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The Northeast Utilities System

JUN 28 2000

Docket No. 50-336
B18142

Re: 10 CFR 50.90

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

Millstone Nuclear Power Station, Unit No. 2
Technical Specifications Change Request 2-11-00
Control Room Boundary

Introduction

Pursuant to 10 CFR 50.90, Northeast Nuclear Energy Company (NNECO) hereby proposes to amend Operating License, DPR-65, by incorporating the attached proposed changes into the Millstone Unit No. 2 Technical Specifications. NNECO is proposing to change Technical Specification 3.7.6.1, "Plant Systems - Control Room Emergency Ventilation System." The Bases for this Technical Specification will be modified as a result of the proposed changes.

Attachment 1 provides a discussion of the proposed changes and the Safety Summary. 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.

The proposed change to Technical Specification 3.7.6.1 is on the same page, 3/4 7-16, which has been proposed to be changed in a separate letter dated December 7, 1999.[1] This previously submitted change also affects Technical Specification Section B 3/4.7.6, Page B 3/4 7-4a, which is included in this submittal. The proposed changes contained in this letter do not assume approval of any of the previously submitted changes.

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(1) R. P. Necci letter to the NRC, "Millstone Nuclear Power Station, Unit No. 2 Proposed Revision to Technical Specifications Positive Reactivity Additions," dated December 7, 1999.

A001

Environmental Considerations

NNECO has reviewed the proposed license amendment request against the criteria of 10 CFR 51.22 for environmental considerations. The proposed Technical Specification changes will address the integrity of the Control Room boundary. These changes may result in an increase in consequences to Control Room personnel since an allowed outage time of 24 hours is proposed to restore boundary integrity. However, considering the low probability of a design basis accident occurring during this time, the proposed allowed outage time is reasonable to allow the boundary integrity to be restored before requiring a plant shutdown. In addition, the proposed allowed outage time is consistent with Technical Specification 3.6.5.2, "Containment Systems - Enclosure Building," and with generic industry guidance. The proposed changes will not result in a significant increase in 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 to the Technical Specifications do not result in a significant increase in the type and amounts of effluents that may be released. In addition, the proposed changes do not significantly increase individual or cumulative occupational radiation exposures. Therefore, we have concluded the proposed changes are safe.

The proposed changes do not involve a significant impact on public health and safety (see the Safety Summary provided in Attachment 1) and do not involve a Significant Hazards Consideration pursuant to the provisions of 10 CFR 50.92 (see the Significant Hazards Consideration provided in Attachment 2). Therefore, NNECO requests the NRC review and approve the proposed changes to the Millstone Unit No. 2 Technical Specifications through an amendment to Operating License DPR-65, pursuant to 10 CFR 50.90.

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 of this amendment for Millstone Unit No. 2 prior to February 28, 2001, with the amendment to be implemented within 30 days of issuance. This change will provide increased operational flexibility, and is a significant enhancement to the Millstone Unit No. 2 Technical Specifications.

State Notification

In accordance with 10 CFR 50.91(b), a copy of this License Amendment Request is being provided to the State of Connecticut.

There are no regulatory commitments contained within this letter.

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

Raymond P. Necci
Vice President - Nuclear Technical Services

Sworn to and subscribed before me

this 28 day of JUNE, 2000

Diane M. Phillipo
Notary Public

DIANE M. PHILLIPO
Notary Public
My Commission Expires Dec. 31, 2000

My Commission expires

Attachments (4)

cc: H. J. Miller, Region I Administrator
J. I. Zimmerman, NRC Project Manager, Millstone Unit No. 2
D. P. Beaulieu, Senior Resident Inspector, Millstone Unit No. 2

Director
Bureau of Air Management
Monitoring and Radiation Division
Department of Environmental Protection
79 Elm Street
Hartford, CT 06106-5127

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Attachment 1

Millstone Nuclear Power Station, Unit No. 2

Proposed Revision to Technical Specifications
Control Room Boundary
Discussion of Proposed Changes

Proposed Revision to Technical Specifications
Control Room Boundary
Discussion of Proposed Changes

Pursuant to 10 CFR 50.90, Northeast Nuclear Energy Company (NNECO) hereby proposes to amend Operating License, DPR-65, by incorporating the attached proposed changes into the Millstone Unit No. 2 Technical Specifications. NNECO is proposing to change Technical Specification 3.7.6.1, "Plant Systems - Control Room Emergency Ventilation System." The Bases for this Technical Specification will be modified as a result of the proposed changes.

System Description

The Control Room Air Conditioning System consists of two full capacity, independent air handling and mechanical subsystems with common suction and discharge ductwork. The system has the capability of heating, ventilating (with outside air), and cooling (mechanical refrigeration) the Control Room environment. Each subsystem is capable of filtering the Control Room atmosphere using high efficiency particulate (HEPA) filters and charcoal adsorbers.

During normal operation, outside air is introduced into the Control Room. In response to an Enclosure Building Filtration Actuation Signal (manual actuation, low pressurizer pressure, high containment pressure signal, or manual safety injection actuation), Auxiliary Exhaust Actuation Signal (high radiation spent fuel pool area), or intake duct high radiation signal, the Control Room Air Conditioning System will shift into a recirculation mode of operation with intake air and outlet exhaust isolated. When operating in the recirculation mode, the Control Room atmosphere is circulated through the HEPA filters and charcoal adsorbers for cleanup, if necessary.

Technical Specification Changes

The proposed changes to Technical Specification 3.7.6.1 will address a loss of the Control Room boundary. The boundary changes are consistent with NUREG-1432 (Technical Specification 3.7.11, TSTF-287, Rev. 5).

1. An asterisk (*) will be added to the word "OPERABLE" in the Limiting Condition for Operation (LCO). This asterisk will refer to a footnote that will be added. This footnote will allow the Control Room boundary to be opened intermittently under administrative control.

2. The phrase "except as specified in ACTION c.," will be added to Action b. This is necessary so that only the new action requirement will apply to address a loss of Control Room boundary integrity.

3. A new action requirement (c.) will be added to address two inoperable Control Room Emergency Ventilation Trains in Modes 1 through 4 due only to an inoperable Control Room boundary. This new action requirement will allow 24 hours to restore the Control Room boundary before a plant shutdown to Mode 5 is required. This new action requirement will also require immediate suspension of fuel movement within the spent fuel pool and shielded cask movement over the spent fuel pool cask laydown area.

4. An additional asterisk (*) will added to the Modes 5 and 6 action requirements and to the footnote on Page 3/4 7-16a. This will avoid any confusion with the new footnote that will added on Page 3/4 7-16. This is a non-technical change.

5. The designation for the Modes 5 and 6 action requirements will be changed from "c." and "d." to "d." and "e." as a result of the addition of the new Modes 1 through 4 action requirement (c.). This will also require the action requirement designations in the footnote on Page 3.4 7-16a to be changed. These are non-technical changes.

6. The Bases for Technical Specification 3.7.6.1 will be modified as a result of the proposed Technical Specification changes.

Safety Summary

The addition of the footnote that the Control Room boundary can be opened intermittently under administrative control, and the new Modes 1 through 4 action requirement that will allow 24 hours to restore the Control Room boundary addresses the impact a loss of Control Room boundary integrity has on operability of the respective system. Using administrative controls to restore integrity of the Control Room boundary when required, will ensure the accident mitigation equipment will be able to function as assumed to protect Control Room personnel. This will address routine operations such as normal entry and egress, and other minor evolutions that result in a short term loss of Control Room boundary integrity. Allowing 24 hours to restore the integrity of the Control Room boundary will allow time for repairs to restore integrity of the Control Room boundary without requiring an immediate plant shutdown. This is acceptable based on the low probability of a design basis accident occurring during the 24 hour allowed outage time. These changes are consistent with Technical Specification 3.6.5.2, "Containment Systems - Enclosure Building," which allows normal entry and egress through associated access openings (Surveillance Requirement 4.6.5.2.1) and 24 hours to restore Enclosure Building integrity. In addition, these changes are consistent with generic industry guidance contained in NUREG-1432 (Technical Specification 3.7.11, TSTF-287, Rev. 5).

The administrative changes (e.g., action requirement format and letter designations) will not result in any technical change to the current requirements.

The Bases for Technical Specification 3.7.6.1 will be modified as a result of the proposed Technical Specification changes. The proposed changes to the Technical Specification Bases will provide additional guidance to ensure the requirements of the Technical Specification are applied correctly. The use of the Bases to contain information such as this is acceptable since NNECO requires a 10 CFR 50.59 evaluation for all Bases only changes. This provides sufficient control to ensure consistency with the accident analyses.

The proposed changes to the Technical Specifications and the associated Bases will not result in any significant change in, or new approach to, plant operation. The proposed changes will not adversely affect public safety. Therefore, the proposed changes are safe.

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Attachment 2

Millstone Nuclear Power Station, Unit No. 2

Proposed Revision to Technical Specifications
Control Room Boundary
Significant Hazards Consideration

Proposed Revision to Technical Specifications
Control Room Boundary
Significant Hazards Consideration

Northeast Nuclear Energy Company (NNECO) hereby proposes to revise the Millstone Unit No. 2 Technical Specifications as described in this License Amendment Request. The proposed changes are associated with the Control Room boundary. Refer to Attachment 1 of this submittal for a detailed discussion of the proposed changes.

Description of License Amendment Request

Technical Specification 3.7.6.1

- Add a footnote that the Control Room boundary can be opened intermittently under administrative control, and add a new Modes 1 through 4 action requirement that will allow 24 hours to restore the Control Room boundary.

- Make various non-technical changes (e.g., action requirement format and letter designations).

Basis for No Significant Hazards Consideration

In accordance with 10 CFR 50.92, NNECO has reviewed the proposed changes and has concluded that they do not involve a Significant Hazards Consideration (SHC). The basis for this conclusion is that the three criteria of 10 CFR 50.92(c) are not compromised. The proposed changes do not involve an SHC because the changes do not:

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

   The action requirements for the Control Room Emergency Ventilation System have been changed to address the impact a loss of boundary integrity has on the associated system. The proposed changes to the action requirements will not cause an accident. Allowing the Control Room boundary to be opened intermittently under administrative controls will have no adverse impact on the consequences of the design basis accidents since the administrative controls will be able to rapidly restore boundary integrity when required. Allowing 24 hours to restore the Control Room boundary in Modes 1 through 4 could result in an increase in the consequences of a design basis accident to the Control Room personnel. However, considering the low probability of a design basis accident occurring during this time, the proposed allowed outage time is reasonable to allow the boundary integrity to be restored before requiring a plant shutdown.

These changes are consistent with Technical Specification 3.6.5.2, "Containment Systems - Enclosure Building," which allows normal entry and egress through associated access openings (Surveillance Requirement 4.6.5.2.1) and 24 hours to restore Enclosure Building integrity, and with generic industry guidance (NUREG-1432, Technical Specification 3.7.11, TSTF-287, Rev. 5).

The proposed changes to address format issues will not result in any technical changes to the current requirements.

The proposed Technical Specification changes will have no adverse effect on plant operation or the operation of accident mitigation equipment, and will not significantly impact the availability of accident mitigation equipment. The plant response to the design basis accidents will not change. In addition, the equipment covered by this specification is not an accident initiator and can not cause an accident. Therefore, the proposed changes will not result in 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 Technical Specification changes do not impact any system or component which could cause an accident. The proposed changes will not alter the plant configuration (no new or different type of equipment will be installed) or require any unusual operator actions. The proposed changes will not alter the way any structure, system, or component functions, and will not significantly alter the manner in which the plant is operated. There will be no adverse effect on plant operation or accident mitigation equipment. The proposed changes do not introduce any new failure modes. Also, the response of the plant and the operators following an accident will not be significantly different as a result of these changes. In addition, the accident mitigation equipment affected by the proposed changes is not an accident initiator. Therefore, the proposed changes will not create the possibility of a new or different kind of accident from any previously analyzed.

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

The proposed changes to Technical Specification 3.7.6.1 are consistent with Technical Specification 3.6.5.2 which allows normal entry and egress through associated access openings (SR 4.6.5.2.1) and 24 hours to restore Enclosure Building integrity, and with generic industry guidance (NUREG-1432, Technical Specification 3.7.11, TSTF-287, Rev. 5). If the Control Room boundary is not operable, the proposed action requirements will require timely restoration of the boundary or the plant will be placed in a configuration where there is no adverse

impact associated with the loss of Control Room boundary integrity. The proposed allowed outage time provides a reasonable time for repairs before requiring a plant shutdown, and reflects the low probability of an event occurring while the boundary is inoperable. The proposed shutdown times, which are consistent with times already contained in the Millstone Unit No. 2 Technical Specifications and with generic industry guidance (NUREG-1432), will allow an orderly shutdown to be performed.

The proposed changes to address format issues will not result in any technical changes to the current requirements. These proposed changes will not adversely impact any of the design basis accidents or the associated accident mitigation equipment.

The proposed changes will have no adverse effect on plant operation or equipment important to safety. The plant response to the design basis accidents will not change and the accident mitigation equipment will continue to function as assumed in the design basis accident analyses. Therefore, there will be no significant reduction in a margin of safety.

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Attachment 3

Millstone Nuclear Power Station, Unit No. 2

Proposed Revision to Technical Specifications
Control Room Boundary
Marked Up Pages

PLANT SYSTEMS

3/4.7.6 CONTROL ROOM EMERGENCY VENTILATION SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.6.1 Two independent Control Room Emergency Ventilation Trains shall be OPERABLE.*

APPLICABILITY: MODES 1, 2, 3, 4, 5, and 6.

During fuel movement within containment or the spent fuel pool.

During movement of a shielded cask over the spent fuel pool cask laydown area.

ACTION:

MODES 1, 2, 3, and 4:

a. With one Control Room Emergency Ventilation Train inoperable, restore the inoperable train to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

b. With both Control Room Emergency Ventilation Trains inoperable, immediately suspend the movement of fuel assemblies within the spent fuel pool and the movement of shielded casks over the spent fuel pool cask laydown area. Restore at least one inoperable train to OPERABLE status within 1 hour, or be in HOT STANDBY within the next 6 hours, and COLD SHUTDOWN within the following 30 hours.

except as specified in ACTION c.

INSERT A

INSERT B

INSERT A - Page 3/4 7-16

c. With both Control Room Emergency Ventilation Trains inoperable due to an inoperable Control Room boundary, immediately suspend the movement of fuel assemblies within the spent fuel pool and the movement of shielded casks over the spent fuel pool cask laydown area. Restore the Control Room boundary to OPERABLE status within 24 hours or be in HOT STANDBY within the next 6 hours and COLD SHUTDOWN within the following 30 hours.

INSERT B - Page 3/4 7-16

* The Control Room boundary may be opened intermittently under administrative control.

PLANT SYSTEMS

3/4.7.6 CONTROL ROOM EMERGENCY VENTILATION SYSTEM

LIMITING CONDITION FOR OPERATION

ACTION (continued)

MODES 5 and 6, and all other times:*

d. With one Control Room Emergency Ventilation Train inoperable, restore the inoperable train to OPERABLE status within 7 days. After 7 days, either initiate and maintain operation of the remaining OPERABLE Control Room Emergency Ventilation Train in the recirculation mode of operation, or immediately suspend CORE ALTERATIONS, the movement of fuel assemblies, and the movement of shielded casks over the spent fuel pool cask laydown area.

e. With both Control Room Emergency Ventilation Trains inoperable, or with the OPERABLE Control Room Emergency Ventilation Train required to be in the recirculation mode by ACTION ~~(c.)~~ not capable of being powered by an OPERABLE normal and emergency power source, immediately suspend CORE ALTERATIONS, positive reactivity changes, the movement of fuel assemblies, and the movement of shielded casks over the spent fuel pool cask laydown area.

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* In MODES 5 and 6, when a Control Room Emergency Ventilation Train is determined to be inoperable solely because its emergency power source is inoperable, or solely because its normal power source is inoperable, it may be considered OPERABLE for the purpose of satisfying the requirements of 3.7.6.1 Limiting Condition for Operation, provided: (1) its corresponding normal or emergency power source is OPERABLE; and (2) all of its redundant system (s), subsystem (s), train (s), component (s) and device(s) are OPERABLE, or likewise satisfy the requirements of the specification. Unless both conditions (1) and (2) are satisfied within 2 hours, then ACTION 3.7.6.1.d or 3.7.6.1.e shall be invoked as applicable.

NO CHANGE
FOR INFORMATION
ONLY March 10, 1999

4.7.6.1 Each Control Room Emergency Ventilation Train shall be demonstrated OPERABLE:

a. At least once per 12 hours by verifying that the control room air temperature is $\leq$ 100°F.

b. At least once per 31 days on a STAGGERED TEST BASIS by initiating from the control room, flow through the HEPA filters and charcoal absorber train and verifying that the train operates for at least 15 minutes.

c. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housings, or (2) following painting, fire or chemical release in any ventilation zone communicating with the train by:

1. Verifying that the cleanup train satisfies the in-place testing acceptance criteria and uses the test procedures of Regulatory Positions C.5.a, C.5.c and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, and the train flow rate is 2500 cfm $\pm$ 10%.

2. Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978.* The carbon sample shall have a removal efficiency of $\geq$ 95 percent.

3. Verifying a train flow rate of 2500 cfm $\pm$ 10% during train operation when tested in accordance with ANSI N510-1975.

d. After every 720 hours of charcoal adsorber operation by verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978.*

* ASTM D3803-89 shall be used in place of ANSI N509-1976 as referenced in table 2 of Regulatory Guide 1.52. The laboratory test of charcoal should be conducted at a temperature of 30°C and a relative humidity of 95% within the tolerances specified by ASTM D3803-89.

NO CHANGE
FOR INFORMATION
ONLY

SURVEILLANCE REQUIREMENTS (Continued)

3. Verifying that control room air in-leakage is less than 130 SCFM with the Control Room Emergency Ventilation System operating in the recirculation/filtration mode.

f. After each complete or partial replacement of a HEPA filter bank by verifying that the HEPA filter banks remove greater than or equal to 99% of the DOP when they are tested in-place in accordance with ANSI N510-1975 while operating the train at a flow rate of 2500 cfm ± 10%.

g. After each complete or partial replacement of a charcoal adsorber bank by verifying that the charcoal adsorbers remove greater than or equal to 99% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with ANSI N510-1975 while operating the train at a flow rate of 2500 cfm ± 10%.

3/4.7.3 REACTOR BUILDING CLOSED COOLING WATER SYSTEM (Continued)

FOR INFORMATION ONLY

would be adversely impacted. The surveillance requirement acceptance criteria for the reactor building closed cooling water pumps was developed assuming a 7% degraded pump from the actual pump curves. Flow measurement instrument inaccuracy for the reactor building closed cooling water pumps have been accounted for in the design basis hydraulic analysis. Pressure measurement instrument inaccuracy for the reactor building closed cooling water pumps is accounted for in the acceptance criteria contained in the surveillance procedure.

3/4.7.4 SERVICE WATER SYSTEM

The OPERABILITY of the service water system ensures that sufficient cooling capacity is available for continued operation of vital components and Engineered Safety Feature equipment during normal and accident conditions. The redundant cooling capacity of this system, assuming a single failure, is consistent with the assumptions used in the accident analyses.

The Technical Specification Surveillance Requirements provided to ensure OPERABILITY of each component ensures that at a minimum, the assumptions used in the accident analysis are met and that subsystem OPERABILITY is maintained. The purpose of the service water pumps differential pressure test, Surveillance Requirement 4.7.4.1.a.2, a substantial flow test, is to ensure that the pumps have not degraded to a point where the accident analysis would be adversely impacted. The surveillance requirement acceptance criteria for the service water pumps was developed assuming a 7% degraded pump from the actual pump curves. Flow and pressure measurement instrument inaccuracies for the service water pumps have been accounted for in the design basis hydraulic analysis. It is not necessary to account for flow and pressure measurement instrument inaccuracies in the acceptance criteria contained in the surveillance procedure.

3/4.7.5 FLOOD LEVEL

The service water pump motors are normally protected against water damage to an elevation of 22 feet. If the water level is exceeding plant grade level or if a severe storm is approaching the plant site, one service water pump motor will be protected against flooding to a minimum elevation of 28 feet to ensure that this pump will continue to be capable of removing decay heat from the reactor. In order to ensure operator accessibility to the intake structure action to provide pump motor protection will be initiated when the water level reaches plant grade level.

3/4.7.6 CONTROL ROOM EMERGENCY VENTILATION SYSTEM

The OPERABILITY of the Control Room Emergency Ventilation System ensures that 1) the ambient air temperature does not exceed the allowable temperature for continuous duty rating for the equipment and instrumentation cooled by this system and 2) the control room will remain habitable for operations personnel during and following all credible accident conditions.

3/4.7.6 CONTROL ROOM EMERGENCY VENTILATION SYSTEM (Continued)

The OPERABILITY of this system in conjunction with control room design provisions is based on limiting the radiation exposure to personnel occupying the control room to 5 rem or less whole body, or its equivalent. This limitation is consistent with the requirements of General Design Criteria 19 of Appendix "A", 10 CFR 50.

INSERT C

The control room radiological dose calculations use the conservative minimum acceptable flow of 2250 cfm based on the flowrate surveillance requirement of 2500 cfm ± 10%.

Currently there are some situations where the CREV System may not automatically start on an accident signal, without operator action. Under most situations, the emergency filtration fans will start and the CREV System will be in the accident lineup. However, a failure of a supply fan (F21A or B) or an exhaust fan (F31A or B), operator action will be required to return to a full train lineup. Also, if a single emergency bus does not power up for one train of the CREV System, the opposite train filter fan will automatically start, but the required supply and exhaust fans will not automatically start. Therefore, operator action is required to establish the whole train lineup. This action is specified in the Emergency Operating Procedures. The radiological dose calculations do not take credit for CREV System cleanup action until 10 minutes into the accident to allow for operator action.

When the CREV System is checked to shift to the recirculation mode of operation, this will be performed from the normal mode of operation, and from the smoke purge mode of operation.

The MODES 5 and 6 action requirement to suspend positive reactivity additions does not preclude completion of actions to establish a safe conservative plant condition.

The ACTION requirements to immediately suspend various activities (CORE ALTERATIONS, fuel movement, shielded cask movement, etc.) do not preclude completion of the movement of a component to a safe position.

INSERT D

INSERT C - Page B 3/4 7-4a

The LCO is modified by a footnote allowing the control room boundary to be opened intermittently under administrative controls. For entry and exit through doors the administrative control of the opening is performed by the person(s) entering or exiting the area. For other openings, these controls consist of stationing a dedicated individual at the opening who is in constant communication with the control room. This individual will have a method to rapidly close the opening when a need for control room isolation is indicated.

INSERT D - Page B 3/4 7-4a

With both control room emergency ventilation trains inoperable due to an inoperable control room boundary, the movement of fuel assemblies within the spent fuel pool and the movement of shielded casks over the spent fuel pool cask laydown area must be immediately suspended. The control room boundary must be restored to OPERABLE status within 24 hours, or the unit must be in HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

If the control room boundary is inoperable in MODES 1, 2, 3, and 4, the control room emergency ventilation trains cannot perform their intended functions. Actions must be taken to restore an OPERABLE control room boundary within 24 hours. During the period that the control room boundary is inoperable, appropriate compensatory measures (consistent with the intent of GDC 19) should be utilized to protect control room operators from potential hazards such as radioactive contamination, toxic chemicals, smoke, temperature and relative humidity, and physical security. Preplanned measures should be available to address these concerns for intentional and unintentional entry into this condition. The 24 hour allowed outage time is reasonable based on the low probability of a DBA occurring during this time period, and the use of compensatory measures. The 24 hour allowed outage time is a typically reasonable time to diagnose, plan, and possibly repair, and test most problems with the control room boundary.

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Attachment 4

Millstone Nuclear Power Station, Unit No. 2

Proposed Revision to Technical Specifications
Control Room Boundary
Retyped Pages

3/4.7.6 CONTROL ROOM EMERGENCY VENTILATION SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.6.1 Two independent Control Room Emergency Ventilation Trains shall be OPERABLE.*

APPLICABILITY: MODES 1, 2, 3, 4, 5, and 6.

During fuel movement within containment or the spent fuel pool.

During movement of a shielded cask over the spent fuel pool cask laydown area.

ACTION:

MODES 1, 2, 3, and 4:

a. With one Control Room Emergency Ventilation Train inoperable, restore the inoperable train to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

b. With both Control Room Emergency Ventilation Trains inoperable, except as specified in ACTION c., immediately suspend the movement of fuel assemblies within the spent fuel pool and the movement of shielded casks over the spent fuel pool cask laydown area. Restore at least one inoperable train to OPERABLE status within 1 hour, or be in HOT STANDBY within the next 6 hours, and COLD SHUTDOWN within the following 30 hours.

c. With both Control Room Emergency Ventilation Trains inoperable due to an inoperable Control Room boundary, immediately suspend the movement of fuel assemblies within the spent fuel pool and the movement of shielded casks over the spent fuel pool cask laydown area. Restore the Control Room boundary to OPERABLE status within 24 hours or be in HOT STANDBY within the next 6 hours and COLD SHUTDOWN within the following 30 hours.

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* The Control Room boundary may be opened intermittently under administrative control.

3/4.7.6 CONTROL ROOM EMERGENCY VENTILATION SYSTEM

LIMITING CONDITION FOR OPERATION

ACTION (continued)

MODES 5 and 6, and all other times:** |

d. With one Control Room Emergency Ventilation Train inoperable, restore the inoperable train to OPERABLE status within 7 days. After 7 days, either initiate and maintain operation of the remaining OPERABLE Control Room Emergency Ventilation Train in the recirculation mode of operation, or immediately suspend CORE ALTERATIONS, the movement of fuel assemblies, and the movement of shielded casks over the spent fuel pool cask laydown area. |

e. With both Control Room Emergency Ventilation Trains inoperable, or with the OPERABLE Control Room Emergency Ventilation Train required to be in the recirculation mode by ACTION d., not capable of being powered by an OPERABLE normal and emergency power source, immediately suspend CORE ALTERATIONS, positive reactivity changes, the movement of fuel assemblies, and the movement of shielded casks over the spent fuel pool cask laydown area. | |

** In MODES 5 and 6, when a Control Room Emergency Ventilation Train is determined to be inoperable solely because its emergency power source is inoperable, or solely because its normal power source is inoperable, it may be considered OPERABLE for the purpose of satisfying the requirements of 3.7.6.1 Limiting Condition for Operation, provided: (1) its corresponding normal or emergency power source is OPERABLE; and (2) all of its redundant system (s), subsystem (s), train (s), component (s) and device(s) are OPERABLE, or likewise satisfy the requirements of the specification. Unless both conditions (1) and (2) are satisfied within 2 hours, then ACTION 3.7.6.1.d or 3.7.6.1.e shall be invoked as applicable. | |

3/4.7.6 CONTROL ROOM EMERGENCY VENTILATION SYSTEM (Continued)

The OPERABILITY of this system in conjunction with control room design provisions is based on limiting the radiation exposure to personnel occupying the control room to 5 rem or less whole body, or its equivalent. This limitation is consistent with the requirements of General Design Criteria 19 of Appendix "A", 10 CFR 50.

The LCO is modified by a footnote allowing the control room boundary to be opened intermittently under administrative controls. For entry and exit through doors the administrative control of the opening is performed by the person(s) entering or exiting the area. For other openings, these controls consist of stationing a dedicated individual at the opening who is in constant communication with the control room. This individual will have a method to rapidly close the opening when a need for control room isolation is indicated.

The control room radiological dose calculations use the conservative minimum acceptable flow of 2250 cfm based on the flowrate surveillance requirement of 2500 cfm $\pm$ 10%.

Currently there are some situations where the CREV System may not automatically start on an accident signal, without operator action. Under most situations, the emergency filtration fans will start and the CREV System will be in the accident lineup. However, a failure of a supply fan (F21A or B) or an exhaust fan (F31A or B), operator action will be required to return to a full train lineup. Also, if a single emergency bus does not power up for one train of the CREV System, the opposite train filter fan will automatically start, but the required supply and exhaust fans will not automatically start. Therefore, operator action is required to establish the whole train lineup. This action is specified in the Emergency Operating Procedures. The radiological dose calculations do not take credit for CREV System cleanup action until 10 minutes into the accident to allow for operator action.

When the CREV System is checked to shift to the recirculation mode of operation, this will be performed from the normal mode of operation, and from the smoke purge mode of operation.

With both control room emergency ventilation trains inoperable due to an inoperable control room boundary, the movement of fuel assemblies within the spent fuel pool and the movement of shielded casks over the spent fuel pool cask laydown area must be immediately suspended. The control room boundary must be restored to OPERABLE status within 24 hours, or the unit must be in HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

If the control room boundary is inoperable in MODES 1, 2, 3, and 4, the control room emergency ventilation trains cannot perform their intended functions. Actions must be taken to restore an OPERABLE control room boundary within 24 hours. During the period that the control room boundary is inoperable, appropriate compensatory measures (consistent with the intent of GDC 19) should be utilized to protect control room operators from potential hazards such as radioactive contamination, toxic chemicals, smoke, temperature and relative humidity, and physical security. Preplanned measures should be

3/4.7.6 CONTROL ROOM EMERGENCY VENTILATION SYSTEM (Continued)

available to address these concerns for intentional and unintentional entry into this condition. The 24 hour allowed outage time is reasonable based on the low probability of a DBA occurring during this time period, and the use of compensatory measures. The 24 hour allowed outage time is a typically reasonable time to diagnose, plan, and possibly repair, and test most problems with the control room boundary.

The MODES 5 and 6 action requirement to suspend positive reactivity additions does not preclude completion of actions to establish a safe conservative plant condition.

The ACTION requirements to immediately suspend various activities (CORE ALTERATIONS, fuel movement, shielded cask movement, etc.) do not preclude completion of the movement of a component to a safe position.