

May 31, 2007

Mr. David A. Christian  
Sr. Vice President and Chief Nuclear Officer  
Dominion Nuclear Connecticut, Inc.  
Innsbrook Technical Center  
5000 Dominion Boulevard  
Glen Allen, VA 23060-6711

SUBJECT: MILLSTONE POWER STATION, UNIT NOS. 2 AND 3 - ISSUANCE OF  
AMENDMENTS REGARDING STEAM GENERATOR TUBE INTEGRITY  
(TAC NOS. MD2570 AND MD2571)

Dear Mr. Christian:

The Nuclear Regulatory Commission (NRC) has issued the enclosed Amendment No. 299 to Facility Operating License No. DPR-65 for the Millstone Power Station, Unit No. 2, and the enclosed Amendment No. 238 to Facility Operating License No. NPF-49 for the Millstone Power Station, Unit No. 3 in response to your application dated May 31, 2006, as supplemented by letters dated February 14, 2007, and April 26, 2007. The amendments revises the existing Steam Generator tube surveillance program consistent with the NRC-approved Technical Specification Task Force (TSTF) Standard TS Change Traveler, TSTF-449, "Steam Generator Tube Integrity," Revision 4. TSTF-449 is part of the consolidated line item improvement process.

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

Sincerely,

*/ra/*

John Hughey, Project Manager  
Plant Licensing Branch I-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-336  
50-423

Enclosures:

1. Amendment No. 299 to DPR-65
2. Amendment No. 238 to NPF-49
3. Safety Evaluation

cc w/encls: See next page

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RidsNrrLACSola	RidsNrrDirsltsb	RidsNrrPMEMiller

ADAMS Accession Numbers: Tech Specs:ML071560531  
Package: ML071380257 Amendment: ML071380264 Tech Specs:ML071560555

OFFICE	LPL1-2/PM	LPL1-2/PM	LPL1-2/LA	DCI/CSGB/BC	DIRS/ITSB/BC	OGC	LPL1-2/BC
NAME	GEMiller (JDH for)	JHughey	RSola	AHiser (By memo dated)	TKobetz (By memo dated)	(Not Required for CLIIP on	HChernoff
DATE	5/31/07	5/31/07	5/22/07	05/09/07	05/14/07	TSTF-449.)	5/31/07

OFFICIAL RECORD COPY

DOMINION NUCLEAR CONNECTICUT, INC.

DOCKET NO. 50-336

MILLSTONE POWER STATION, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 299  
License No. DPR-65

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Dominion Nuclear Connecticut, Inc. (the licensee) dated May 31, 2006, as supplemented by letters dated February 14, 2007, and April 26, 2007, 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 Title 10 of the *Code of Federal Regulations* (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. , 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 180 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

*/ra/*

Harold K. Chernoff, Chief  
Plant Licensing Branch I-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Attachment: Changes to License No. DPR-65  
and the Technical Specifications

Date of Issuance: May 31, 2007

ATTACHMENT TO LICENSE AMENDMENT NO. 299

FACILITY OPERATING LICENSE NO. DPR-65

DOCKET NO. 50-336

Replace page 3 of License No. DPR-65 with the attached revised page 3.

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

INDEX - I  
INDEX - VI  
INDEX - XII  
INDEX - XVII  
INDEX - XVIII  
1-3  
3/4 4-5  
3/4 4-6  
3/4 4-7  
3/4 4-7a  
3/4 4-7b  
3/4 4-7c  
3/4 4-7d  
3/4 4-7e  
3/4 4-7f  
3/4 4-9  
3/4 4-10  
6-17  
6-20  
6-20a  
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Insert

INDEX - I  
INDEX - VI  
INDEX - XII  
INDEX - XVII  
INDEX - XVIII  
1-3  
3/4 4-5  
3/4 4-6  
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3/4 4-9  
3/4 4-10  
6-17  
6-20  
6-20a  
6-30  
6-31

DOMINION NUCLEAR CONNECTICUT, INC.

DOCKET NO. 50-423

MILLSTONE POWER STATION, UNIT NO. 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 238  
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 May 31, 2006, as supplemented by letters dated February 14, 2007, and April 26, 2007, 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 Title 10 of the *Code of Federal Regulations* (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. , and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated in the license. Dominion Nuclear Connecticut, Inc. 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 180 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

*/ra/*

Harold K. Chernoff, Chief  
Plant Licensing Branch I-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Attachment: Changes to License No. NPF-49  
and the Technical Specifications

Date of Issuance: May 31, 2007

ATTACHMENT TO LICENSE AMENDMENT NO. 238

FACILITY OPERATING LICENSE NO. NPF-49

DOCKET NO. 50-423

Replace page 4 of License No. NPF-49 with the attached revised page 4.

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.

<u>Remove</u>	<u>Insert</u>
INDEX - i	INDEX - i
INDEX - ii	INDEX - ii
INDEX - vii	INDEX - vii
INDEX - xix	INDEX - xix
1-2	1-2
1-3	1-3
1-4	1-4
1-5	1-5
1-6	1-6
3/4 4-14	3/4 4-14
3/4 4-15	3/4 4-15
3/4 4-16	3/4 4-16
3/4 4-17	3/4 4-17
3/4 4-18	3/4 4-18
3/4 4-19	3/4 4-19
3/4 4-20	3/4 4-20
3/4 4-22	3/4 4-22
3/4 4-23	3/4 4-23
-----	4-23a
6-17a	6-17a
-----	6-17b
-----	6-17c
6-21	6-21
-----	6-21a
6-22	6-22



SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NOS. 299 AND 238

TO FACILITY OPERATING LICENSE NOS. DPR-65 AND NPF-49

DOMINION NUCLEAR CONNECTICUT, INC.

MILLSTONE POWER STATION, UNIT NOS. 2 AND 3

DOCKET NOS. 50-336 AND 50-423

1.0 INTRODUCTION

By letter dated May 31, 2006, as supplemented by letters dated February 14, 2007, and April 26, 2007, Dominion Nuclear Connecticut, Inc. (DNC or licensee) submitted a request for changes to the Millstone Power Station, Unit Nos. 2 and 3 (MPS2 and MPS3) Technical Specifications (TSs) to the Nuclear Regulatory Commission (NRC or the Commission). The proposed amendments would revise the existing Steam Generator tube surveillance program consistent with the NRC-approved TS Task Force (TSTF) Standard TS Change Traveler, TSTF-449, "Steam Generator Tube Integrity," Revision 4. TSTF-449 is part of the consolidated line item improvement process.

The supplements dated February 14, 2007, and April 26, 2007, provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the staff's original proposed no significant hazards determination as published in the *Federal Register* on December 19, 2006 (71 FR 75992).

2.0 REGULATORY EVALUATION

The background, description, and applicability of the proposed changes associated with the SG tube integrity issue and the applicable regulatory requirements were included in the NRC staff's model safety evaluation (SE) published in the *Federal Register* on March 2, 2005 (70 FR 10298). The "Notice of Availability of Model Application Concerning Technical Specification Improvement To Modify Requirements Regarding Steam Generator Tube Integrity Using the Consolidated Line Item Improvement Process," was published in the *Federal Register* on May 6, 2005 (70 FR 24126), and made the model SE available for licensees to reference.

### 3.0 TECHNICAL EVALUATION

#### 3.1 Overview

In its May 31, 2006 application, and February 14, 2007 and April 26, 2007 supplements, the licensee proposed changes to the TSs that are modeled after TS Task Force (TSTF) Standard TS Change Traveler, TSTF-449, "Steam Generator Tube Integrity." There were minor differences between TSTF-449 and the licensee's application. These included differences in the facility licensing basis (than that discussed in TSTF-449) and differences in TS format and numbering. These differences are discussed below.

With respect to the differences in the facility licensing basis, the differences did not invalidate the technical evaluation on TSTF-449; rather they resulted in the licensee having to slightly deviate from some of the modifications discussed in TSTF-449, or they resulted in slight differences in the requirements. For example, the temperatures corresponding to the reactor operating modes (e.g., Hot Standby, Hot Shutdown) in the standard TSs (and in TSTF-449) differ from the temperatures corresponding to these modes at MPS2. These different temperatures were previously approved by the NRC staff and have no effect on the adequacy of the SG program; however, they do affect the temperatures at which the SG is operated.

Other examples of differences are contained in the Bases section. In the SG Tube Integrity Bases section, the licensee indicates that the analysis of a SG tube rupture event assumes that the primary-to-secondary leak rate includes a leak rate equal to two times the operational leak rate limit in the TSs (rather than equal to the limit in the TSs as indicated in TSTF-449), plus the leakage rate associated with a double-ended rupture of a single tube. The text proposed to be included in the Bases to describe the SG tube rupture event is consistent with the licensee's current licensing basis. Another example is that the licensee indicated that the dose consequences are within the limits of Title 10 of the *Code of Federal Regulations* (10 CFR) 50.67 (rather than Part 100 as indicated in TSTF-449), since their current licensing basis is based on 10 CFR 50.67. Another example is that the licensee indicated in their Bases that the accident analyses for a SG tube rupture assumes the contaminated secondary fluid is released to the atmosphere via safety valves or atmospheric dump valves (rather than only being briefly released to the atmosphere via safety valves with the majority being discharged to the main condenser as indicated in TSTF-449). Since the licensee's accident analysis differs from that assumed in TSTF-449, they did not incorporate the text from TSTF-449, rather, they incorporated a sentence that reflects their accident analysis. Since these differences were minor in nature, they were consistent with the plant's licensing basis, or they were consistent with the intent of TSTF-449, the NRC staff determined they were acceptable.

With respect to the differences in numbering of the TSs, these differences were administrative in nature and did not affect the technical adequacy of the submittal. As a result, the NRC staff determined they were acceptable. With respect to the differences in the format of the TSs, these differences resulted in listing the requirements in sentence format rather than tabular format and using slightly different terminology. Since these differences were administrative in nature and did not affect the technical adequacy of the submittal, the NRC staff determined they were acceptable.

### 3.2 Changes Specific to MPS2

In addition to the above, and specific to MPS2, the licensee proposed some changes that went beyond TSTF-449. For example, the licensee proposed changes to the requirements pertaining to reactor coolant system operational leakage to facilitate the adoption of TSTF-449 (e.g., consolidating the various definitions of leakage in TS 1.14, modifying the action statements in TS 3.4.6.2, and modifying surveillance requirements in TS 4.4.6.2.2). Since these proposed TS changes, including the changes to the Bases, were generally consistent with the standard TSs as modified to reflect the plant's licensing basis, the NRC staff determined that the proposed changes were acceptable. Another example is that the licensee proposed, in part, to limit accident induced leakage to 150 gallons per day per SG. Since this proposal was more restrictive than that required by TSTF-449 (which limited accident induced leakage, in part, to 1 gallon per minute (1440 gallons per day) per SG), the staff found it acceptable. In addition, the licensee proposed to increase their normal operating primary-to-secondary leakage limit from 0.035 gallons per minute (50 gallons per day) to 75 gallons per day. Since this limit is less than that discussed in TSTF-449 and is less than (or equal to) the value assumed in the licensee's accident analyses, the NRC staff finds this proposed increase acceptable.

### 3.3 Changes Specific to MPS3

In addition to section 3.1, and specific to MPS3, the licensee proposed some changes that went beyond TSTF-449. For example, the licensee proposed changes to the requirements pertaining to reactor coolant system operational leakage to facilitate the adoption of TSTF-449 (e.g., consolidating the various definitions of leakage in TS 1.16, modifying action statements in TS 3.4.6.2, and modifying surveillance requirements in TS 4.4.6.2.1 and 4.4.6.2.2). Since these proposed TS changes, including the changes to the Bases, were generally consistent with the standard TSs as modified to reflect the plant's licensing basis, the NRC staff determined that the proposed changes were acceptable. Another example is that the licensee proposed, in part, to limit accident induced leakage to 500 gallons per day per SG. Since this proposal was more restrictive than that required by TSTF-449 (which limited accident induced leakage, in part, to 1 gallon per minute (1440 gallons per day) per SG), the NRC staff found it acceptable.

The remainder of the application was consistent with, or more limiting than, TSTF-449.

In summary, the NRC staff determined that the model SE is applicable to this review and finds the proposed changes acceptable.

Consistent with TSTF-449, the proposed TS changes include: (1) a revised definition of LEAKAGE, (2) a revised TS 3.4.6.2, "Reactor Coolant System Operational Leakage," (3) a new TS 6.26, "Steam Generator (SG) Program," (4) a revised TS 3.4.5, "Steam Generator Tube Integrity," (5) a new TS 6.9.1.9, "Steam Generator Tube Inspection Report," and (6) revised Table of Content pages to reflect the proposed changes.

### 3.4 Summary

The proposed TS changes establish a programmatic, largely performance-based regulatory framework for ensuring SG tube integrity is maintained. The NRC staff finds that it addresses key shortcomings of the current framework by ensuring that SG programs are focused on accomplishing the overall objective of maintaining tube integrity. It incorporates performance criteria for evaluating tube integrity that the NRC staff finds consistent with the structural margins and the degree of leak tightness assumed in the current plant licensing basis. The NRC staff finds that maintaining these performance criteria provides reasonable assurance that the SGs can be operated safely without increase in risk.

The revised TSs will contain limited specific details concerning how the SG Program is to achieve the required objective of maintaining tube integrity; the intent being that the licensee will have the flexibility to determine the specific strategy for meeting this objective. However, the NRC staff finds that the revised TSs include sufficient regulatory constraints on the establishment and implementation of the SG Program such as to provide reasonable assurance that tube integrity will be maintained.

Failure to meet the performance criteria will be reportable pursuant to the requirements in 10 CFR Parts 50.72 and 50.73. The NRC reactor oversight process provides a process by which the NRC staff can verify that the licensee has identified any SG Program deficiencies that may have contributed to such an occurrence and that appropriate corrective actions have been implemented.

In conclusion, the NRC staff finds that the TS changes proposed by the licensee in its May 31, 2006 application, and February 14, 2007 and April 26, 2007 supplements conform to the requirements of 10 CFR 50.36 and establish a TS framework that will provide reasonable assurance that SG tube integrity is maintained without undue risk to public health and safety.

The licensee included in its application the revised TS Bases to be implemented with the TS change. The NRC staff finds that the TS Bases Control Program is the appropriate process for updating the affected TS Bases pages and has, therefore, not included the affected Bases pages with this amendment.

### 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 Connecticut State official provided no comments.

### 5.0 ENVIRONMENTAL CONSIDERATION

This 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. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluent 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 (71 FR 75992). 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 NRC staff concludes 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 activity 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 health and safety of the public.

Principal Contributors: J. McGuire  
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D. Nold  
D. Muller  
G. Makar

Date: May 31, 2007

Millstone Power Station, Unit Nos. 2 and 3

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