



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

August 4, 2016

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
TO REVISE DESIGN FEATURES - FUEL STORAGE TECHNICAL
SPECIFICATION 5.6.3, "CAPACITY" (CAC NO. MF6709)

Dear Mr. Heacock:

The U.S. Nuclear Regulatory Commission has issued the enclosed Amendment No. 270 to Renewed Facility Operating License No. NPF-49 for the Millstone Power Station, Unit No. 3 (MPS3). This amendment is in response to your application dated August 31, 2015. The amendment revises the MPS3 Design Features - Fuel Storage Technical Specification 5.6.3, "Capacity," to specify the spent fuel pool storage capacity limit in terms of the total number of fuel assemblies.

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

Sincerely,

A handwritten signature in black ink, appearing to read "R. Guzman", with a long horizontal flourish extending to the right.

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. 270 to NPF-49
2. Safety Evaluation

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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. 270
Renewed License No. NPF-49

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Dominion Nuclear Connecticut, Inc. dated August 31, 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.

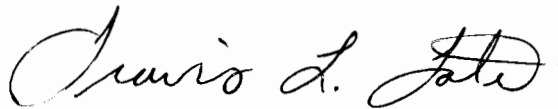
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Renewed Facility Operating License No. NPF-49 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, revised through Amendment No. 270 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 60 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Travis L. Tate, 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: August 4, 2016

ATTACHMENT TO LICENSE AMENDMENT NO. 270

MILLSTONE POWER STATION, UNIT NO. 3

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 a marginal line indicating the area of change.

REMOVE

-4-

INSERT

-4-

Replace the following page of the Appendix A Technical Specifications with the attached revised page. The revised page is identified by amendment number and contains a marginal line indicating the area of change.

REMOVE

5-6a

INSERT

5-6a

(2) Technical Specifications

The Technical Specifications contained in Appendix A, revised through Amendment No. 270 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 cannot be amended in any material respect without 30 days prior written notification to the Director of the Office of Nuclear Reactor Regulation.

DESIGN FEATURES

CAPACITY

5.6.3 The spent fuel storage pool contains 350 Region 1 storage locations, 673 Region 2 storage locations and 756 Region 3 storage locations, for a total of 1779 fuel storage locations. An additional Region 2 rack with 81 storage locations may be placed in the spent fuel pool, if needed. With this additional rack installed, the Region 2 storage capacity is 754 storage locations. The total storage capacity of the spent fuel pool is limited to no more than 1860 fuel assemblies.

5.7 DELETED



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 270

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 application dated August 31, 2015 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML15246A118), Dominion Nuclear Connecticut, Inc. (DNC, the licensee), submitted a license amendment request (LAR) regarding the Millstone Power Station, Unit No. 3 (MPS3). The proposed amendment would revise the MPS3 Design Features - Fuel Storage Technical Specification (TS) 5.6.3, "Capacity," to specify the spent fuel pool (SFP) storage capacity limit in terms of the total number of fuel assemblies.

2.0 REGULATORY EVALUATION

As required by Title 10 of the *Code of Federal Regulations* (10 CFR), Part 50, Section 50.92(a), in determining whether an amendment to a license will be issued to the applicant, the Commission will be guided by the considerations which govern the issuance of initial licenses to the extent applicable and appropriate. To issue an operating license, the Commission must make the findings in 10 CFR 50.57, which include findings that the facility will operate in conformity with the application as amended, the provisions of the Atomic Energy Act of 1954, as amended (Act), and the rules and regulations of the Commission; and there is reasonable assurance (i) that the activities authorized by the operating license 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.

The U.S. Nuclear Regulatory Commission's (NRC's) regulatory requirements related to the content of the TSs are contained in 10 CFR 50.36, "Technical specifications." Per 10 CFR 50.36(b), each license authorizing operation of a utilization facility will include technical specifications, which will be derived from the analyses and evaluation included in the safety analysis report, and amendments thereto, submitted pursuant to 10 CFR 50.34 "Contents of applications; technical information". The Commission may include such additional technical specifications as the Commission finds appropriate. Per 10 CFR 50.36(c)(4), TSs will include items in the category of "design features." The regulation in 10 CFR 50.36(c)(4), states that "design features to be included are those features of the facility such as materials of

construction and geometric arrangements, which, if altered or modified, would have a significant effect on safety and are not covered in the categories of safety limits, limiting safety system settings, limiting conditions for operation, and surveillance requirements.

Under 10 CFR 50.90, whenever a holder of an operating license desires to amend the license, application for an amendment must be filed with the Commission fully describing the changes desired, and following as far as applicable, the form prescribed for original applications. Pursuant to 10 CFR 50.36(a)(1), each applicant for a license authorizing operation of a utilization facility shall include in the application proposed TSs in accordance with the requirements of 10 CFR 50.36. Accordingly, the licensee provided proposed changes to its TS covering the fuel storage design features.

The NRC staff also considered the following guidance document during this review: NUREG-1431, "Standard Technical Specifications [STS], Westinghouse Plants: Specification," Volume 1, Revision 4 (ADAMS Accession No. ML12100A222). As described in the Commission's Final Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors, 58 Fed. Reg. 39,132, 39,136 (July 22, 1993), "improved STS have been developed and will be maintained for each [nuclear steam supply system] owners group. The Commission encourages licensees to use the improved STS as a basis for plant[-]specific Technical Specifications." NUREG-1431 includes TS 4.3 "Fuel Storage" providing TS 4.3.1 "Criticality," 4.3.2 "Drainage," and 4.3.3 "Capacity." Model TS 4.3.3 states: "The spent fuel storage pool is designed and shall be maintained with a storage capacity limited to no more than [1737] fuel assemblies" (square brackets in original).

2.1 Background

The MPS3 Final Safety Analysis Report, Section 9.1, "Fuel Storage and Handling," Revision 27, details the MPS3 SFP design. The SFP is an L-shaped structure located in the fuel building and is designed to accommodate fuel racks that store both new and spent fuel assemblies. The spent fuel storage racks, located under water in the SFP, are designed to maintain the stored fuel assemblies in a safe, coolable geometry.

2.2 Proposed Technical Specification Changes

On November 28, 2000, the NRC issued License Amendment No. 189 (ADAMS Accession No. ML003744387) approving an increase of spent fuel storage capacity for Region 2 of the SFP storage locations. The NRC approved the fuel storage racks in Region 2 to be increased by 81, from 673 to 754 racks. As a result MPS3's Design Features - Fuel Storage TS 5.6.3, "Capacity" currently states:

The spent fuel storage pool contains 350 Region 1 storage locations, 673 Region 2 storage locations and 756 Region 3 storage locations, for a total of 1779 total available fuel storage locations. An additional Region 2 rack with 81 storage locations may be placed in the spent fuel pool, if needed. With this additional rack installed, the Region 2 storage capacity is 754 storage locations, for a total of 1860 total available fuel storage locations.

The licensee's proposed change would state (deletions have strikethroughs and additions are bolded):

The spent fuel storage pool contains 350 Region 1 storage locations, 673 Region 2 storage locations and 756 Region 3 storage locations, for a total of 1779 ~~total available~~ fuel storage locations. An additional Region 2 rack with 81 storage locations may be placed in the spent fuel pool, if needed. With this additional rack installed, the Region 2 storage capacity is 754 storage locations, ~~for a total of 1860 total available fuel storage locations.~~ **The total storage capacity of the spent fuel pool is limited to no more than 1860 fuel assemblies.**

3.0 TECHNICAL EVALUATION

In its LAR dated August 31, 2015, the licensee stated, in part:

Currently, TS 5.6.3 describes the total fuel assembly storage capacity in terms of the total "available" fuel storage locations. The number of "available" fuel storage locations is subject to change. Fuel storage availability in the three regions of the MPS3 SFP is affected when individual storage cells are unusable due to physical obstructions or removed from service because the storage cell does not meet its design basis.

The proposed change to TS 5.6.3 is consistent with the design configuration of the MPS3 SFP. MPS3 design and accident analyses are based on a total SFP storage capacity limit (i.e., 1860 fuel assemblies)...The proposed change to TS 5.6.3 only revises the description of the MPS3 SFP storage capacity. The number of SFP storage locations and the maximum number of fuel assemblies allowed to be stored in the MPS3 spent fuel pool remain unchanged.

The NRC staff reviewed the licensee's application against the regulation and guidance discussed in Section 2.0 of this safety evaluation. The licensee stated in its application dated August 31, 2015, that although the additional racks were approved for implementation, they have yet to be physically installed in the SFP. The licensee's proposed change to TS 5.6.3 would remove the words "total available" and specify a storage capacity limit of 1860 fuel assemblies.

Per 10 CFR 50.36(c)(4) design features are features "if altered or modified, would have a significant effect on safety." In this case, the design feature is the upper limit on total available fuel storage locations. Both before and after the amendment, the upper limit is unchanged. However, due to the unusable individual storage locations described by the licensee, the actual number of storage locations at any given time is less than, or equal to, the upper limit. The staff had previously analyzed, and found appropriate, an upper limit of 1860 total available fuel storage locations. The change to the TS continues to reflect this upper limit. Because there is no "significant effect on safety" associated with using fewer than the upper limit of fuel storage locations, there is no need to specify a lower limit in the design features category of TS.

Further, NUREG-1431 STS 4.3.3 "Capacity" does not include a lower limit, but only states an upper limit. The licensee's proposed change similarly includes only an upper limit. In this way, the proposed change is consistent with the STS.

Therefore, the NRC staff concludes that the proposed TS changes are acceptable.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Connecticut State official was notified on July 25, 2016, 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 the 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 *Federal Register* (FR) on November 24, 2015 (80 FR 73235). 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) 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.

Principal Contributor: K. West

Date: August 4, 2016

August 4, 2016

Mr. David A. Heacock
President and Chief Nuclear Officer
Dominion Nuclear Connecticut, Inc.
Innsbrook Technical Center
5000 Dominion Boulevard
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Sincerely,

/RA/

Richard V. Guzman, Senior Project Manager
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*SE memo dated

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