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

April 27, 2021

Mr. Daniel G. Stoddard
Senior Vice President and
Chief Nuclear Officer
Dominion Nuclear
Innsbrook Technical Center
5000 Dominion Blvd.
Glen Allen, VA 23060-6711

SUBJECT: MILLSTONE POWER STATION, UNIT NO. 2 – REVIEW OF THE SPRING 2017 STEAM GENERATOR TUBE INSPECTION REPORT (EPID L-2021-LRO-0006)

Dear Mr. Stoddard:

By letter dated September 18, 2017 (Agencywide Documents Access and Management System Accession No. ML17269A030), Dominion Energy Nuclear Connecticut, Inc. (the licensee) submitted information to the U.S. Nuclear Regulatory Commission (NRC) summarizing the results of the spring 2017 steam generator tube inspection that were performed at Millstone Power Station, Unit No. 2 (Millstone 2). This inspection was performed during the Millstone 2 Refueling Outage 24.

The NRC staff has completed its review of this report and concludes that the licensee provided the information required by the Millstone 2 Technical Specifications. No additional follow-up is required at this time. The NRC staff's review is enclosed.

If you have any questions concerning this matter, please contact me at (301) 415-1030 or by e-mail to Richard.Guzman@nrc.gov.

Sincerely,

/RA/

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

Docket No. 50-336

Enclosure:
Review of the Spring 2017 Steam
Generator Tube Inspection Report

cc: Listserv

STAFF ASSESSMENT BY THE OFFICE OF NUCLEAR REACTOR REGULATION

REVIEW OF THE SPRING 2017 STEAM GENERATOR TUBE INSPECTION REPORT

DOMINION ENERGY NUCLEAR CONNECTICUT, INC.

MILLSTONE POWER STATION, UNIT NO. 2

DOCKET NO. 50-336

By letter dated September 18, 2017 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML17269A030), Dominion Energy Nuclear Connecticut, Inc. (the licensee) submitted information summarizing the results of the spring 2017 steam generator (SG) tube inspections that were performed at Millstone Power Station, Unit No. 2 (Millstone 2), during Refueling Outage 24 (2R24).

Millstone Unit 2 has two replacement SGs manufactured by Babcock and Wilcox that were installed in 1992. Each SG contains 8,523[1] thermally treated Alloy 690 tubes, which have a nominal outside diameter of 0.75 inches and a nominal wall thickness of 0.0445 inches. The tubes were hydraulically expanded into the tubesheet, which is 21.06 inches thick, and are arranged in a triangular pitch. The straight portion of the tubes are supported by 7 Type 410 stainless steel lattice grid supports, and the U-bend portion of the tubes are supported by 12 Type 410 stainless steel fan bar assemblies.

The licensee provided the scope, extent, methods, and results of the SG tube inspections in the letters referenced above. In addition, the licensee described corrective actions (e.g., tube plugging), if any were taken in response to the inspection findings.

Based on the review of the information provided, the U.S. Nuclear Regulatory Commission (NRC) staff has the following observations:

- The licensee provided additional information regarding the results of the steam drum visual inspections performed during 2R24 in the April 15, 2021 (ADAMS Accession No. ML21105A482), response to the NRC staff's request for additional information on the licensee's license amendment request to revise the Millstone 2 SG tube inspection frequency technical specifications. The licensee clarified that orange discoloration on the skimmer vanes, lower cylinder assembly sidewalls, swirl vanes, and baseplates of the secondary moisture separators were observed during 2R24. These regions exhibited a lack of magnetite, which the licensee stated has not changed appreciably over multiple operating cycles. The licensee further stated that neither perforations nor visible material loss were evident in these regions. The licensee concluded there is a lack of evidence that secondary side components are actively being degraded by flow assisted corrosion. The licensee will continue to monitor these regions.

- Table 2, "Detection and Sizing of Fan Bar and Loose Parts Induced Tube Wear," refers to "Anti-Vibration Bars," which serves the same function and is synonymous with the term fan bar assemblies.

[1] SG-1 has 8,522 tubes because one hot-leg tubesheet hole was plugged during construction and the associated cold-leg tubesheet hole was not drilled.

Based on a review of the information provided, the NRC staff concludes that the licensee provided the information required by their technical specifications. In addition, the staff concludes that there are no technical issues that warrant follow-up action at this time since the inspections appear to be consistent with the objective of detecting potential tube degradation and the inspection results appear to be consistent with industry operating experience at similarly designed and operated units.

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ADAMS Accession No.: ML21113A135

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