enclosure Building Integrity" (4.6.5.2.2). Surveillance Requirement 4.6.5.2 is being renumbered as 4.6.5.2.1 and is being modified to require each Enclosure Building access opening to be closed, instead of requiring each door in each Enclosure Building access opening to be closed. Technical Specification 3.6.5.2 is also being modified to include Enclosure Building Operability, in addition to Enclosure Building Integrity. Definition 1.25, "Enclosure Building Integrity" is being deleted and included in the Bases for Section 3.6.5.2, "Enclosure Building."

In addition, editorial changes are being made to Technical Specifications 3.6.5.1, 3.6.5.2, and 3.9.15 to standardize the terminology used.

Background

The Enclosure Building is a limited leakage steel framed structure that completely surrounds the Containment. It is designed and constructed to ensure that an acceptable upper limit of leakage of radioactive materials to the environment would not be exceeded in the unlikely event of a loss of coolant accident (LOCA).

The Enclosure Building Filtration Region (EBFR) includes the region between the Containment and the Enclosure Building, the penetration rooms and the engineered safety feature equipment rooms. In the unlikely event of a LOCA, the EBFR is maintained at a slightly negative pressure by the Enclosure Building Filtration System (EBFS). Air in the EBFR would be processed through charcoal and HEPA filters and released through the 375 foot Unit 1 stack during a LOCA.

For the EBFS to be able to maintain the EBFR at a slightly negative pressure following a LOCA, the integrity of the Enclosure Building boundary must be maintained. If the integrity of the Enclosure Building boundary, above and beyond normal everyday personnel passage through the doorways, is not maintained, entry into the Action Statement of Limiting Condition for Operation (LCO) 3.6.5.2 is required. This Action

Statement requires operability of the Enclosure Building boundary be restored within 24 hours, or the plant is to be in cold shutdown within the next 36 hours.

NNECO has determined that if the integrity of the Enclosure Building boundary is not maintained, this could reduce the effectiveness of the EBFS enough, such that the draw down of the Enclosure Building to a negative pressure of 0.25 inch water gauge within 60 seconds would not be possible. The 18-month surveillance test (4.6.5.1.d.3) required for operability of the system in accordance with Technical Specification 3.6.5.1 would probably not be successful if performed concurrent with the existence of a significant deterioration in the integrity of the Enclosure Building boundary. However, the system would still be effective in reducing the levels of radionuclides released to the outside environment due to a negative pressure inside the building.

Thus, while the plant would have entered into the Action Statement of LCO 3.6.5.2 (i.e., 24 hour Action Statement) if there was a loss of Enclosure Building boundary integrity (i.e., above and beyond the normal everyday personnel passage through doorways), this situation has recently been identified to create a conflict relative to meeting the EBFS operability requirements. Specifically, the ability to establish and maintain a negative pressure of 0.25 inch water gauge would be reduced. Therefore, the requirements of the EBFS Technical Specification (LCO 3.6.5.1) may not be met. LCO 3.6.5.1, as currently written, does not address this situation (both EBFS trains inoperable). This would result in an entry into Technical Specification 3.0.3, requiring a plant shutdown for a loss of Enclosure Building boundary integrity of sufficient magnitude to affect the ability of the EBFS to draw down the Enclosure Building. This situation has been recognized by the industry (i.e., cascading effect of technical specifications that requires entering additional action statements for supported systems or other systems that are also affected) and the correction to this is reflected in the new, improved Standard Technical Specifications for Combustion Engineering plants (NUREG-1432 LCOs 3.6.11 and 3.6.13). Specifically, NUREG-1432 has removed the draw down requirement (i.e., surveillance requirement for attaining a negative pressure in the Enclosure Building) from the filtration technical specification (MP2 Technical Specification 3.6.5.1) and relocated this surveillance requirement to the building technical specification (MP2 Technical Specification 3.6.5.2). This change recognizes the direct impact of boundary integrity on draw down capability. NNECO has determined that the Millstone Unit No. 2 Technical Specifications need to be modified to resolve this conflict between Specifications 3.6.5.1 and 3.6.5.2 and, therefore, NNECO is proposing changes to the Millstone Unit No. 2 Technical Specifications, 3.6.5.1 and 3.6.5.2, and the corresponding bases.

Also, Surveillance Requirement 4.6.5.2.1 and Bases 3/4.6.5.1 have been clarified to indicate that when double doors (two doors in series) are used in the Enclosure Building boundary, only one door is required to be closed and latched, except for normal passage. Single doors are required to be closed and latched except for normal passage. Millstone Unit No. 2 incorporates a double door design for some of the Enclosure Building access openings to minimize the potential for unfiltered releases.

This design redundancy is not credited in the radiological dose calculations for any design basis accident. Therefore, it is acceptable to have only one of the double doors operable without entering the action statement. When only one door of a double door design is operable, it must be capable of automatically closing and latching to ensure boundary integrity at all times⁽¹⁾.

Design Basis and Licensing Basis

The containment for Millstone Unit No. 2 consists of a primary containment structure and an Enclosure Building that encloses the primary containment. An Enclosure Building Filtration System (EBFS) is provided for the annulus formed by these two structures. The EBFS consists of two independent and redundant subsystems or trains. Each train consists of an exhaust fan, an electric heater, and a filter unit. Each filter unit contains prefilters, High Efficiency Particulate Air (HEPA) filters, and charcoal filters. The EBFS will collect and filter radioactive airborne fission products that may leak from the primary containment to the annulus following the postulated loss of coolant accident (LOCA).

In the event of a LOCA, the EBFS will be actuated by an Enclosure Building Filtration Actuation Signal (EBFAS) based on high containment pressure or low pressurizer pressure. The EBFS will function to exhaust sufficient air from the annulus to achieve a negative pressure of 0.25 inches water gauge within one minute following an EBFAS. Only one EBFS train is necessary to establish this negative pressure.

The EBFS can be powered by the emergency diesel generators. If a loss of normal power occurs concurrently with the LOCA, the emergency diesel generators will supply power to EBFS equipment. To account for the time required for the emergency diesel generators to start, come up to speed and voltage, and then sequence on loads, the safety analysis assumes the release of radioactivity from the primary containment structure continues for 110 seconds. After 110 seconds the uncontrolled release of radioactivity to the environment stops, because of the negative pressure established in the Enclosure Building by the EBFS.

The Enclosure Building contains numerous access openings. These access opening contain either single or double doors. Integrity of the Enclosure Building is maintained by ensuring that at least one door in each access openings is operable and closed, except during normal passage.

Description of Proposed Changes

The Enclosure Building draw down requirement is presently located in Specification 3.6.5.1 "Enclosure Building Filtration System." Specifically, Surveillance Requirement

(1) R. W. Reid (NRC) letter to W. G. Council dated December 8, 1978.

4.6.5.1.d.3 verifies that an EBFS train will produce a negative pressure of 0.25 inch water gauge within 60 seconds after a start signal. NNECO is proposing to relocate this surveillance requirement to the Enclosure Building Technical Specification 3.6.5.2 as Surveillance Requirement 4.6.5.2.2.

Also, Surveillance Requirement 4.6.5.2.1 and Bases 3/4.6.5.1 have been clarified to indicate that when double doors are used in the Enclosure Building boundary, only one door is required to be closed and latched, except for normal passage. Single doors are required to be closed and latched except for normal passage.

This submittal provides the license amendment request which, if granted by the NRC, will recognize the direct impact of boundary integrity on the draw down capability and will decouple Technical Specification 3.6.5.1 from Technical Specification 3.6.5.2. The changes proposed by NNECO to modify the Millstone Unit No. 2 Technical Specifications are described below.

1. Enclosure Building Integrity will be deleted on Index Page II and the word "Integrity" will be removed from "Enclosure Building Integrity" on Index Page VII. These changes are editorial to agree with the proposed changes described below.
2. Definition 1.25, "ENCLOSURE BUILDING INTEGRITY" will be deleted. The information related to this term will be relocated to the Bases for Technical Specification 3.6.5.2. This change decouples Technical Specification 3.6.5.2 from Technical Specification 3.6.5.1 such that a problem with the Enclosure Building Filtration System (LCO 3.6.5.1) will not require entry into the Enclosure Building Technical Specification (LCO 3.6.5.2).
3. The Enclosure Building Filtration System is composed of two trains. Currently, Technical Specification 3.6.5.1 uses "system(s)" and "train(s)" interchangeably. To avoid any possible confusion, "system(s)" will be replaced with "train(s)," where appropriate.
4. For consistency between the specifications contained in this submittal, the first letter of each word in either Enclosure Building Filtration System or Enclosure Building Filtration Train(s) will be capitalized.
5. Surveillance Requirement 4.6.5.1.d.3 will be relocated to Technical Specification 3.6.5.2 as Surveillance Requirement 4.6.5.2.2. This change recognizes the direct impact of boundary integrity on draw down capability and decouples Technical Specification 3.6.5.1 from Technical Specification 3.6.5.2. Therefore, a loss of Enclosure Building boundary integrity (LCO 3.6.5.2) will not require entry into the Enclosure Building Filtration System Technical Specification (LCO 3.6.5.1).

6. The word "INTEGRITY" will be removed from the title of Technical Specification 3.6.5.2. LCO 3.6.5.2 will be revised to address operability of the Enclosure Building, instead of just integrity. These changes address the deletion of the Enclosure Building Integrity definition and the addition of Surveillance Requirement 4.6.5.2.2.
7. Surveillance Requirement 4.6.5.2 will be renumbered as 4.6.5.2.1 and revised to address operability of the Enclosure Building, instead of just integrity. This change addresses the deletion of the Enclosure Building Integrity definition and the addition of Surveillance Requirement 4.6.5.2.2.
8. The words "each door in" will be removed from Surveillance Requirement 4.6.5.2.1. Some Enclosure Building access openings contain a double door arrangement. To satisfy this surveillance requirement, it is only necessary for one of the two doors to be closed.
9. Surveillance Requirement 4.6.5.2.2 will be added to Technical Specification 3.6.5.2 as discussed above.
10. The Enclosure Building Filtration System is composed of two trains. Currently, Technical Specification 3.9.15 uses "system" and "train" interchangeably. To avoid any possible confusion, "system" will be replaced with "train," where appropriate.
11. The words "spent fuel storage pool ventilation system" in the action statement for Technical Specification 3.9.15 will be replaced with "Enclosure Building Filtration Train" since this is the correct terminology for the equipment used to satisfy LCO 3.9.15.
12. The Bases for Technical Specifications 3.6.5.1, 3.6.5.2, and 3.9.15 have been modified to reflect the changes described above and additional information has been added to clarify the laboratory testing requirement for the charcoal sample⁽²⁾.

The mark-up of the existing technical specifications is contained in Attachment 3. The retype of the proposed changes to the technical specifications is contained in Attachment 4 and reflect the currently issued version of the Millstone Unit 2 Technical Specifications.

(2) G.S. Vissing (NRC) letter to J.F. Opeka dated May 23, 1994.

Safety Assessment

As currently written, the Action Statement for Technical Specification 3.6.5.2 requires that in the event the Enclosure Building boundary operability is not maintained, operability must be restored within 24 hours. If there was a loss of Enclosure Building boundary integrity (normal everyday personnel passage through doorways does not constitute a loss of Enclosure Building boundary integrity), the plant would have historically entered the Action Statement for LCO 3.6.5.2 (and not entered the Action Statement for LCO 3.6.5.1). However, with a change in the interpretation of technical specifications, the plant should enter additional Action Statements for supported systems or other systems (e.g., Enclosure Building Filtration System [EBFS]) that are also affected. The new interpretation for the entry into the Action Statement of the EBFS Technical Specification 3.6.5.1, in conjunction with an entry in the Action Statement for LCO 3.6.5.2, would result in an entry into Technical Specification 3.0.3, requiring a plant shutdown.

The proposed changes to Technical Specifications 3.6.5.1 and 3.6.5.2, relocation of Surveillance Requirement 4.6.5.1.d.3 to Specification 3.6.5.2, changes to Bases Sections 3.6.5.1 and 3.6.5.2 and deletion of Definition 1.25 will resolve this conflict between Specifications 3.6.5.1 and 3.6.5.2. Specifically, the requirement to establish and maintain a negative pressure of 0.25 inch water gauge in Specification 3.6.5.1 belongs to Specification 3.6.5.2. In the event Enclosure Building operability is not maintained in Modes 1-4, the Action Statement for LCO 3.6.5.2 requires that Enclosure Building operability must be restored within 24 hours. Twenty-four hours is a reasonable completion time considering the limited leakage design of containment and the low probability of a design basis accident (DBA) occurring during this time period. Therefore, it is considered that there exists no loss of safety function. This situation was recognized and has been rectified in the new, improved Standard Technical Specifications for Combustion Engineering plants (NUREG-1432). The proposed changes to Specifications 3.6.5.1 and 3.6.5.2, and corresponding Bases sections do not modify the LCO or surveillance acceptance criterion, nor do they change the frequency of the surveillance. The proposed changes do not involve any physical changes to the plant and do not alter the way any structure, system, or component functions.

Surveillance Requirement 4.6.5.2.1 and Bases 3.6.5.1 have been clarified to indicate that when double doors are used in the Enclosure Building boundary, only one door is required to be closed and latched, except for normal passage. Single doors are required to be closed and latched except for normal passage. Millstone Unit No. 2 incorporates a double door design for some of the Enclosure Building access openings to minimize the potential for unfiltered releases. This design redundancy is not credited in the radiological dose calculations for any design basis accident. Therefore, it is acceptable to have only one of the double doors operable without entering the

action statement. When only one door of a dual door design is operable, it must be capable of automatically closing and latching to ensure boundary integrity at all times⁽³⁾.

The proposed changes do not have any adverse impact on the design basis accidents previously analyzed. The proposed changes resolve conflicts between two specifications, namely 3.6.5.1 and 3.6.5.2. Therefore, the proposed changes do not pose a condition adverse to safety.

(3) R. W. Reid (NRC) letter to W. G. Counsil dated December 8, 1978.

Docket No. 50-336
B16344

Attachment 2

Millstone Nuclear Power Station, Unit No. 2
Proposed Revision to Technical Specifications
Enclosure Building
Significant Hazards Consideration

April 1997

**Proposed Revision to Technical Specifications
Enclosure Building
Significant Hazards Consideration**

Significant Hazards Consideration

Pursuant to 10CFR50.92, Northeast Nuclear Energy Company (NNECO) has reviewed the proposed changes. NNECO concludes that these changes do not involve a significant hazards consideration (SHC) since the proposed changes satisfy the criteria in 10CFR59.92(c). That is, the proposed changes do not:

1. Involve a significant increase in the probability or consequences of an accident previously evaluated.

The proposed changes to Technical Specifications 3.6.5.1 and 3.6.5.2, relocation of Surveillance Requirement 4.6.5.1.d.3 to Specification 3.6.5.2, changes to Bases Sections 3.6.5.1 and 3.6.5.2, and deletion of Definition 1.25 will resolve the conflict that currently exists between Specifications 3.6.5.1 and 3.6.5.2. Specifically, the requirement to establish and maintain a negative pressure in the Enclosure Building boundary included in Specification 3.6.5.1 belongs in Specification 3.6.5.2. In the event Enclosure Building operability is not maintained in Modes 1-4, the Action Statement for LCO 3.6.5.2 requires that Enclosure Building operability must be restored within 24 hours. Twenty-four hours is a reasonable completion time considering the limited leakage design of containment and the low probability of a DBA occurring during this time period. Therefore, it is considered that there exists no loss of safety function. The proposed changes do not modify the LCO or surveillance acceptance criterion, nor do they change the frequency of the surveillances. The proposed changes do not involve any physical changes to the plant, do not alter the way any structure, system, or component functions. Therefore, the structures, systems, or components will perform their intended function when called upon. (The redundancy of the double doors has not been credited in the radiological dose calculations for any Design Basis Accident.) The proposed changes do not affect the probability of any previously evaluated accident. Additionally, the proposed changes are consistent with the new, improved Standard Technical Specifications for Combustion Engineering plants (NUREG-1432).

The editorial changes to Technical Specifications 3.6.5.1, 3.6.5.2, and 3.9.15 do not change any technical aspect of these specifications. Therefore the proposed changes do not affect the probability of any previously evaluated accident.

Based on the above, the proposed changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Create the possibility of a new or different kind of accident from any accident previously evaluated.

The proposed changes do not make any physical or operational changes to existing plant structures, systems, or components. The proposed changes do not introduce any new failure modes. The proposed changes simply resolve a conflict which currently exists between Specifications 3.6.5.1 and 3.6.5.2. Thus, the proposed changes do not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Involve a significant reduction in a margin of safety.

The proposed changes do not have any adverse impact on the accident analyses. Also, the proposed changes resolve a conflict which currently exists between Specifications 3.6.5.1 and 3.6.5.2. The structures, systems, or components covered under Specifications 3.6.5.1 and 3.6.5.2 will perform their intended safety function when called upon.

Based on the above, there is no significant reduction in the margin of safety.