

May 15, 2002

Mr. J. A. Price  
Vice President - Nuclear Technical Services - Millstone  
c/o Mr. David A. Smith  
Dominion Nuclear Connecticut, Inc.  
Rope Ferry Road  
Waterford, CT 06385-0128

SUBJECT: MILLSTONE NUCLEAR POWER STATION, UNIT NO. 3 - ISSUANCE OF  
AMENDMENT RE: CONTAINMENT AIRLOCK (TAC NO. MB2930)

Dear Mr. Price:

The Commission has issued the enclosed Amendment No. 205 to Facility Operating License No. NPF-49 for the Millstone Nuclear Power Station, Unit No. 3, in response to your application dated August 27, 2001.

The amendment modifies the action and surveillance requirements associated with the containment airlock.

A copy of the related Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

***/RA/***

Victor Nerses, Sr. Project Manager, Section 2  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket No. 50-423

Enclosures: 1. Amendment No. 205 to NPF-49  
2. Safety Evaluation

cc w/encls: See next page

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Millstone Nuclear Power Station  
Unit 3

cc:

Ms. L. M. Cuoco  
Senior Nuclear Counsel  
Dominion Nuclear Connecticut, Inc.  
Rope Ferry Road  
Waterford, CT 06385

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

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

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

Mr. P. J. Parulis  
Manager - Nuclear Oversight  
Dominion Nuclear Connecticut, Inc.  
Rope Ferry Road  
Waterford, CT 06385

Mr. W. R. Matthews  
Vice President and Senior  
Nuclear Executive - Millstone  
Dominion Nuclear Connecticut, Inc.  
Rope Ferry Road  
Waterford, CT 06385

Ernest C. Hadley, Esquire  
P.O. Box 1104  
West Falmouth, MA 02574-1104

Mr. John Markowicz  
Co-Chair  
Nuclear Energy Advisory Council  
9 Susan Terrace  
Waterford, CT 06385

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

Mr. D. A. Christian  
Senior Vice President - Nuclear Operations  
and Chief Nuclear Officer  
Innsbrook Technical Center - 2SW  
5000 Dominion Boulevard  
Waterford, CT 06385

Mr. C. J. Schwarz  
Director - Nuclear Operations and Chemistry  
Dominion Nuclear Connecticut, Inc.  
Rope Ferry Road  
Waterford, CT 06385

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

Mr. G. D. Hicks  
Director - Nuclear Training  
Dominion Nuclear Connecticut, Inc.  
Rope Ferry Road  
Waterford, CT 06385

Mr. J. Alan Price  
Vice President - Nuclear Operations - Millstone  
c/o Mr. David A. Smith  
Dominion Nuclear Connecticut, Inc.  
Rope Ferry Road  
Waterford, CT 06385

Mr. D. A. Smith  
Manager - Regulatory Affairs  
Dominion Nuclear Connecticut, Inc.  
Rope Ferry Road  
Waterford, CT 06385

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

Mr. William D. Meinert  
Nuclear Engineer  
Massachusetts Municipal Wholesale  
Electric Company  
P.O. Box 426  
Ludlow, MA 01056

DOMINION NUCLEAR CONNECTICUT, INC.

DOCKET NO. 50-423

MILLSTONE NUCLEAR POWER STATION, UNIT NO. 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 205  
License No. NPF-49

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Dominion Nuclear Connecticut, Inc., (the licensee) dated August 27, 2001, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-49 is hereby amended to read as follows:

- (2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 205, and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of the date of issuance, and shall be implemented within 30 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

*/RA/*

James W. Clifford, Chief, Section 2  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical  
Specifications

Date of Issuance: May 15, 2002

ATTACHMENT TO LICENSE AMENDMENT NO. 205

FACILITY OPERATING LICENSE NO. NPF-49

DOCKET NO. 50-423

Replace the following pages of the Appendix A Technical Specifications, with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove

3/4 6-5

3/4 6-6

B3/4 6-1a

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Insert

3/4 6-5

3/4 6-6

B 3/4 6-1a

B 3/4 6-1b

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 205

TO FACILITY OPERATING LICENSE NO. NPF-49

DOMINION NUCLEAR CONNECTICUT, INC.

MILLSTONE NUCLEAR POWER STATION, UNIT NO. 3

DOCKET NO. 50-423

1.0 INTRODUCTION

By letter dated August 27, 2001, Dominion Nuclear Connecticut, Inc. (the licensee) requested changes to the Millstone Nuclear Power Station, Unit No. 3 (MP3) Technical Specification (TS) 3.6.1.3, "Containment Systems-Containment Airlocks." The proposed changes will revise the action and surveillance requirements associated with the containment airlock.

2.0 BACKGROUND

Containment airlocks form part of the containment pressure boundary and provide a means for personnel access during all MODES of operation. Airlocks have doors at each end that are interlocked to prevent simultaneous opening. Either airlock door is adequate to control any potential radioactive release from containment to within the limits assumed in the safety analysis. As such, airlock integrity and leak tightness is essential for maintaining the containment leakage rate within limits in the event of a design-basis accident. Not maintaining airlock integrity or leak tightness may result in a leakage rate in excess of that assumed in the unit's safety analyses.

3.0 EVALUATION

3.1 TS 3.6.1.3 Containment Systems-Containment Airlocks

The Action statements currently read as follows:

ACTION:

- a. With one containment airlock door inoperable:
  1. Maintain at least the OPERABLE airlock door closed\* and restore the inoperable airlock door to OPERABLE status within 24 hours or lock the OPERABLE airlock door closed.

2. Operation may then continue until performance of the next required overall airlock leakage test provided that the OPERABLE airlock door is verified to be locked closed at least once per 31 days.
  3. Otherwise, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours, and
  4. Entry into an OPERATIONAL MODE is permitted while subject to these ACTION requirements.
- b. With the containment airlock inoperable, except as a result of an inoperable airlock door, maintain at least one airlock door closed; restore the inoperable airlock to OPERABLE status within 24 hours or be in HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

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\*Except during entry to repair an inoperable inner door, for a cumulative time not to exceed 1 hour per year.

The licensee proposes to revise the TS Action statements to state the following:

ACTION:

NOTE

Entry and exit through the containment airlock doors is permitted to perform repairs on the affected airlock components

- a. With only one containment airlock door inoperable:
1. Verify the OPERABLE airlock door is closed within 1 hour and restore the inoperable airlock door to OPERABLE status within 24 hours or lock the OPERABLE airlock door closed.
  2. Operation may then continue provided that the OPERABLE airlock door is verified to be locked closed at least once per 31 days.
  3. Otherwise, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours, and
  4. Entry into an OPERATIONAL MODE is permitted while subject to these ACTION requirements.
- b. With only the containment airlock interlock mechanism inoperable, verify an OPERABLE airlock door is closed within 1 hour and lock an OPERABLE airlock door closed within 24 hours. Verify an OPERABLE airlock door is locked closed at least once per 31 days thereafter. Otherwise, be in HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. (Entry into and exit from containment is permissible under the control of a dedicated individual.)

- c. With the containment airlock inoperable, except as specified in ACTION a. or ACTION b. above, immediately initiate action to evaluate overall containment leakage rate per Specification 3.6.1.2 and verify an airlock door is closed within 1 hour. Restore the airlock to OPERABLE status within 24 hours. Otherwise be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

The addition of the Note prior to Action Item a. allows for entry and exit through the containment airlock doors when the doors normally should be closed for the purpose of performing repairs. This could lead to a situation when there is a short time during which the containment boundary is not intact. The ability to open the OPERABLE door, even if it means the containment boundary is temporarily not intact, is acceptable due to the low probability of an event that could pressurize the containment during the short time in which the OPERABLE door is expected to be open. The addition of this Note allows the deletion of the footnote associated with Action Item a.1. and removes the cumulative time limit of 1 hour per year to have the outer door open with an inoperable inner door. This is acceptable as the limit is not needed since the outer door should be open only a short period of time to allow access to the inner door and Action Item a.1. limits the time the outer door can be open with an inoperable inner door. Limiting the cumulative time to 1 hour per year could unnecessarily prevent repair to an inoperable inner door.

The phrase "Maintain at least the OPERABLE airlock door closed" in Action Item a.1 will be replaced by "Verify the OPERABLE airlock door is closed within 1 hour." This is a relaxation in the requirement as it currently requires the immediate closure of the airlock door while the new requirement could result in the airlock door remaining open for up to 1 hour. The change is acceptable due to the low probability of an event that could pressurize the containment during the short time in which the OPERABLE door is expected to be open.

The licensee proposes to eliminate the phrase "...until performance of the next required overall airlock leakage test..." from the current Action Item a. 2. This is primarily an administrative change as this phrase repeats requirements in Surveillance Requirement (SR) 4.6.1.3.a and TS 3.6.1.2, "Containment Leakage." SR 4.6.1.3.a requires that airlock leakage be verified in accordance with the Containment Leakage Rate Program. TS 3.6.1.2, "Containment Leakage," requires that the plant be shut down if the containment leakage rates exceed the limits of the Containment Leakage Rate Program. As a result, if an airlock cannot pass the next required leakage test due to an inoperable door, the plant will have to shut down; therefore, this change is acceptable because it is a redundant requirement.

The licensee proposes to add a new Action Item b. to address an inoperable containment airlock interlock mechanism. Under the current Action Item b., an inoperable airlock interlock mechanism would have to be restored within 24 hours or the plant would have to shut down within the next 6 hours. The proposed Action Item b. requirements are the same for the inoperable airlock interlock mechanism as for an inoperable airlock door under Action Item a.1. The proposed Action Item b. would also allow the use of the airlock for containment access under the control of a dedicated individual.

The actions under the new Action Item b. are acceptable as they are consistent with Action Item a, which, as noted above, was determined to be acceptable. The note allowing containment access under the control of a dedicated individual performing the function of the interlock by

only allowing one airlock door to be open at a time is also acceptable as this ensures that containment integrity is maintained while still allowing access to the containment.

With the addition of the new Action Item b. described above, the current Action Item b. will become Action Item c. Also, an additional requirement to immediately initiate actions to evaluate overall containment leakage rate per TS 3.6.1.2 is being added to Action Item c. The addition of the new requirement is acceptable as it will ensure that any increase in containment leakage due to the inoperable airlock will be detected. The licensee is also replacing the phrase "...maintain at least one airlock door closed,.." with "...verify an airlock door is closed within 1 hour." This is a relaxation of the requirement as it currently requires the immediate closure of the airlock door versus allowing the airlock door to remain open for up to 1 hour. The change is acceptable due to the low probability of an event that could pressurize the containment during the short time in which the door is expected to be open.

### 3.2 Surveillance Requirement (SR) 4.6.1.3

3.2.1 The following statement is being added to SR 4.6.1.3.a:

Containment airlock leakage test results shall be evaluated against the leakage limits of Technical Specification 3.6.1.2. (An inoperable airlock door does not invalidate the previous successful performance of the overall airlock leakage test.)

The licensee is proposing to add the above statement to clarify that the leakage through the containment airlock will be evaluated against the requirements specified by TS 3.6.1.2. This change is acceptable as it ensures the airlock leakage results will be properly accounted for in the combined Type B and Type C containment leakage rates.

The licensee is also proposing to add the statement that an inoperable airlock door does not invalidate the previous successful performance of the overall airlock leakage test. This is considered reasonable since either airlock door is capable of providing a fission product barrier in the event of a design-basis accident.

### 3.2.2 Extending the performance frequency of SR 4.6.1.3.b from 6 months to 24 months.

The proposed change to extend the frequency is consistent with the guidance in Technical Specification Task Force Traveler (TSTF) 17, Revision 2 concerning the extension of the testing frequency of containment airlock mechanisms. As the proposed change is consistent with TSTF-17 and the airlock interlock is not normally challenged when the containment airlock door is used for entry and exit, the 24-month surveillance frequency is acceptable.

### 3.3 Summary

The NRC staff finds the licensee's proposed changes to Technical Specification 3.6.1.3 specified in the letter dated August 27, 2001, to be acceptable for the reasons provided above. The TS Bases will be appropriately changed to accommodate the changes to the TS.

#### 4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Connecticut State official was notified of the proposed issuance of the amendment. The State official had no comments.

#### 5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes surveillance requirements. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (66 FR 57119). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

#### 6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: D. Cullison

Date: May 15, 2002