Dominion Nuclear Connecticut, Inc. 5000 Dominion Boulevard, Glen Allen, VA 23060

Web Address: www.dom.com



April 30, 2013

Attention: Document Control Desk U.S. Nuclear Regulatory Commission Washington, D.C. 20555-0001

DOMINION NUCLEAR CONNECTICUT, INC. MILLSTONE POWER STATION UNITS 2 AND 3 Serial No.: 12-161C NL&OS/MAE: R0 Docket Nos.: 50-336/423 License Nos.: DPR-65 NPF-49

SUPPLEMENT TO OVERALL INTEGRATED PLAN IN RESPONSE TO MARCH 12, 2012 COMMISSION ORDER MODIFYING LICENSES WITH REGARD TO REQUIREMENTS FOR MITIGATION STRATEGIES FOR BEYOND-DESIGN-BASIS EXTERNAL EVENTS (ORDER NUMBER EA-12-049)

On March 12, 2012, the Nuclear Regulatory Commission (NRC) issued Order EA-12-049, "Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events" (the Order) to Dominion Nuclear Connecticut, Inc. (DNC). DNC responded to the Order by letters dated March 26, 2012, October 25, 2012, and February 28, 2013 (Serial Nos. 12-161, 12-161A and 12-161B, respectively).

The purpose of this letter is to supplement the Overall Integrated Plan that was provided in DNC's February 28, 2013 letter. The additional information is provided for Millstone Units 2 and 3 in the attachment to this letter.

If you have any questions, please contact Ms. Margaret Earle at (804) 273-2768.

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Sincerely,

Eugene S. Grecheck Vice President Nuclear Engineering and Development Dominion Nuclear Connecticut, Inc.

COMMONWEALTH OF VIRGINIA

VICKI L. HULL Notary Public Commonwealth of Virginia 140542 My Commission Expires May 31, 2014

COUNTY OF HENRICO

The foregoing document was acknowledged before me, in and for the County and Commonwealth aforesaid, today by Eugene S. Grecheck who is Vice President Nuclear Engineering and Development of Dominion Nuclear Connecticut, Inc. He has affirmed before me that he is duly authorized to execute and file the foregoing document in behalf of the Company, and that the statements in the document are true to the best of his knowledge and belief.

Acknowledged before me this <u>30</u>TH day of <u>April</u> My Commission Expires: <u>5 - 31 - 14</u> cki L. Hull

(SEAL)

Attachment

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Commitments made by this letter: No New Regulatory Commitments

cc: Director of Office of Nuclear Reactor Regulation U. S. Nuclear Regulatory Commission One White Flint North Mail Stop 13H16M 11555 Rockville Pike Rockville, MD 20852-2738

> U. S. Nuclear Regulatory Commission, Region I Regional Administrator 2100 Renaissance Blvd. Suite 100 King of Prussia, PA 19406-2713

Mr. J. S. Kim NRC Project Manager Millstone Units 2 and 3 U. S. Nuclear Regulatory Commission One White Flint North Mail Stop O8 C 2A 11555 Rockville Pike Rockville, MD 20852-2738

Ms. J. A. Kratchman U. S. Nuclear Regulatory Commission One White Flint North Mail Stop O9 D2 11555 Rockville Pike Rockville, MD 20852-2738

NRC Senior Resident Inspector Millstone Power Station

Attachment

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Supplement To Millstone Units 2 and 3 Overall Integrated Plan

Requirements for Mitigation Strategies For Beyond-Design-Basis External Events

Millstone Power Station Units 2 and 3 Dominion Nuclear Connecticut, Inc. (DNC)

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Supplement To Millstone Units 2 and 3 Overall Integrated Plan Requirements for Mitigation Strategies For Beyond-Design-Basis External Events

By letter dated February 28, 2013, Serial No. 12-161B, DNC provided an Overall Integrated Plan (OIP) to address Beyond-Design-Basis (BDB) events at Millstone Units 2 and 3 as required by Order Number EA-12-049, dated March 12, 2012. It was stated that the OIP was based on conceptual design information and that final design information and revisions would be provided via updates. Various open items were inserted into the OIP to identify information that would be provided or confirmed at a later date. This attachment provides the basis for closure of Open Item No. 2 for Unit 2 and Open Item No. 3 for Unit 3.

Millstone Unit 2:

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<u>Open Item No. 2</u> - Preliminary analyses have been performed to determine the time to SG overfill without operator action to reduce AFW flow, time to SG dryout without AFW flow, and time to depletion of the CST. Final durations will be provided when the analyses are completed.

The analysis for secondary side inventories and heat removal has been finalized. Slight changes were observed from the preliminary values reported in the OIP. These changes are as follows:

- 1) The time to steam generator (SG) overfill decreased from 2.6 hours to 1.8 hours. As stated in the OIP, operators would be assigned within the first 15 minutes of the event to control flow in order to maintain proper SG level. The throttling would be performed locally using the auxiliary feedwater (AFW) regulating valves or their bypass valves at the turbine driven auxiliary feedwater (TDAFW) pump. Operators could access the area in less than 5 minutes to begin to control AFW flow in order to maintain SG levels. Therefore, the basis for acceptability stated in the OIP remains valid for the reduced SG overfill time of 1.8 hours.
- 2) The time for SG dryout increased from 50 minutes to 1 hour. This provides additional time, if needed, to perform a manual start of the TDAFW pump as part of the Phase 1 core cooling strategy.
- 3) The time to depletion of the water supply from the condensate storage tank increased from 7.2 hours to 8.4 hours. This provides additional time to setup and engage Phase 2 BDB equipment as part of the long-term core cooling strategy.

The finalized analysis also confirmed the statement that the site pond was capable of providing core cooling supply for greater than 20 days to each unit.

This response closes Open Item No. 2 for Millstone Unit 2.

Millstone Unit 3:

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<u>Open Item No. 3</u> - Preliminary analyses have been performed to determine the time to steam generator overfill without operator action to reduce AFW flow, time to steam generator dryout without AFW flow, and time to depletion of the useable volume of the DWST. The final durations will be provided when the analyses are completed.

The analysis for secondary side inventories and heat removal has been finalized. Slight changes were observed from the preliminary values reported in the OIP. These changes are as follows:

- 1) The time to steam generator (SG) overfill decreased from 2.0 hours to 1.3 hours. As stated in the OIP, operators would be assigned within the first 15 minutes of the event to control flow in order to maintain proper SG level. AFW flow rate can be controlled by locally throttling the AFW header isolation valves. Operators could access the area in less than 5 minutes to begin to control AFW flow in order to maintain SG levels. Therefore, the basis for acceptability stated in the OIP remains valid for the reduced SG overfill time of 1.3 hours.
- 2) The time for SG dryout increased from 1 hour to 1.1 hours. This provides additional time, if needed, to perform a manual start of the turbine driven auxiliary feedwater (TDAFW) pump as part of the Phase 1 core cooling strategy.
- 3) The time to depletion of the water supply from the demineralized water storage tank (DWST) increased from 20.9 hours to 22.7 hours. This provides additional time to setup and engage Phase 2 BDB equipment as part of the long-term core cooling strategy.

The finalized analysis also confirmed the statement that the site pond was capable of providing core cooling supply for greater than 20 days to each unit.

This response closes Open Item No. 3 for Millstone Unit 3.