April 23, 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 NUCLEAR POWER STATION, UNITS 2 & 3 — NRC RECEIPT OF RESPONSE TO GENERIC LETTER 2003-01, "CONTROL ROOM HABITABILITY" (TAC NOS. MB9822 AND MB9823)

Dear Mr. Christian:

The Nuclear Regulatory Commission (NRC) acknowledges the receipt of your responses to Generic Letter (GL) 2003-01, "Control Room Habitability," dated August 11, 2003 (ML032310416 [Agencywide Document Access and Management System Accession Number]); March 5, 2004 (ML040680773), June 1, 2004 (ML041550378), August 31, 2004 (ML042450147), and September 1, 2006 (ML062440414). This letter provides the results of the NRC staff's review of your responses and documents the follow-up actions committed to by Dominion Nuclear Connecticut, Inc. (DNC).

GL 2003-01 requested that DNC confirm that the Millstone Nuclear Power Station, Unit Nos. 2 and 3 (MPS2 and MPS3, respectively) control rooms meet their design bases (e.g. General Design Criterion (GDC) 1, 3, 4, 5, & 19, draft GDC, or principal design criteria), with special attention to: (1) Determination of the most limiting unfiltered and/or filtered inleakage into the control room and comparison to values used in your design bases for meeting control room operator dose limits from accidents (GL 2003-01, Item 1(a)); (2) Determination that the most limiting unfiltered inleakage is incorporated into the MPS2 and MPS3 hazardous chemical assessments (GL 2003-01, Item 1(b)); and, (3) Determination that reactor control capability is maintained in the control room or at the alternate shutdown location in the event of smoke (GL 2003-01, Item 1(b)). The GL further requested information on any compensatory measures in use to demonstrate control room habitability (CRH), and plans to retire them (GL 2003-01, Item 2).

In the September 1, 2006, letter, DNC reported the results of ASTM E741 [American Society for Testing Materials, Standard Test Method for Determining Air Change in a Single Zone by Means of a Tracer Gas Dilution] tracer gas tests for the MPS2 control room which is pressurized for accident mitigation.

> You determined that the maximum tested value for inleakage into the Control Room Envelope (CRE) was 109.14 cubic feet per minute (cfm), which is less than the value of 130 cfm assumed in the design basis radiological analyses for CRH.

In the August 31, 2004, letter, DNC reported the results of ASTM E741 tracer gas tests for the MPS3 control room which is pressurized for accident mitigation.

> You determined that the maximum tested value for inleakage into the CRE was 20.1 (+/- 3.6) cfm which was more than the value of 10 cfm assumed in the design basis radiological analyses for CRH when the control room is at a positive pressure. In your August 31, 2004, letter you stated that an operability determination was performed, which specified operational restrictions affecting potential radiological release pathways to compensate for the higher measured positive pressure mode inleakage, which maintained radiological consequences within the limits specified in the current licensing basis acceptance criteria of 5 roentgen equivalent man (rem) whole body, 30 rem thyroid, and 30 rem skin dose. You further stated that no credit was taken in the operability determination for the use of self-contained breathing apparatus or the use of potassium iodide. In your letter dated May 27, 2004 (ML041560464), you requested a license amendment to fully implement an alternative source term methodology at MPS3, which assumed control room inleakage of 350 cfm for unfiltered inleakage during periods of neutral pressure, and 100 cfm for unfiltered inleakage during periods of positive pressure. The license amendment request is currently being reviewed.

Additionally, the NRC staff finds that DNC provided information that adequately supported a conclusion that unfiltered inleakage into the CRE is not specifically incorporated into the hazardous chemical assessment because toxic gases are not considered to be a threat based on hazard screening performed on chemicals stored onsite or transported nearby and that reactor control capability is maintained from either the control room or the alternate shutdown panel in the event of smoke.

The GL further requested that licensees assess their Technical Specifications (TSs) to determine if they verify the integrity of the CRE, including ongoing verification of the inleakage assumed in the design basis analysis for control room habitability, and in light of the demonstrated inadequacy of a delta (Δ) P measurement to alone provide such verification (GL 2003-01, Item 1(c)). As permitted by the GL, DNC provided a schedule for revising the surveillance requirement in the TS to reference an acceptable surveillance methodology. In its June 1, 2004 response, DNC, indicated that you would submit proposed changes to the MPS2 and MPS3 TSs that would incorporate the intent of Technical Specification Task Force (TSTF)-448 within 6 months following NRC approval of TSTF-448.

The information you provided also supported the fact that there are no compensatory measures needed to be in place other than the operability determination for MPS3 as previously discussed, to demonstrate CRH.

The information you provided also supported the conclusion that DNC is committed to meet the GDC, the draft GDC, or the “Principle Design Criteria,” regarding CRH.

The information discussed above, and DNC’s commitment to submit a LAR based on TSTF-448 is acceptable for purposes of closing out your response to GL 2003-01.

If you have any questions regarding this correspondence, please contact me at (301) 415-1484.

Sincerely,

/ra/

Victor Nerses, Senior Project Manager
Plant Licensing Branch I-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-336 and 50-423

cc: See next page

If you have any questions regarding this correspondence, please contact me at (301) 415-1484.

Sincerely,

/ra/

Victor Nerses, Senior Project Manager
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Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-336 and 50-423

cc: See next page

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