

Dominion Nuclear Connecticut, Inc.  
Millstone Power Station  
Rope Ferry Road  
Waterford, CT 06385



**Dominion™**

FEB 12 2004

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

Serial No. 04-072  
MPS Lic/MAE R0  
Docket No. 50-423  
License No. NPF-49

**DOMINION NUCLEAR CONNECTICUT, INC.**  
**MILLSTONE POWER STATION UNIT 3**  
**RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION**  
**LICENSE BASIS DOCUMENT CHANGE REQUEST (LBDCR) 3-01-03**  
**SELECTIVE IMPLEMENTATION OF THE ALTERNATIVE SOURCE TERM –**  
**FUEL HANDLING ACCIDENT ANALYSES**

By a letter dated March 4, 2003, Dominion Nuclear Connecticut, Inc. (DNC) proposed to amend Operating License NPF-49 by incorporating changes into the Millstone Unit 3 Technical Specifications. The proposed changes would selectively implement the Alternative Source Term for the Fuel Handling Accident analysis.

In conference calls with the Nuclear Regulatory Commission (NRC) during the weeks of January 6, 2004 and February 2, 2004, the NRC staff requested modifications to the proposed Technical Specification changes in the March 4, 2003 letter.

The NRC staff specifically requested the following modifications:

1. Technical Specification 3/4.7.7, "Control Room Emergency Ventillation System"

Change the proposed Applicability from

APPLICABILITY: MODES 1, 2, 3, and 4

To

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

2. Technical Specification 3/4.7.8, "Control Room Envelope Pressurization System"

Change the proposed Applicability from

APPLICABILITY: MODES 1, 2, 3, and 4

To

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

A001

3. Technical Specification 3/4.9.4, "Containment Building Penetrations"

Change proposed Action a. from

- a. The equipment access hatch closed or capable of being closed under administrative control,

To

- a. The equipment access hatch shall be either:
1. closed and held in place by a minimum of four bolts, or
  2. open under administrative control and capable of being closed and held in place by a minimum of four bolts,

Additionally, the following Bases changes are added:

1. MODES 5 and 6 are added in the discussion of Actions d. and e. in Insert D to page B 3/4 7-12, and Actions e. and f. in Insert E to page B 3/4 7-18.
2. The wording "CORE ALTERATIONS" on page B 3/4 7-13 is deleted. This deletion is consistent with the deletion proposed in Technical Specification 3/4.7.7, Actions d. and e.

Attachment 1 contains the marked-up version of the appropriate pages of the current Technical Specifications. Attachment 2 provides the retyped pages of the Technical Specifications. Attachment 3 provides an informational copy of the proposed changes to the Technical Specification Bases.

The additional information provided in this letter will not affect the conclusions of the Safety Summary and Significant Hazards Consideration discussion in the DNC March 4, 2003, letter.

If you have any questions or require additional information, please contact Mr. David W. Dodson at (860) 447-1791, extension 2346.

Very truly yours,

  
J. Alan Price  
Site Vice President - Millstone

Attachments: (2)

Commitments made in this letter: None.

cc: U.S. Nuclear Regulatory Commission  
Region I  
475 Allendale Road  
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Mr. V. Nerses  
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Mr. S. M. Schneider  
NRC Senior Resident Inspector  
Millstone Power Station

STATE OF CONNECTICUT        )  
  )  
COUNTY OF NEW LONDON     )

The foregoing document was acknowledged before me, in and for the County and State aforesaid, today by J. Alan Price, who is Site Vice President - Millstone, of Dominion Nuclear Connecticut, Inc. He has affirmed before me that he is duly authorized to execute and file the foregoing document in behalf of that Company, and that the statements in the document are true to the best of his knowledge and belief.

Acknowledged before me this 12 day of February, 2004.

My Commission Expires: Diane M. Phillipi

**DIANE M. PHILLIPO**  
**NOTARY PUBLIC**  
**MY COMMISSION EXPIRES 12/31/2005**

**Attachment 1**

**License Basis Document Change Request 3-01-03  
Selective Implementation of the Alternative Source Term -  
Fuel Handling Accident Analyses  
Marked-Up Pages**

**Millstone Power Station, Unit 3  
Dominion Nuclear Connecticut, Inc. (DNC)**

PLANT SYSTEMS

3/4.7.7 CONTROL ROOM EMERGENCY VENTILATION SYSTEM

February 20, 2002

LIMITING CONDITION FOR OPERATION

3.7.7 Two independent Control Room Emergency Air Filtration Systems shall be OPERABLE. <sup>g Deleted</sup> #

APPLICABILITY: MODES 1, 2, 3, 4, 5, and 6.  
During fuel movement within containment or the spent fuel pool.

ACTION:

MODES 1, 2, 3 and 4:

- a. With one Control Room Emergency Air Filtration System inoperable, restore the inoperable system 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 Air Filtration Systems inoperable, except as specified in ACTION c., immediately suspend the movement of fuel assemblies within the spent fuel pool. Restore at least one inoperable system 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 Air Filtration Systems inoperable due to an inoperable Control Room boundary, immediately suspend the movement of fuel assemblies within the spent fuel pool and 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.

MODES 5 and 6, and fuel movement within containment or the spent fuel pool:

- d. With one Control Room Emergency Air Filtration System inoperable, restore the inoperable system to OPERABLE status within 7 days. After 7 days, either initiate and maintain operation of the remaining OPERABLE Control Room Emergency Air Filtration System in the recirculation mode of operation, or immediately suspend CORE ALTERATIONS and the movement of fuel assemblies.
- e. With both Control Room Emergency Air Filtration Systems inoperable, or with the OPERABLE Control Room Emergency Air Filtration System required to be in the recirculation mode by ACTION d. not capable of being powered by an OPERABLE emergency power source, immediately suspend CORE ALTERATIONS and the movement of fuel assemblies.

\* The requirements of Surveillance Requirement 4.7.7.e.2 do not apply during pressure testing of the Cable Spreading Room. This exception is valid until the first entry into MODE 4 following the completion of refueling operations associated with the seventh Refueling Outage.

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

SURVEILLANCE REQUIREMENTS

4.7.7 Each Control Room Emergency Air Filtration System shall be demonstrated OPERABLE:

- a. At least once per 12 hours by verifying that the control room air temperature is less than or equal to 95°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 adsorbers and verifying a system flow rate of 1,120 cfm  $\pm 20\%$  and that the system operates for at least 10 continuous hours with the heaters operating;
- c. At least once per 24 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 system by:
  - 1) Verifying that the system satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than 0.05% and uses the test procedure guidance in Regulatory Position C.5.a, C.5.c, and C.5.d of Regulatory Guide 1.52, Revisions 2, March 1978,\* and the system flow rate is 1,120 cfm  $\pm 20\%$ ;
  - 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,\* shows the methyl iodide penetration less than or equal to 2.5% when tested in accordance with ASTM D3803-89 at a temperature of 30°C (86°F), a relative humidity of 70%, and a face velocity of 54 ft/min; and
  - 3) Verifying a system flow rate of 1,120 cfm  $\pm 20\%$  during system operation when tested in accordance with ANSI N510-1980.
- 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,\* shows the methyl iodide penetration less than or equal to 2.5% when tested in accordance with ASTM D3803-89 at a temperature of 30°C (86°F), and a relative humidity of 70%, and a face velocity of 54 ft/min.
- e. At least once per 24 months by:
  - 1) Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is less than 6.75 inches Water Gauge while operating the system at a flow rate of 1,120 cfm  $\pm 20\%$ ;

SURVEILLANCE REQUIREMENTS (Continued)

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- 2) Verifying that the system maintains the control room at a positive pressure of greater than or equal to 1/8 inch Water Gauge at less than or equal to a pressurization flow of 230 cfm relative to adjacent areas and outside atmosphere during positive pressure system operation; and
  - 3) Verifying that the heaters dissipate  $9.4 \pm 1$  kW when tested in accordance with ANSI N510-1980.
- f. After each complete or partial replacement of a HEPA filter bank, by verifying that the cleanup system satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than 0.05% in accordance with ANSI N510-1980 for a DOP test aerosol while operating the system at a flow rate of 1120 cfm  $\pm 20\%$ ; and
- g. After each complete or partial replacement of a charcoal adsorber bank, by verifying that the cleanup system satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than 0.05% in accordance with ANSI N510-1980 for a halogenated hydrocarbon refrigerant test gas while operating the system at a flow rate of 1120 cfm  $\pm 20\%$ .

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\*ANSI N510-1980 shall be used in place of ANSI N510-1975 referenced in Regulatory Guide 1.52, Revision 2, March 1978.

PLANT SYSTEMS

3/4.7.8 CONTROL ROOM ENVELOPE PRESSURIZATION SYSTEM

February 20, 2002

LIMITING CONDITION FOR OPERATION

3.7.8 <sup>Deleted</sup> Two independent Control Room Envelope Pressurization Systems shall be OPERABLE. <sup>Deleted</sup> #

APPLICABILITY: MODES 1, 2, 3, 4, 5, and 6:  
During fuel movement within containment or the spent fuel pool.

ACTION:

MODES 1, 2, 3, and 4:

- a. With one Control Room Envelope Pressurization System inoperable, restore the system to OPERABLE status within 7 days or be in HOT STANDBY within the next 6 hours and COLD SHUTDOWN within the following 30 hours.
- b. With both Control Room Envelope <sup>Deleted</sup> Pressurization Systems inoperable, except as specified in ACTION c. or ACTION d., immediately suspend the movement of fuel assemblies within the spent fuel pool. Restore at least one inoperable system 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 Envelope <sup>Deleted</sup> Pressurization Systems inoperable due to an inoperable Control Room boundary, immediately suspend the movement of fuel assemblies within the spent fuel pool. 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.
- d. With both Control Room Envelope <sup>Deleted</sup> Pressurization Systems inoperable during the performance of Surveillance Requirement 4.7.8.c and the system not being tested under administrative control, immediately suspend the movement of fuel assemblies within the spent fuel pool. Restore at least one inoperable system to OPERABLE status within 4 hours or be in HOT STANDBY within the next 6 hours and COLD SHUTDOWN within the following 30 hours.

MODES 5 and 6, and fuel movement within containment or the spent fuel pool:

- e. With one Control Room Envelope Pressurization System inoperable, restore the inoperable system to OPERABLE status within 7 days. After 7 days, immediately suspend CORE ALTERATIONS and the movement of fuel assemblies. <sup>Deleted</sup>
- f. With both Control Room Envelope <sup>Deleted</sup> Pressurization Systems inoperable, immediately suspend CORE ALTERATIONS and the movement of fuel assemblies. <sup>Deleted</sup>

\* The requirements of Surveillance Requirements 4.7.8.c.2 and 4.7.8.c.3 do not apply during pressure testing of the Cable Spreading Room. This exception is valid until the first entry into MODE 4 following the completion of refueling operations associated with the seventh Refueling Outage.

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

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS

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4.7.8 Each Control Room Envelope Pressurization System shall be demonstrated OPERABLE:

- a. At least once per 7 days by verifying that the storage air bottles are pressurized to greater than or equal to 2200 psig,
- b. At least once per 31 days on a STAGGERED TEST BASIS by verifying that each valve (manual, power operated or automatic) in the flow path not locked, sealed or otherwise secured in position, is in its correct position, and
- c. At least once per 24 months or following a major alteration of the control room envelope pressure boundary by:
  1. Verifying that the control room envelope is isolated in response to a Control Building Isolation test signal,
  2. Verifying that after a 60 second time delay following a Control Building Isolation test signal, the control room envelope pressurizes to greater than or equal to 1/8 inch W.G. relative to adjacent areas and outside atmosphere, and
  3. Verifying that the positive pressure of Specification 4.7.8.c.2 is maintained for greater than or equal to 60 minutes.

REFUELING OPERATIONS

February 20, 2002

3/4.9.4 CONTAINMENT BUILDING PENETRATIONS

LIMITING CONDITION FOR OPERATION

3.9.4 The containment building penetrations shall be in the following status:

- a. ~~The equipment access hatch closed and held in place by a minimum of four bolts,~~ replaced with Insert B
- b. The personnel access hatch shall be either:
  - 1. closed by one personnel access hatch door, or
  - 2. capable of being closed by an OPERABLE personnel access hatch door, under administrative control; and
- c. Each penetration providing direct access from the containment atmosphere to the outside atmosphere shall be either:
  - 1) Closed by an isolation valve, blind flange, or manual valve, or
  - 2) Be capable of being closed by an OPERABLE automatic ~~containment purge and exhaust isolation valve.~~ <sup>Under administrative control</sup>

APPLICABILITY: During ~~CORE ALTERATIONS~~ or movement of ~~irradiated~~ fuel within the containment.

ACTION: building

With the requirements of the above specification not satisfied, immediately suspend all operations involving ~~CORE ALTERATIONS~~ or movement of ~~irradiated~~ fuel in the containment building.

SURVEILLANCE REQUIREMENTS

4.9.4.a Verify each required containment penetration is in the required status at least once per 7 days.

4.9.4.b. ~~Verify each required containment purge and exhaust valve actuates to the isolation position per the applicable portions of Specification 4.6.3.2.~~

Replaced with "DELETED"

Insert A

Insert B to page 3/4 9-4

- a. The equipment access hatch shall be either:
  1. closed and held in place by a minimum of four bolts, or
  2. open under administrative control and capable of being closed and held in place by a minimum of four bolts,

**Insert A to Page 3/4 9-4**

- \* **Administrative controls shall ensure that appropriate personnel are aware that the equipment access hatch penetration, personnel access hatch doors and/or other containment penetrations are open, and that a specific individual(s) is designated and available to close the equipment access hatch penetration, a personnel access hatch door and/or other containment penetrations within 30 minutes if a fuel handling accident occurs. Any obstructions (e.g. cables and hoses) that could prevent closure of the equipment access hatch penetration, a personnel access hatch door and/or other containment penetrations must be capable of being quickly removed.**

**Attachment 2**

**License Basis Document Change Request 3-01-03  
Selective Implementation of the Alternative Source Term -  
Fuel Handling Accident Analyses  
Retyped Pages**

**Millstone Power Station, Unit 3  
Dominion Nuclear Connecticut, Inc. (DNC)**

## PLANT SYSTEMS

### 3/4.7.7 CONTROL ROOM EMERGENCY VENTILATION SYSTEM

#### LIMITING CONDITION FOR OPERATION

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3.7.7 Two independent Control Room Emergency Air Filtration Systems shall be OPERABLE.#

APPLICABILITY: MODES 1, 2, 3, 4, 5, and 6 .  
During fuel movement within containment or the spent fuel pool.

ACTION:

MODES 1, 2, 3 and 4:

- a. With one Control Room Emergency Air Filtration System inoperable, restore the inoperable system 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 Air Filtration Systems inoperable, except as specified in ACTION c., immediately suspend the movement of fuel within the spent fuel pool. Restore at least one inoperable system 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 Air Filtration Systems inoperable due to an inoperable Control Room boundary, immediately suspend the movement of fuel within the spent fuel pool and 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.

MODES 5 and 6, and fuel movement within containment or the spent fuel pool:

- d. With one Control Room Emergency Air Filtration System inoperable, restore the inoperable system to OPERABLE status within 7 days. After 7 days, either initiate and maintain operation of the remaining OPERABLE Control Room Emergency Air Filtration System in the recirculation mode of operation, or immediately suspend the movement of fuel.

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

## PLANT SYSTEMS

### LIMITING CONDITION FOR OPERATION (Continued)

- e. With both Control Room Emergency Air Filtration Systems inoperable, or with the OPERABLE Control Room Emergency Air Filtration System required to be in the recirculation mode by ACTION d. not capable of being powered by an OPERABLE emergency power source, immediately suspend the movement of fuel.

### SURVEILLANCE REQUIREMENTS

4.7.7 Each Control Room Emergency Air Filtration System shall be demonstrated OPERABLE:

- a. At least once per 12 hours by verifying that the control room air temperature is less than or equal to 95°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 adsorbers and verifying a system flow rate of 1,120 cfm  $\pm$ 20% and that the system operates for at least 10 continuous hours with the heaters operating;
- c. At least once per 24 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 system by:
  - 1. Verifying that the system satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than 0.05% and uses the test procedure guidance in Regulatory Position C.5.a, C.5.c, and C.5.d of Regulatory Guide 1.52, Revisions 2, March 1978,\* and the system flow rate is 1,120 cfm  $\pm$  20%;
  - 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,\* shows the methyl iodide penetration less than or equal to 2.5% when tested in accordance with ASTM D3803-89 at a temperature of 30°C (86°F), a relative humidity of 70%, and a face velocity of 54 ft/min; and
  - 3. Verifying a system flow rate of 1,120 cfm  $\pm$  20% during system operation when tested in accordance with ANSI N510-1980.

## PLANT SYSTEMS

### SURVEILLANCE REQUIREMENTS (Continued)

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- 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,\* shows the methyl iodide penetration less than or equal to 2.5% when tested in accordance with ASTM D3803-89 at a temperature of 30°C (86°F), and a relative humidity of 70%, and a face velocity of 54 ft/min.
- e. At least once per 24 months by:
  - 1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is less than 6.75 inches Water Gauge while operating the system at a flow rate of 1,120 cfm  $\pm$  20%;
  - 2. Verifying that the system maintains the control room at a positive pressure of greater than or equal to 1/8 inch Water Gauge at less than or equal to a pressurization flow of 230 cfm relative to adjacent areas and outside atmosphere during positive pressure system operation; and
  - 3. Verifying that the heaters dissipate 9.4  $\pm$  1 kW when tested in accordance with ANSI N510-1980
- f. After each complete or partial replacement of a HEPA filter bank, by verifying that the cleanup system satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than 0.05% in accordance with ANSI N510-1980 for a DOP test aerosol while operating the system at a flow rate of 1120 cfm  $\pm$  20%; and
- g. After each complete or partial replacement of a charcoal adsorber bank, by verifying that the cleanup system satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than 0.05% in accordance with ANSI N510-1980 for a halogenated hydrocarbon refrigerant test gas while operating the system at a flow rate of 1120 cfm  $\pm$  20%.

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\* ANSI N510-1980 shall be used in place of ANSI N510-1975 referenced in Regulatory Guide 1.52, Revision 2, March 1978.

## PLANT SYSTEMS

### 3/4.7.8 CONTROL ROOM ENVELOPE PRESSURIZATION SYSTEM

#### LIMITING CONDITION FOR OPERATION

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3.7.8 Two independent Control Room Envelope Pressurization Systems shall be OPERABLE.#

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

During fuel movement within containment or the spent fuel pool.

ACTION:

MODES 1, 2, 3, and 4:

- a. With one Control Room Envelope Pressurization System inoperable restore the system to OPERABLE status within 7 days or be in HOT STANDBY within the next 6 hours and COLD SHUTDOWN within the following 30 hours.
- b. With both Control Room Envelope Pressurization Systems inoperable, except as specified in ACTION c. or ACTION d., immediately suspend the movement of fuel within the spent fuel pool. Restore at least one inoperable system 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 Envelope Pressurization Systems inoperable due to an inoperable Control Room boundary, immediately suspend the movement of fuel within the spent fuel pool. 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.
- d. With both Control Room Envelope Pressurization Systems inoperable during the performance of Surveillance Requirement 4.7.8.c and the system not being tested under administrative control, immediately suspend the movement of fuel within the spent fuel pool. Restore at least one inoperable system to OPERABLE status within 4 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.

## PLANT SYSTEMS

### LIMITING CONDITION FOR OPERATION (Continued)

MODES 5 and 6, and fuel movement within containment or the spent fuel pool:

- e. With one Control Room Envelope Pressurization System inoperable, restore the inoperable system to OPERABLE status within 7 days. After 7 days, immediately suspend the movement of fuel.
- f. With both Control Room Envelope Pressurization Systems inoperable, immediately suspend the movement of fuel.

### SURVEILLANCE REQUIREMENTS

4.7.8 Each Control Room Envelope Pressurization System shall be demonstrated OPERABLE:

- a. At least once per 7 days by verifying that the storage air bottles are pressurized to greater than or equal to 2200 psig,
- b. At least once per 31 days on a STAGGERED TEST BASIS by verifying that each valve (manual, power operated or automatic) in the flow path not locked, sealed or otherwise secured in position, is in its correct position, and
- c. At least once per 24 months or following a major alteration of the control room envelope pressure boundary by:
  - 1. Verifying that the control room envelope is isolated in response to a Control Building Isolation test signal,
  - 2. Verifying that after a 60 second time delay following a Control Building Isolation test signal, the control room envelope pressurizes to greater than or equal to 1/8 inch W.G relative to adjacent areas and outside atmosphere, and
  - 3. Verifying that the positive pressure of Specification 4.7.8.c.2 is maintained for greater than or equal to 60 minutes.

## REFUELING OPERATIONS

### 3/4.9.4 CONTAINMENT BUILDING PENETRATIONS

#### LIMITING CONDITION FOR OPERATION

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3.9.4 The containment building penetrations shall be in the following status:

- a. The equipment access hatch shall be either:
  1. closed and held in place by a minimum of four bolts, or
  2. open under administrative control and capable of being closed and held in place by a minimum of four bolts,
- b. A personnel ACCESS hatch shall be either:
  1. closed by one personnel access hatch door, or
  2. capable of being closed by an OPERABLE personnel access hatch door, under administrative control\*, and
- c. Each penetration providing direct access from the containment atmosphere to the outside atmosphere shall be either:
  1. Closed by an isolation valve, blind flange, or manual valve, or
  2. Be capable of being closed under administrative control.

APPLICABILITY: During movement of fuel within the containment building.

#### ACTION:

With the requirements of the above specification not satisfied, immediately suspend all operations involving movement of fuel in the containment building.

#### SURVEILLANCE REQUIREMENTS

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- 4.9.4.a Verify each required containment penetrations is in the required status at least once per 7 days.
- 4.9.4.b DELETED

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\* Administrative controls shall ensure that appropriate personnel are aware that the equipment access hatch penetration, personnel access hatch doors and/or other containment penetrations are open, that a specific individual(s) is designated and available to close the equipment access hatch penetration, a personnel access hatch door and/or other containment penetrations within 30 minutes if a fuel handling accident occurs. Any obstruction (e.g. cables and hoses) that could prevent closure of the equipment access hatch penetration, a personnel access hatch door and/or other containment penetrations must be capable of being quickly removed.

**Attachment 3**

License Basis Document Change Request 3-01-03  
Selective Implementation of the Alternative Source Term -  
Fuel Handling Accident Analyses  
Proposed Technical Specification Bases changes (Information Only)

**Millstone Power Station, Unit 3  
Dominion Nuclear Connecticut, Inc. (DNC)**

BASES

3/4.7.7 CONTROL ROOM EMERGENCY VENTILATION SYSTEM (Continued)

LIMITING CONDITION FOR OPERATION

Two independent control room emergency air filtration systems are required to be operable to ensure that at least one is available in the event the other system is disabled.

A control room emergency air filtration system is OPERABLE when the associated:

- a. Fan is OPERABLE;
- b. HEPA filters and charcoal adsorbers are not excessively restricting flow and are capable of performing their filtration functions; and
- c. moisture separator, heater, ductwork, valves, and dampers are OPERABLE, and air circulation can be maintained.

The integrity of the control room habitability boundary (i.e., walls, floors, ceilings, ductwork, and access doors) must be maintained such that the control building habitability zone can be maintained at its design positive pressure if required to be aligned in the filtration pressurization mode. However, 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.

APPLICABILITY

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

During fuel movement within containment or the spent fuel pool.

Insert D

ACTIONS

MODES 1, 2, 3, and 4

- a. With one control room emergency air filtration system inoperable, action must be taken to restore the inoperable system to an OPERABLE status within 7 days. In this condition, the remaining control room emergency air filtration system is adequate to perform the control room protection function. However, the overall reliability is reduced because a single failure in the OPERABLE train could result in a loss of the control room emergency air filtration system function. The 7-day completion time is based on the low probability of a DBA occurring during this time period, and the ability of the remaining train to provide the required capability.

If the inoperable train cannot be restored to an OPERABLE status within 7 days, the unit must be placed in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. These completion times are reasonable, based on operating experience, to reach the required unit condition from full power conditions in an orderly manner and without challenging unit systems.

3/4.7.7 CONTROL ROOM EMERGENCY VENTILATION SYSTEM (Continued)

ACTIONS (Continued)

b. With both control room emergency air filtration systems inoperable, <sup>Deleted</sup> except due to an inoperable control room boundary, the movement of fuel assemblies within the spent fuel pool must be immediately suspended. At least one control room emergency air filtration system must be restored to OPERABLE status within 1 hour, or the unit must be in HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. These completion times are reasonable, based on operating experience, to reach the required unit conditions from full power conditions in an orderly manner and without challenging unit systems.

c. With both control room emergency air filtration systems inoperable, <sup>Deleted</sup> due to an inoperable control room boundary, the movement of fuel assemblies within the spent fuel pool 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 air filtration systems 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.

MODES 5 AND 6, and fuel movement within containment or the spent fuel pool

d. With one control room emergency air filtration system inoperable, action must be taken to restore the inoperable system to an OPERABLE status within 7 days. After 7 days, either initiate and maintain operation of the remaining OPERABLE control room emergency air filtration system in the recirculation mode or suspend CORE ALTERATIONS and <sup>Deleted</sup> the movement of fuel assemblies. Initiating and maintaining operation of the OPERABLE train in the recirculation mode ensures: (i) operability of the train will not be compromised by a failure of the automatic actuation logic; and (ii) active failures will be readily detected.

e. With both control room emergency air filtration systems inoperable, or with the train required by ACTION 'd' not capable of being powered by an OPERABLE emergency power source, actions must be taken to suspend all operations involving CORE ALTERATIONS and the movement of fuel assemblies. This action places the unit in a condition that minimizes risk. This action does not preclude the movement of fuel to a safe position. <sup>Deleted</sup>

Deleted

Deleted

BASES3/4.7.8 CONTROL ROOM ENVELOPE PRESSURIZATION SYSTEM (Continued)APPLICABLE SAFETY ANALYSIS

The OPERABILITY of the control room envelope pressurization system ensures that: (1) breathable air is supplied to the control room, instrumentation rack room, and computer room, and (2) a positive pressure is created and maintained within the control room envelope during control building isolation for the first hour following any event with the potential for radioactive releases. Each system is capable of providing an adequate air supply to the control room for one hour following an initiation of a control building isolation signal. After one hour, operation of the control room emergency ventilation system would be initiated.

LIMITING CONDITION FOR OPERATION

Two independent control room envelope pressurization systems are required to be operable to ensure that at least one is available in the event the other system is disabled.

A control room envelope pressurization system is OPERABLE when the associated:

- a. air storage bottles are OPERABLE; and
- b. piping and valves are OPERABLE.

The integrity of the control room habitability boundary (i.e., walls, floors, ceilings, ductwork, and access doors) must be maintained. However, 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.

APPLICABILITY

MODES 1, 2, 3, 4, 5, and 6.  
During fuel movement within containment or the spent fuel pool.

Insert E  
ACTIONS

MODES 1, 2, 3, and 4

- a. With one control room envelope pressurization system inoperable, action must be taken either to restore the inoperable system to an OPERABLE status within 7 days, or place the unit in HOT STANDBY within six hours and COLD SHUTDOWN within the next 30 hours.

The remaining control room envelope pressurization system is adequate to perform the control room protection function. However, the overall reliability is reduced because a single failure in the OPERABLE train could result in a loss of the control room envelope pressurization system. The 7-day completion time is based on the low probability of a design basis accident occurring during this time period and the ability of the remaining train to provide the required capability.

**Insert D to Page B 3/4 7-12**

in MODES 5 and 6, and

Actions a., b., and c. of this specification are applicable at all times during plant operation in MODES 1, 2, 3, and 4. Actions d. and e. are applicable whenever fuel is being moved within containment or the spent fuel pool. The fuel handling accident analyses assume that during a fuel handling accident some of the fuel that is dropped and some of the fuel impacted upon is damaged. Therefore, the movement of either new or irradiated fuel (assemblies or individual fuel rods) can cause a fuel handling accident, and this specification is applicable whenever new or irradiated fuel is moved within the containment or the storage pool.

**Insert E to Page B 3/4 7-18**

in Modes 5 and 6, and

Actions a., b., c., and d. of this specification are applicable at all times during plant operation in MODES 1, 2, 3, and 4. Actions e. and f. are applicable whenever fuel is being moved within containment or the spent fuel pool. The fuel handling accident analyses assume that during a fuel handling accident some of the fuel that is dropped and some of the fuel that is impacted upon is damaged. Therefore, the movement of either new or irradiated fuel (assemblies or individual fuel rods) can cause a fuel handling accident, and this specification is applicable whenever new or irradiated fuel is moved within the containment or the storage pool.