



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

July 27, 2015

Mr. David A. Heacock
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 NO. 3 - ISSUANCE OF AMENDMENT
RE: REFUELING WATER STORAGE TANK ALLOWABLE TEMPERATURES
(TAC NO. MF3078)

Dear Mr. Heacock:

The Commission has issued the enclosed Amendment No. 262 to Renewed Facility Operating License No. NPF-49 for the Millstone Power Station, Unit No. 3. This amendment is in response to your application dated November 6, 2013, as supplemented on November 14, 2014, and February 9, 2015.

The amendment revises Technical Specification (TS) 3/4.5.4, "Refueling Water Storage Tank," and TS 3/4.6.2.1, "Depressurization and Cooling Systems, Containment Quench Spray System," to provide additional operational margin for control of the Refueling Water Storage Tank temperature.

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,

A handwritten signature in black ink, appearing to read "R. Guzman", is written over a horizontal line.

Richard V. Guzman, Senior Project Manager
Plant Licensing Branch I-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-423

Enclosures:

1. Amendment No. 262 to NPF-49
2. Safety Evaluation

cc w/encls: Distribution via Listserv



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
WASHINGTON, D.C. 20555-0001

DOMINION NUCLEAR CONNECTICUT, INC.

DOCKET NO. 50-423

MILLSTONE POWER STATION, UNIT NO. 3

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 262
Renewed License No. NPF-49

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by the applicant dated November 6, 2013, as supplemented on November 14, 2014, and February 9, 2015, 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 Renewed Facility Operating License No. NPF-49 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, revised through Amendment No. 262 and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto are hereby incorporated into the license. DNC 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 120 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in black ink, appearing to read "Michael I. Dudek".

Michael I. Dudek, Acting Chief
Plant Licensing Branch I-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to the License
and Technical Specifications

Date of Issuance: July 27, 2015

ATTACHMENT TO LICENSE AMENDMENT NO. 262

RENEWED FACILITY OPERATING LICENSE NO. NPF-49

DOCKET NO. 50-423

Replace the following page of the Renewed Facility Operating License with the attached revised page. The revised page is identified by amendment number and contains marginal lines indicating the areas of change.

Remove

4

Insert

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.

Remove

3/4 5-9

3/4 6-12

Insert

3/4 5-9

3/4 6-12

(2) Technical Specifications

The Technical Specifications contained in Appendix A, revised through Amendment No. 262 and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto are hereby incorporated into the license. DNC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

- (3) DNC shall not take any action that would cause Dominion Resources, Inc. (DRI) or its parent companies to void, cancel, or diminish DNC's Commitment to have sufficient funds available to fund an extended plant shutdown as represented in the application for approval of the transfer of the licenses for MPS Unit No. 3.
- (4) Immediately after the transfer of interests in MPS Unit No. 3 to DNC, the amount in the decommissioning trust fund for MPS Unit No. 3 must, with respect to the interest in MPS Unit No. 3, that DNC would then hold, be at a level no less than the formula amount under 10 CFR 50.75.
- (5) The decommissioning trust agreement for MPS Unit No. 3 at the time the transfer of the unit to DNC is effected and thereafter is subject to the following:
- (a) The decommissioning trust agreement must be in a form acceptable to the NRC.
 - (b) With respect to the decommissioning trust fund, investments in the securities or other obligations of Dominion Resources, Inc. or its affiliates or subsidiaries, successors, or assigns are prohibited. Except for investments tied to market indexes or other non-nuclear-sector mutual funds, investments in any entity owning one or more nuclear power plants are prohibited.
 - (c) The decommissioning trust agreement for MPS Unit No. 3 must provide that no disbursements or payments from the trust, other than for ordinary administrative expenses, shall be made by the trustee until the trustee has first given the Director of the Office of Nuclear Reactor Regulation 30 days prior written notice of payment. The decommissioning trust agreement shall further contain a provision that no disbursements or payments from the trust shall be made if the trustee receives prior written notice of objection from the NRC.
 - (d) The decommissioning trust agreement must provide that the agreement can not be amended in any material respect without 30 days prior written notification to the Director of the Office of Nuclear Reactor Regulation.

EMERGENCY CORE COOLING SYSTEMS

3/4.5.4 REFUELING WATER STORAGE TANK

LIMITING CONDITION FOR OPERATION

- 3.5.4 The refueling water storage tank (RWST) shall be OPERABLE with:
- a. A contained borated water volume between 1,166,000 and 1,207,000 gallons,
 - b. A boron concentration between 2700 and 2900 ppm of boron,
 - c. A minimum solution temperature of 42°F, and
 - d. A maximum solution temperature of 73°F.

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

ACTION:

With the RWST inoperable, restore the tank to OPERABLE status within 1 hour or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

- 4.5.4 The RWST shall be demonstrated OPERABLE:
- a. At the frequency specified in the Surveillance Frequency Control Program by:
 - 1) Verifying the contained borated water volume in the tank, and
 - 2) Verifying the boron concentration of the water.
 - b. At the frequency specified in the Surveillance Frequency Control Program by verifying the RWST temperature.

CONTAINMENT SYSTEMS

3/4.6.2 DEPRESSURIZATION AND COOLING SYSTEMS

CONTAINMENT QUENCH SPRAY SYSTEM

LIMITING CONDITION FOR OPERATION

3.6.2.1 Two independent Containment Quench Spray subsystems shall be OPERABLE.

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

ACTION:

With one Containment Quench Spray subsystem inoperable, restore the inoperable system to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.6.2.1 Each Containment Quench Spray subsystem shall be demonstrated OPERABLE:

- a. At the frequency specified in the Surveillance Frequency Control Program, by:
 - 1) Verifying that each valve (manual, power operated, or automatic) in the flow path that is not locked, sealed, or otherwise secured in position, is in its correct position; and
 - 2) Verifying the temperature of the borated water in the refueling water storage tank is between 42°F and 73°F.
- b. By verifying that each pump's developed head at the test flow point is greater than or equal to the required developed head when tested pursuant to Specification 4.0.5;
- c. At the frequency specified in the Surveillance Frequency Control Program, by:
 - 1) Verifying that each automatic valve in the flow path actuates to its correct position on a CDA test signal, and
 - 2) Verifying that each spray pump starts automatically on a CDA test signal.
- d. By verifying each spray nozzle is unobstructed following maintenance that could cause nozzle blockage.



UNITED STATES
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SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 262

TO RENEWED FACILITY OPERATING LICENSE NO. NPF-49

DOMINION NUCLEAR CONNECTICUT, INC.

DOCKET NO. 50-423

MILLSTONE POWER STATION, UNIT NO. 3

1.0 INTRODUCTION

By letter dated November 6, 2013 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML13322A415), as supplemented by letters dated November 14, 2014 (ADAMS Accession No. ML14325A644), and February 9, 2015 (ADAMS Accession No. ML15044A044), Dominion Nuclear Connecticut, Inc. (DNC, the licensee), submitted a request for changes to the Millstone Power Station, Unit No. 3 (MPS3), Technical Specifications (TSs). The amendment modifies the existing TS requirements for the Refueling Water Storage Tank (RWST) solution temperature; specifically, the minimum temperature is increased from 40°F to 42°F and the maximum temperature is increased from 50°F to 73°F. The amendment also makes an editorial change to the TS 3/4.5.4 action statement.

The increase in the minimum RWST temperature is to account for operational margin to the analyzed limit of 40°F, while the increase in the maximum RWST is to increase operating flexibility. The amendment would make the action statement consistent with similar action statements in the licensee's TSs and with the Standard TSs in NUREG-1431 (Reference 4).

Supplemental letters dated November 14, 2014, and February 9, 2015, provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the U.S. Nuclear Regulatory Commission (NRC) staff's original proposed no significant hazards consideration determination as published in the *Federal Register* (FR) on November 25, 2014 (79 FR 70212).

2.0 REGULATORY EVALUATION

The regulatory requirements in Appendix A to Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50 – "General Design Criteria for Nuclear Power Plants," (Reference 5) which the NRC staff considered in assessing the proposed TS change are as follows:

- GDC-16 - *Containment design*. Reactor containment and associated systems shall be provided to establish an essentially leak-tight barrier against the uncontrolled release of radioactivity to the environment and to assure that the containment design conditions important to safety are not exceeded for as long as postulated accident conditions require.
- GDC-38 - *Containment heat removal*. A system to remove heat from the reactor containment shall be provided. The system safety function shall be to reduce rapidly, consistent with the functioning of other associated systems, the containment pressure and temperature following any loss-of-coolant accident and maintain them at acceptably low levels.
- GDC-50 - *Containment design basis*. The reactor containment structure, including access openings, penetrations, and the containment heat removal system shall be designed so that the containment structure and its internal compartments can accommodate, without exceeding the design leakage rate and with sufficient margin, the calculated pressure and temperature conditions resulting from any loss-of-coolant accident.

The staff also looked at the following guidance:

- Regulatory Guide 1.1 - *Net Positive Suction Head for Emergency Core Cooling and Containment Heat Removal System Pumps (Safety Guide 1)* (Reference 6), as related to the net positive suction head (NPSH) available to the emergency core cooling system (ECCS) and containment heat removal system pumps (as clarified by NUREG-0800, *Standard Review Plan (SRP)* Section 6.2.2).
- Regulatory Guide 1.26 - *Quality Group Classifications and Standards for Water-, Steam-, and Radioactive-Waste-Containing Components of Nuclear Power Plants* (Reference 7), as related to how the systems are designed in accordance with American Society of Mechanical Engineers Boiler and Pressure Vessel Code, Section III, Class 2 and are designated Safety Class 2.
- Regulatory Guide 1.29 - *Seismic Design Classification* (Reference 8), as it relates to how the systems are designed to Seismic Category 1.

In Section 50.36, "Technical specifications," of 10 CFR, the NRC established its regulatory requirements related to the content of TSs. Pursuant to 10 CFR 50.36(c), TSs are required to include items in the following five specific categories related to station operation: (1) safety limits, limiting safety system settings, and limiting control settings; (2) limiting conditions for operation (LCOs); (3) surveillance requirements (SRs); (4) design features; and (5) administrative controls.

Specifically, 10 CFR 50.36(c)(2)(ii) requires that a TS LCO be established for each item meeting one or more of the following criteria:

- Criterion 1: Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.
- Criterion 2: A process variable, design feature, or operating restriction that is an initial condition for a design basis accident or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
- Criterion 3: A structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a design basis accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
- Criterion 4: A structure, system, or component which operating experience or probabilistic risk assessment has shown to be significant to public health and safety.

Also, 10 CFR 50.36(c)(3) defines SRs as requirements relating to test, calibration, or inspection to assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the limiting conditions for operation will be met.

3.0 TECHNICAL EVALUATION

3.1 Proposed Changes

The TS 3/4.5.4 LCO requirements currently state, in part, that the RWST shall be OPERABLE with:

- c. A minimum solution temperature of 40°F, and
- d. A maximum solution temperature of 50°F.

The revised TS 3/4.5.4 LCO requirements would state:

- c. A minimum solution temperature of 42°F.
- d. A maximum solution temperature of 73°F.

The TS 3/4.5.4 LCO action statement currently states:

With the RWST inoperable, restore the tank to OPERABLE status within 1 hour or be in at least HOT STANDBY within 6 hours and in COLD SHUTDOWN within the following 30 hours.

The revised TS 3/4.5.4 LCO action statement would include "the next" and state:

With the RWST inoperable, restore the tank to OPERABLE status within 1 hour or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

The TS 3/4.6.2.1 SRs currently state:

- 2). Verifying the temperature of the borated water in the refueling water storage tank is between 40°F and 50°F.

The revised TS 3/4.6.2.1 SRs would state:

- 2). Verifying the temperature of the borated water in the refueling water storage tank is between 42°F and 73°F.

3.2 Summary of Technical Information Provided by the Licensee

The changes to the RWST temperature requirements would provide increased operating margin to the licensee including reducing refueling outage duration and the risk of unplanned outages during the summer.

The current analysis of record was reviewed and approved in a license amendment request (LAR) dated July 13, 2007, for a stretch power uprate (SPU) (Reference 9). In anticipation of this LAR to increase the maximum TS RWST temperature, the licensee revised the assumed RWST temperature for those accident analyses submitted in the SPU LAR.

In Enclosure 1 to Attachment 1 of the November 6, 2013, application, the licensee provided the assumed RWST temperature for MPS3 safety analyses in Table 1 and the assumed RWST temperatures for safety analyses and evaluations supporting MPS3 plant design and programs in Table 2. The minimum RWST temperature of 40°F is commonly used in analyses limited by a low RWST temperature, while various maximum RWST temperatures are used in analyses limited by a high RWST temperature. However, the operating limit is set by the containment recirculation spray system and quench spray system piping thermal analysis described in Sections 6.2.2 and 6.3.1 which assumes a temperature of 75°F. As such, the limiting RWST minimum and maximum temperature assumptions are 40°F and 75°F, respectively.

3.3 NRC Staff Evaluation

3.3.1 Background

The MPS3 uses a Westinghouse 4-Loop, closed cycle, Pressurized-Water Reactor (PWR) type nuclear steam supply system with sub-atmospheric containment type. The containment encloses the reactor system and is the final barrier against the release of significant amounts of radioactive fission products in the event of an accident. During normal operation, the containment structure is maintained at a subatmospheric pressure range of 10.6 psia [pounds per square inch absolute] to 14.0 psia. During a design basis loss-of-coolant accident (LOCA), or a Main Steam Line Break (MSLB) accident, the containment peak pressure and temperature must remain below the containment's internal design pressure and design temperature. The containment structure is designed to withstand internal pressurization from high energy pipe breaks within it and the external pressurization due to inadvertent actuation of the containment

heat removal systems. The containment maximum and minimum internal design pressure is 45 psig [pounds per square inch gauge] and 8.00 psia respectively, and its structural design temperature is 296°F.

The RWST coolers and recirculation pumps are provided to meet its current TS temperature limits of 40°F minimum and 50°F maximum. On receiving a Safety Injection Signal (SIS), the directly aligned pumps to the RWST (i.e., the safety injection (SI), the residual heat removal, and the containment quench spray system (QSS) pumps) draw borated water from the RWST while the charging pumps draw water from RWST after automatically switching alignment from the Volume Control Tank to the RWST. During post-accident, the RWST water is used for core injection and for quench spray to reduce containment pressure and temperature. The RWST has sufficient volume of water to ensure sump recirculation pump suction when the core injection and containment cooling is performed in the sump recirculation mode.

3.3.2 LOCA Containment Analysis

As described in the MPS3 Final Safety Analysis Report (FSAR), the LOCA containment analysis was performed as a part of the SPU application (Reference 9) and approved by the NRC in Reference 10. The licensee further revised the LOCA containment analysis using the revised Westinghouse mass and energy (M&E) release rate data after correcting errors identified in Westinghouse Nuclear Safety Advisory Letter (NSAL)-11-5, "Westinghouse LOCA Mass and Energy Release Calculation Issues," dated July 25, 2011 (Reference 11), and correcting another error specific to the MPS3. This revision was submitted for NRC review in licensee's letter dated April 25, 2013 (Reference 12), and was approved by the NRC in Reference 13. The licensee stated that the current FSAR Chapter 6 LOCA containment analyses have corrected the NSAL-11-5 M&E errors changing the input assumption for RWST temperature to the values reported in Reference 2. The RWST temperature is one of the key safety input parameters for accident analysis involving the SI system and the QSS. In an NRC staff request for additional information (RAI) (Reference 14), the licensee was requested to identify other input parameters and assumptions that have been changed subsequent to the SPU M&E release and containment response analyses. In its response (Reference 2), the licensee stated that the LOCA M&E release analysis through the end of reflood phase (which assumed a RWST solution temperature of 100°F for the ECCS fluid) has not changed. The only change the licensee made was in the GOTHIC containment analysis which models the LOCA post-reflood phase up to the initiation of the sump recirculation phase to counter the effects of the increase in M&E release from Westinghouse NSAL-11-5 M&E errors described in Reference 12. The maximum value for the RWST water temperature which the licensee used in the safety analysis and the design basis is 75°F (Tables 1 and 2 in Enclosure 1 of Attachment 1 to Reference 1). The NRC staff finds that this value is acceptable because it bounds the maximum solution temperature 73°F requested in this LAR.

3.3.3 Minimum Containment Pressure Analysis

The minimum containment internal design pressure is 8.0 psia. A minimum containment internal pressure can occur during an inadvertent QSS operation event. The analysis for this event uses the minimum RWST solution temperature as an input parameter to determine the minimum containment internal pressure which should be greater than the minimum containment internal design pressure. The analysis of record described in FSAR Section 6.2.1.1 and Table

6.2-78 documents an RWST solution temperature of 40°F which is bounded by the proposed TS minimum temperature of 42°F. As reported in FSAR Section 6.2.1.1.3.4, the minimum internal pressure is calculated to be 8.08 psia occurring approximately 50 minutes after the event using a minimum RWST solution temperature of 40°F (FSAR Table 6.2-78). Therefore, the staff finds that the change in TS minimum RWST solution temperature from 40°F to 42°F is acceptable because it does not affect the current minimum containment pressure of 8.08 psia.

3.3.4 Mass and Energy Release Errors for LOCA Analysis Reported in Westinghouse NSALs

Regarding M&E errors reported Westinghouse NSAL-06-6 (Reference 15), the licensee stated that corrections were included in the containment analysis performed for the SPU (Reference 9).

Regarding M&E errors reported in Westinghouse NSAL-14-2 (Reference 16), the licensee revised its response for RAI-2 in Reference 2 as follows (Reference 3):

The current FSAR analyses have not been updated to address NSAL-14-2, "Westinghouse Loss-of-Coolant Accident Mass and Energy Release Calculation Issue for Steam Generator Tube Material Properties," which was distributed to MPS3 on April 8, 2014. Since the analysis of record for MPS3 uses material properties for stainless steel instead of Alloy 600, NSAL-14-2 is applicable to MPS3, which results in an underprediction of the initial stored energy in the steam generator tubes. NSAL-14-2 included a conservative estimate for impact on LOCA peak pressure of 0.2 psia for plants with Alloy 600 tube material. Application of the 0.2 psia conservative penalty from NSAL-14-2 would increase the MPS3 LOCA peak containment pressure from 41.9 psig to 42.1 psig, which continues to remain below the containment design pressure of 45 psig and below the test pressure of 42.5 psig that was measured during the last MPS3 Type A test on November 7, 2011. Therefore, the past Type A test is bounding and the Integrated Leak Rate Test (ILRT) program is not impacted by application of the NSAL-14-2 penalty.

The conservative estimates specified in NSAL-14-2 are not plant specific but are meant to bound the Westinghouse PWR fleet. Based on preliminary information specific to MPS3, NSAL-14-2 is expected to have no impact on the short-term containment peak pressure calculation (and thus no impact on the ILRT program) and a very small effect on the long-term energy release that can be accommodated by margins available in the containment analyses. DNC expects no impact from NSAL-14-2 on the RWST temperature limits proposed in the LAR submitted November 6, 2013. MPS3 is addressing NSAL-14-2 through the corrective action process.

The licensee's evaluation of the impact of NSAL-14-2 on the containment peak pressure is based on a generic and conservative increase of 0.2 psig estimated by Westinghouse for PWRs similar to MPS3. The NRC staff finds the evaluation acceptable because the conservatively estimated peak containment pressure is less than the design pressure with a margin of 2.9 psig and is also less than the previous 10 CFR 50 Appendix J, Type A test pressure of 42.5 psig with a margin of 0.4 psig.

The NRC staff finds it acceptable that the licensee's containment analysis of record assumed an RWST water temperature that bounds the proposed TS change in the RWST water temperature. The licensee's analysis of record includes corrections in the M&E release errors reported in Westinghouse NSAL-06-6 and NSAL-11-5. The NRC staff also finds acceptable the licensee's conclusion stating that the effect of M&E corrections due to errors reported in Westinghouse NSAL-14-2 will have a minimal effect on the long-term energy release and can be accommodated by margins available in the containment analysis.

Additionally, the NRC staff finds that the applicable GDCs are met because:

- The containment and associated systems will maintain a leak-tight barrier against the uncontrolled release of radioactivity to the environment and that the containment design conditions important to safety are not exceeded for as long as the postulated accident requires (GDC-16);
- The containment heat removal system safety function will reduce rapidly, consistent with the functioning of other associated systems, the containment pressure and temperature following any LOCA and to maintain them at acceptably low levels (GDC-38); and
- The containment structure and its internal compartments will accommodate without exceeding the design leakage rate and with sufficient margin, the calculated pressure and temperature conditions resulting from any LOCA (GDC-50).

3.3.5 Revised RWST Temperatures

The NRC staff reviewed the licensee's LAR and supplemental information to determine whether the proposed TS changes are appropriate. The staff notes that the previously reviewed and approved FSAR Chapter 15 accident analyses demonstrated acceptable results while using a minimum RWST temperature as high as 40°F and a maximum RWST temperature as low as 75°F.

Increasing the minimum TS required RWST temperature from 40°F to 42°F provides a 2°F operational margin (e.g., measurement uncertainties, analytical uncertainties, and design uncertainties) to the analyzed value. Increasing the maximum TS required RWST temperature from 50°F to 73°F reduces the margin to the currently analyzed value; however, this value is consistent with the limiting assumption for the RWST temperature including a 2°F operational margin. Therefore, the NRC staff finds the changes to the RWST temperature requirements of TS 3/4.5.4 and 3/4.6.2.1 are acceptable.

3.3.6 Editorial change to TS 3/4.5.4 action statement

Revising the action statement in TS 3/4.5.4 to include the wording "the next" is consistent with the current MPS3 TS LCO 3.0.3 statement and other similar action statements (e.g., TS 3.1.1.3, TS 3.1.1.4, TS 3.3.1, TS 3.3.2, TS 3.3.3.5, TS 3.3.3.6, TS 3.4.1.5, TS 3.4.2, etc.) in the MPS3 TSs that require HOT STANDBY and are preceded by a completion time. The NRC staff finds this is an acceptable editorial change because it enhances clarity in the TSs.

3.4 NRC Staff Conclusion

The NRC staff evaluated the licensee's proposed changes and the licensee's assessment of the impact of the proposed change to the MPS3 TSs. Based on the considerations discussed in the preceding sections, the staff has determined that the proposed changes to TS 3/4.5.4, "Refueling Water Storage Tank," and TS 3/4.6.2.1, "Depressurization and Cooling Systems, Containment Quench Spray System," are acceptable.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Connecticut State official was notified on June 26, 2015, 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. 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 published in the FR on November 25, 2014 (79 FR 70212). The amendment also involves changes to administrative procedures or requirements and makes editorial, corrective or other minor revisions. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9) and (c)(10). 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) there is reasonable assurance that 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.

7.0 REFERENCES

1. Letter from Dominion to NRC dated November 6, 2013, "Dominion Nuclear Connecticut, Inc. Millstone Power Station Unit 3, Licensee Amendment Request, Proposed Technical Specification Changes of the Refueling Water Storage Tank Allowable Temperatures," (ADAMS Accession No. ML13322A415).
2. Letter from Dominion to NRC dated November 14, 2014, "Dominion Nuclear Connecticut, Inc. Millstone Power Station Unit 3, Response To Request For Additional Information

Regarding License Amendment Request For Proposed Technical Specification Changes of the Refueling Water Storage Tank Allowable Temperatures," (ADAMS Accession No. ML14325A644).

3. Letter from Dominion to NRC dated February 9, 2015, "Dominion Nuclear Connecticut, Inc. Millstone Power Station Unit 3, Revised Response to Request for Additional Information Regarding License Amendment Request for Proposed Technical Specification Changes of the Refueling Water Storage Tank Allowable Temperatures," (ADAMS Accession No. ML15044A044).
4. NUREG-1431, "Standard Technical Specifications: Westinghouse Plants-Specifications," Volume 1, Revision 4, April 2012, (ADAMS Accession No. ML12100A222).
5. Federal Regulation *U.S. Code of Federal Regulations*, "Domestic Licensing of Production and Utilization Facilities - General Design Criteria for Nuclear Power Plants," Title 10, of the *Code of Federal Regulations* (10 CFR) Part 50, Appendix A."
6. USNRC Regulatory Guide 1.1, 'Net Positive Suction Head for Emergency Core Cooling and Containment Heat Removal System Pumps," U.S. Nuclear Regulatory Commission, November 2, 1970 (ADAMS Accession No. ML003739925).
7. USNRC Regulatory Guide 1.26 "An Acceptable Model and Related Statistical Methods for the Analysis of Fuel Densification," March 2010 (ADAMS Accession No. ML093360318).
8. USNRC Regulatory Guide 1.29 "Maintenance, Testing, and Replacement of Vented Lead-Acid Storage Batteries for Nuclear Power Plants," September 2013 (ADAMS Accession No. ML13170A112).
9. Letter from Dominion to NRC, "Dominion Nuclear Connecticut, Inc., Millstone Power Station Unit 3, License Amendment Request, Stretch Power Uprate," dated July 13, 2007. (ADAMS Accession No. ML072000386).
10. Letter from NRC to Dominion dated August 12, 2008, "Millstone Power Station, Unit No. 3, issuance of Amendment RE: Stretch Power Uprate (TAC No. MD6070)," (ADAMS Accession No. ML081610585).
11. Westinghouse Nuclear Safety Advisory Letter, NSAL-11-5, "Westinghouse LOCA Mass and Energy Release Calculation Issues," July 25, 2011.
12. Letter from Dominion to NRC dated April 25, 2013, "Dominion Nuclear Connecticut, Inc. Millstone Power Station Unit 3 License Amendment Request to Revise Technical Specification 6.8.4.F for Peak Calculated Containment Internal Pressure," (ADAMS Accession No. ML13120A158).
13. Letter from NRC to Dominion dated April 8, 2014, "Millstone Power Station, Unit No. 3- Issuance of Amendment Regarding Calculated Containment Internal Pressure (TAC No. MF1731)," (ADAMS Accession No. ML14073A055).

14. Email from NRC to Dominion, dated September 8, 2014, Email to "Request for Additional Information: Proposed Change to TS 3.5.4, "Refueling Water Storage Tank," and Surveillance Requirement SR 4.6.2.1a, (ADAMS Accession No. ML14252A556).
15. Westinghouse Nuclear Safety Advisory Letter, NSAL-06-6, "Westinghouse LOCA Mass and Energy Release Analysis."
16. Westinghouse Nuclear Safety Advisory Letter, NSAL-14-2, "Westinghouse Loss-of-Coolant Accident Mass and Energy Release Calculation Issue for Steam Generator Tube Material Properties," April 8, 2014.
17. WCAP-10325-P-A, May 1983 (Proprietary) and WCAP-10326-A (Nonproprietary), "Westinghouse LOCA Mass and Energy Release Model for Containment Design, March 1979."

Principal Contributor: D. Saenz, A. Sallman

Date: July 27, 2015

July 27, 2015

Mr. David A. Heacock
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 NO. 3 - ISSUANCE OF AMENDMENT
RE: REFUELING WATER STORAGE TANK ALLOWABLE TEMPERATURES
(TAC NO. MF3072)

Dear Mr. Heacock:

The Commission has issued the enclosed Amendment No. 262 to Renewed Facility Operating License No. NPF-49 for the Millstone Power Station, Unit No. 3. This amendment is in response to your application dated November 6, 2013, as supplemented on November 14, 2014 and February 9, 2015.

The amendment revises Technical Specification (TS) 3/4.5.4, "Refueling Water Storage Tank," and TS 3/4.6.2.1, "Depressurization and Cooling Systems, Containment Quench Spray System," to provide additional operational margin for control of the Refueling Water Storage Tank temperature.

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 V. Guzman, Senior Project Manager
Plant Licensing Branch I-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-423

Enclosures:

1. Amendment No. 262 to NPF-49
2. Safety Evaluation

cc w/encls: Distribution via Listserv

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ADAMS Accession No.: ML15187A011

*SE memo dated

OFFICE	NRR/DORL/LPLI-1/PM	NRR/DORL/LPLI-1/LA	NRR/DSS/SRXB/BC	NRR/DSS/SCVB/BC
NAME	RGuzman	KGoldstein	CJackson*	RDennig*
DATE	7/08/2015	7/08/2015	3/13/2015	2/11/2015
OFFICE	NRR/DSS/STSB/BC	OGC	NRR/DORL/LPLI-1/BC(A)	NRR/DORL/LPLI-1/PM
NAME	RElliott	CKanatas	MDudek	RGuzman
DATE	7/13/2015	7/21/2015	7/23/2015	7/27/2015

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