

June 7, 2002

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

SUBJECT: MILLSTONE NUCLEAR POWER STATION, UNIT NO. 2 - ISSUANCE OF  
AMENDMENT RE: CONTAINMENT AIR LOCK (TAC NO. MB2858)

Dear Mr. Price:

The Commission has issued the enclosed Amendment No. 267 to Facility Operating License No. DPR-65 for the Millstone Nuclear Power Station, Unit No. 2 (MP2), in response to your application dated August 27, 2001.

The amendment revises MP2 Technical Specification (TS) 3/4.6.1.3, "Containment Systems - Containment Air Locks" and the associated TS Bases section.

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/*

Richard B. Ennis, Sr. Project Manager, Section 2  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket No. 50-336

Enclosures: 1. Amendment No. 267 to DPR-65  
2. Safety Evaluation

cc w/encls: See next page

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

SUBJECT: MILLSTONE NUCLEAR POWER STATION, UNIT NO. 2 - ISSUANCE OF  
AMENDMENT RE: CONTAINMENT AIR LOCK (TAC NO. MB2858)

Dear Mr. Price:

The Commission has issued the enclosed Amendment No. 267 to Facility Operating License No. DPR-65 for the Millstone Nuclear Power Station, Unit No. 2 (MP2), in response to your application dated August 27, 2001.

The amendment revises MP2 Technical Specification (TS) 3/4.6.1.3, "Containment Systems - Containment Air Locks" and the associated TS Bases section.

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/*

Richard B. Ennis, Sr. Project Manager, Section 2  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket No. 50-336

Enclosures: 1. Amendment No. 267 to DPR-65  
2. Safety Evaluation

cc w/encls: See next page

DISTRIBUTION:

PUBLIC	REnnis	GHill (2)
PDI-2 Reading	TClark	RDennig
SRichards	OGC	PHearn
JClifford	ACRS	CCowgill, RGN-I

ACCESSION NUMBER: ML021210592

\*See previous concurrence

OFFICE	PDI-2/PM	PDI-2/LA	RORP/SC*	OGC*	PDI-2/SC
NAME	REnnis	TClark	RDennig	SUttal	JClifford
DATE	6/4/02	6/4/02	5/28/02	6/3/02	6/5/02

OFFICIAL RECORD COPY

Millstone Nuclear Power Station  
Unit 2

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

Charles Brinkman, Manager  
Washington Nuclear Operations  
ABB Combustion Engineering  
12300 Twinbrook Pkwy, Suite 330  
Rockville, MD 20852

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

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

Mr. D. A. Christian  
Senior Vice President - Nuclear Operations  
and Chief Nuclear Officer  
Innsbrook Technical Center - 2SW  
5000 Dominion Boulevard  
Glen Allen, VA 23060

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

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. Smith  
Manager - Licensing  
Dominion Nuclear Connecticut, Inc.  
Rope Ferry Road  
Waterford, CT 06385

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

Millstone Nuclear Power Station  
Unit 2

cc:

Mr. G. D. Hicks  
Director - Nuclear Station Safety and Licensing  
Dominion Nuclear Connecticut, Inc.  
Rope Ferry Road  
Waterford, CT 06385

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

Mr. S. E. Scace  
Director - Nuclear Engineering  
Dominion Nuclear Connecticut, Inc.  
Rope Ferry Road  
Waterford, CT 06385

Mr. M. J. Wilson  
Manager - Nuclear Training  
Dominion Nuclear Connecticut, Inc.  
Rope Ferry Road  
Waterford, CT 06385

DOMINION NUCLEAR CONNECTICUT, INC.

DOCKET NO. 50-336

MILLSTONE NUCLEAR POWER STATION, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 267  
License No. DPR-65

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by the applicant 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. DPR-65 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 267 , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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: June 7, 2002

ATTACHMENT TO LICENSE AMENDMENT NO. 267

FACILITY OPERATING LICENSE NO. DPR-65

DOCKET NO. 50-336

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 6-6

---

B 3/4 6-1a

---

Insert

3/4 6-6

3/4 6-6a

B 3/4 6-1a

B 3/4 6-1b

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 267

TO FACILITY OPERATING LICENSE NO. DPR-65

DOMINION NUCLEAR CONNECTICUT, INC.

MILLSTONE NUCLEAR POWER STATION, UNIT NO. 2

DOCKET NO. 50-336

1.0 INTRODUCTION

By letter dated August 27, 2001, Dominion Nuclear Connecticut, Inc., (the licensee), submitted a request for changes to the Millstone Nuclear Power Station, Unit No. 2 (MP2) Technical Specifications (TSs). The proposed changes would revise TS 3/4.6.1.3, "Containment Systems - Containment Air Locks" and the associated TS Bases section. Specifically, the proposed changes would revise the action and surveillance requirements (SRs) associated with the MP2 containment air lock and expand the current guidance provided to address inoperable air lock components. The operability requirements for the containment air lock would remain the same.

2.0 BACKGROUND

A containment air lock forms part of the containment pressure boundary and provides a means for personnel access into and out of the containment. As discussed in Section 5.2.7.1.3 of the Final Safety Analysis Report (FSAR), the MP2 air lock is equipped with double doors that are interlocked to prevent both from being opened simultaneously, and to ensure that one door is completely closed before the opposite door can be opened. Remote indicating lights and annunciators in the control room indicate the operational status of the doors. A provision is made to bypass the interlock system and leave the doors open during cold shutdown.

The air lock doors are provided with double gaskets along the closure surfaces. Using the pressure taps furnished, the air space between the gaskets may be pressurized and checked to ensure leak-tightness in accordance with the TSs. As discussed in FSAR Section 5.2.4, the air lock is designed to resist the full design pressure of the containment.

As discussed in the licensee's submittal, either air lock door is adequate to control any potential radioactive release from containment during an accident to within the limits assumed by the safety analysis. Air lock integrity and leak-tightness is essential in order to maintain the containment leakage rate within design limits in the event of a design-basis accident (DBA) consistent with the intent of General Design Criterion (GDC) 16 of Appendix A to Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50.

### 3.0 EVALUATION

#### 3.1 TS 3.6.1.3

The TS 3.6.1.3 Action statements currently read as follows:

ACTION:

- a. With one containment air lock door inoperable:
  - 1. Maintain at least the OPERABLE air lock door closed and either restore the inoperable air lock door to OPERABLE status within 24 hours or lock the OPERABLE air lock door closed.
  - 2. Operation may then continue until performance of the next required overall air lock leakage test provided that the OPERABLE air lock 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.
  - 4. Entry into an OPERATIONAL MODE or other specified condition under the provisions of Specification 3.0.4 shall not be made if the inner air lock door is inoperable.
- b. With the containment air lock inoperable, except as a result of an inoperable air lock door, maintain at least one air lock door closed; restore the inoperable air lock to OPERABLE status within 24 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

The licensee proposed to revise the TS 3.6.1.3 Action statements to read as follows:

ACTION:

<p><b>NOTE</b></p> <p>Entry and exit through the containment air lock doors is permitted to perform repairs on the affected air lock components.</p>
--

- a. With only one containment air lock door inoperable:
  - 1. Verify the OPERABLE air lock door is closed within 1 hour and either restore the inoperable air lock door to OPERABLE status within 24 hours or lock the OPERABLE air lock door closed.
  - 2. Operation may then continue provided that the OPERABLE air lock 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.
  4. Entry into an OPERATIONAL MODE or other specified condition under the provisions of Specification 3.0.4 shall not be made if the inner air lock door is inoperable.
- b. With only the containment air lock interlock mechanism inoperable, verify an OPERABLE air lock door is closed within 1 hour and lock an OPERABLE air lock door closed within 24 hours. Verify an OPERABLE air lock 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 air lock 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 air lock door is closed within 1 hour. Restore the air lock 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. would apply to all of the action requirements. The Note would allow entry and exit through the containment air lock doors, even if the applicable action item requires the air lock door to be closed, only for the purpose of performing repairs on the affected air lock components. As a result, there may be a short interval during access through the operable door when the containment boundary will not be intact. After each entry and exit, the door must immediately be closed. This is acceptable because, during the short period of time in which the door is expected to be open, both the probability of the occurrence of an event that could pressurize containment atmosphere and the associated risk are low.

The addition of the word “only” to Action Item a. is for clarification purposes to ensure that the action requirement will only be utilized to address one inoperable air lock door. The proposed change is acceptable since it would not result in any technical change to the current requirements.

The phrase “Maintain at least the OPERABLE air lock door closed” in Action Item a.1 would be replaced by “Verify the OPERABLE air lock door is closed within 1 hour...” This proposed change is considered a relaxation of the current requirement as “maintain the door closed” can be interpreted to require the immediate closure of the air lock door while the new requirement could result in the air lock door remaining open for up to 1 hour. Either air lock door is adequate to control any potential radioactive release from containment during an accident within the limits assumed by the safety analysis. The 1-hour time period that is proposed to verify that the operable air lock door is closed, instead of the current wording to maintain the door closed, will provide specific guidance to the plant operators. The 1-hour time period is a reasonable time to verify the operable air lock door is closed. The proposed 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. In addition, it is consistent

with the action requirements of TS 3.6.1.1 , “Primary Containment - Containment Integrity,” to restore containment integrity within 1 hour.

Currently, Action Item a.2 allows plant operation to continue with an inoperable air lock door until performance of the next required overall air lock leakage test. The licensee proposed to eliminate the phrase “...until performance of the next required overall air lock leakage test...” from Action Item a.2. This phrase is not necessary due to the proposed addition of Action Item c. With the proposed changes, if an inoperable air lock door prevents performance of the overall air lock leakage test, the air lock would be declared inoperable when the current test expires, and a plant shutdown would be required. The proposed change is acceptable since it would not result in any technical change to the current requirements.

The licensee proposed to replace the existing Action Item b. with a new Action Item b. to address an inoperable containment air lock interlock mechanism. The existing Action Item b. would become Action Item c. with additional changes as described below. Under the current TS 3.6.1.3 action requirements, an inoperable air lock interlock mechanism would have to be restored within 24 hours or a plant shutdown would have to be initiated. The proposed action requirement is less restrictive since it would allow plant operation to continue indefinitely with an inoperable interlock mechanism, provided an operable air lock door is locked closed and periodically verified. Requiring a plant shutdown if the interlock mechanism is not operable is unnecessary since this situation does not potentially challenge containment integrity unless the air lock is used for access to the containment. In this situation, since the air lock and associated doors are operable, the potential for excessive leakage from containment would only occur if both air lock doors were opened simultaneously. The proposed action requirements would eliminate this situation by requiring an air lock door to be locked closed and periodically verified, and would require the use of a dedicated individual to ensure only one door is opened at a time when it is necessary to use the air lock for access to containment. The dedicated individual, in effect, would replace the inoperable interlock mechanism. As a result, continued plant operation in accordance with the proposed action requirement would not adversely affect containment integrity. Therefore, the proposed change is acceptable.

As discussed above, with the addition of the new Action Item b., the current Action Item b. would become Action Item c. An additional requirement is being added to Action Item c. to immediately initiate actions to evaluate overall containment leakage rate per TS 3.6.1.2 if the air lock is inoperable for reasons not specifically addressed by proposed Action Items a. and b. The addition of this new, more restrictive, requirement is acceptable as it will ensure that any increase in containment leakage due to the inoperable air lock will be detected. The licensee has also proposed to replace the phrase “...maintain at least one air lock door closed;” with “...verify an air lock door is closed within 1 hour.” This change is acceptable based on the same reasons as the proposed changes for Action Item a.1 discussed above.

### 3.2 SR 4.6.1.3

The current SR for the containment air locks reads as follows:

- 4.6.1.3 Each containment air lock shall be demonstrated OPERABLE in accordance with the Containment Leakage Rate Testing Program.

The licensee has proposed to renumber SR 4.6.1.3 as SR 4.6.1.3.1, revise that requirement, and add new SR 4.6.1.3.2. The SRs would read as follows:

4.6.1.3.1 Each containment air lock shall be demonstrated OPERABLE in accordance with the Containment Leakage Rate Testing Program. Containment air lock leakage test results shall be evaluated against the leakage limits of Technical Specification 3.6.1.2. (An inoperable air lock door does not invalidate the previous successful performance of the overall air lock leakage test).

4.6.1.3.2 Each containment air lock shall be demonstrated OPERABLE at least once per 24 months by verifying that only one door in each air lock can be opened at a time.

The proposed change in SR 4.6.1.3.1 to clarify that the leakage through the containment air lock will be evaluated against the requirements specified by TS 3.6.1.2 is acceptable since it ensures the air lock leakage results will be properly accounted for in the combined Type B and Type C containment leakage rates.

The proposed change in SR 4.6.1.3.1 to add the statement that an inoperable air lock door does not invalidate the previous successful performance of the overall air lock leakage test is acceptable since either air lock door is capable of providing a fission product barrier in the event of a DBA.

The proposed addition of SR 4.6.1.3.2 will provide assurance that the air lock interlock mechanism is operating properly. The proposed 24-month surveillance frequency is consistent with the guidance in Technical Specification Task Force Traveler (TSTF) 17, Revision 2. The proposed addition of SR 4.6.1.3.2 is considered more restrictive since the current TSs do not require surveillance testing of the air lock interlock mechanism. Therefore, the staff finds that the proposed change is acceptable.

### 3.3 Summary

Based on the preceding evaluation, the staff concludes that there is reasonable assurance that the proposed changes will not adversely affect the integrity and leak-tightness of the air lock. Therefore, the proposed changes to TS 3/4.6.1.3 are acceptable. The associated TS Bases section will also be revised as specified in the licensee's application consistent with the proposed changes to TS 3/4.6.1.3.

### 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 55010). 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 Contributors: P. Hearn  
R. Ennis

Date: June 7, 2002