

Dominion Nuclear Connecticut, Inc.  
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**PROPRIETARY-Withhold Under 10 CFR 2.390**

April 26, 2010

U.S Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, DC 20555

Serial No 10-276  
NSSL/MLC R0  
Docket No. 50-423  
License No. NPF-49

**DOMINION NUCLEAR CONNECTICUT, INC.**  
**MILLSTONE POWER STATION UNIT 3**  
**LICENSE AMENDMENT REQUEST TO REVISE TECHNICAL SPECIFICATION (TS)**  
**6.8.4.g, "STEAM GENERATOR (SG) PROGRAM," AND TS 6.9.1.7, "STEAM**  
**GENERATOR TUBE INSPECTION REPORT" FOR ONE-TIME ALTERNATE REPAIR**  
**CRITERIA (H\*)**  
**SUBMITTAL OF SUPPLEMENTAL INFORMATION**

Dominion Nuclear Connecticut, Inc. (DNC) submitted a request for a one-time revision to Facility Operating License NPF-49 for Millstone Power Station Unit 3 (MPS3) in a letter dated November 23, 2009 (Reference). This amendment request proposes to revise Technical Specification (TS) 6.8.4.g, "Steam Generator (SG) Program," to exclude a portion of the tubes below the top of the steam generator tubesheet from periodic steam generator tube inspections. Specifically, the change deletes the previous reference to the interim alternate repair criteria (IARC) applicable to Cycle 13 and adds information associated with a one-time alternate repair criteria (ARC) for Cycle 14. The amendment request also proposes to revise the reporting criteria in TS 6.9.1.7, "Steam Generator Tube Inspection Report," to remove reference to the previous Cycle 13 IARC and add reporting requirements specific to use of the one-time ARC during Cycle 14.

In DNC letter dated November 23, 2009, DNC committed to perform a one-time verification of the tube expansion to locate any significant deviations in the distance from the top of tubesheet (TTS) to the bottom of the expansion transition (BET). If any significant deviations were found, the condition would be entered into the plant's corrective action program and dispositioned. Additionally, DNC committed to notify the NRC of significant deviations.

DNC has performed a one-time verification of the tube expansion to locate any significant deviations in the distance from the TTS to the BET. Enclosure 1 provides a summary of the effect of variations in the depth of BET on the calculated values of H\* length. Enclosure 2 contains the BET measurement results for the tube-to-tubesheet intersections with BET measurements greater than or equal to 0.4 inches. This information is supported by Westinghouse Electric Company, LLC, Letter LTR-SGMP-10-50 P-Attachment, "Assessment of the Effect of the Location of the Bottom of the Expansion Transition on H\*," dated April 22, 2010 (Enclosure 3). Enclosure 3 is proprietary information. Classification of Enclosure 3 as proprietary is supported by the affidavit provided in Enclosure 5; therefore, it is respectfully requested that this

**Enclosure 3 contains information that is being withheld from public disclosure under 10 CFR 2.390. Upon separation this page is decontrolled.**

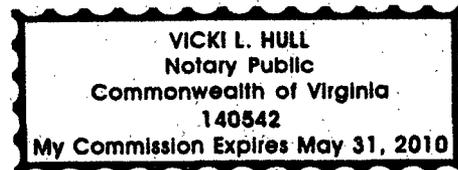
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information be withheld from public disclosure in accordance with 10 CFR 2.390. The non-proprietary version of the Westinghouse letter is contained in Enclosure 4.

Should you have any questions in regard to this submittal, please contact Mr. William D. Bartron at (860) 444-4301.

Sincerely,

  
J. Alan Price  
Vice President – Nuclear Engineering



COMMONWEALTH OF VIRGINIA  
COUNTY OF HENRICO

The foregoing document was acknowledged before me, in and for the County and Commonwealth aforesaid, today by J. Alan Price, who is Vice President – Nuclear Engineering 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 that company, and that the statements in the document are true to the best of his knowledge and belief.

Acknowledged before me this 26<sup>TH</sup> day of April, 2010.

My Commission Expires: MAY 31, 2010  
Vicki L. Hull  
Notary Public

Commitments made in this letter:

For those seven tubes identified in the 'A' Steam Generator with BETs greater than 1.0 inch from the TTS, DNC commits to remove them from service no later than the next scheduled inspection during 3R14.

Enclosures:

1. Summary of the Effect of Variations in the Depth of BET on the Calculated Values of H\* Length
2. Bottom of the Expansion Transition (BET) Measurement Results

3. Westinghouse Electric Company LLC, LTR-SGMP-10-50 P-Attachment, "Assessment of the Effect of the Location of the Bottom of the Expansion Transition on H\*," dated April 22, 2010 (Proprietary)
4. Westinghouse Electric Company LLC, LTR-SGMP-10-50 NP-Attachment, "Assessment of the Effect of the Location of the Bottom of the Expansion Transition on H\*," dated April 22, 2010 (Non- Proprietary)
5. Westinghouse Electric Company LLC, CAW-10-2803, "Application for Withholding Proprietary Information from Public Disclosure," dated April 22, 2010

Reference:

DNC Letter 09-525, "Millstone Power Station Unit 3, License Amendment Request to Revise Technical Specification (TS) 6.8.4.g, "Steam Generator (SG) Program," and TS 6.9.1.7, "Steam Generator Tube Inspection Report" for One-Time Alternate Repair Criteria (H\*)," dated November 23, 2009.

cc: U.S. Nuclear Regulatory Commission  
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**Enclosure 1**

**Summary of the Effect of Variations in the Depth of BET on the Calculated  
Values of H\* Length**

**DOMINION NUCLEAR CONNECTICUT, INC.  
MILLSTONE POWER STATION UNIT 3**

### **Summary of the Effect of Variations in the Depth of BET on the Calculated Values of H\* Length**

Dominion Nuclear Connecticut, Inc. (DNC) submitted a request for a one-time revision to Facility Operating License NPF-49 for Millstone Power Station Unit 3 (MPS3) in a letter dated November 23, 2009. This amendment request proposes to revise Technical Specification (TS) 6.8.4.g, "Steam Generator (SG) Program," to exclude a portion of the tubes below the top of the steam generator tubesheet from periodic steam generator tube inspections. Specifically, the change deletes the previous reference to the interim alternate repair criteria (IARC) applicable to Cycle 13 and adds information associated with a one-time alternate repair criteria (ARC) for Cycle 14. The license amendment request (LAR) also proposes to revise the reporting criteria in TS 6.9.1.7, "Steam Generator Tube Inspection Report," to remove reference to the previous Cycle 13 IARC and add reporting requirements specific to use of the one-time ARC during Cycle 14.

In DNC letter dated November 23, 2009, DNC committed to perform a one-time verification of the tube expansion to locate any significant deviations in the distance from the top of tubesheet (TTS) to the bottom of the expansion transition (BET). If any significant deviations were found, the condition would be entered into the plant's corrective action program and dispositioned. Additionally, DNC committed to notify the Nuclear Regulatory Commission (NRC) of significant deviations.

Using data from previous inspections, the locations of the BET positions relative to the TTS were determined from eddy current data. The reported positions of BET with values greater than or equal to 0.4 inch are provided in Enclosure 2. Based on the margins inherent to the H\* value requested in the LAR, an assessment was made to determine if any of the reported BET positions are significant to application of H\*. A corrective action program item was entered to evaluate the departure from the nominal 0.3 inch value of BET which is already included in the calculated value(s) of H\*. Enclosure 3 provides the proprietary Westinghouse assessment of the effect of variations in the depth of the BET on the calculated values of H\* length to determine the position beyond which the BET value would be considered significant. This value has been determined to be 1.0 inch for the MPS3 steam generators due to available margins. The assessment demonstrates (1) the current requested inspection depth of 13.1 inches provides significant margin over a 95/95 whole plant value calculated for H\* which does not consider the effect of residual contact pressure, (2) the margin between the requested inspection depth and the calculated H\* values increases as the position of the tube in the bundle varies from the limiting position, and (3) a variation of the BET position to a value of 1.0 inch below the TTS, compared to the 0.3 inch uncertainty already included in the calculated values of H\* is readily accommodated by the available margins between the planned inspection depth and the calculated H\* values.

Based on the information provided in this submittal, the DNC commitment identified above is complete. For those seven tubes identified in the 'A' Steam Generator with BETs greater than 1.0 inch from the TTS, DNC commits to remove them from service no later than the next scheduled inspection.

**Enclosure 2**

**Bottom of the Expansion Transition (BET) Measurement Results**

**DOMINION NUCLEAR CONNECTICUT, INC.  
MILLSTONE POWER STATION UNIT 3**

### Bottom of the Expansion Transition (BET) Measurement Results

A summary of the Millstone Power Station Unit 3 (MPS3) BET measurement results greater than or equal to 0.4 inches is provided below.

SG Leg	BET = 0.4 inches	BET > 0.4 inches
A-Hot	6	23
A-Cold	0	1
B-Hot	11	6
B-Cold	0	0
C-Hot	4	2
C-Cold	0	0
D-Hot	0	0
D-Cold	0	1

As shown above, a total of 54 tube-to-tubesheet intersections have BET measurements greater than or equal to 0.4 inch. A detailed list of the tubes with BET measurements greater than or equal to 0.4 inch is provided below.

#### Steam Generator A – Hot Leg

Row	Column	Hot/Cold	BET
24	28	TSH	-0.40
39	41	TSH	-0.40
42	24	TSH	-0.40
44	23	TSH	-0.40
47	40	TSH	-0.40
47	57	TSH	-0.40
14	61	TSH	-0.41
43	20	TSH	-0.42
44	21	TSH	-0.42
42	19	TSH	-0.44
11	67	TSH	-0.45
45	40	TSH	-0.47
15	86	TSH	-0.50
14	59	TSH	-0.51
46	33	TSH	-0.52

Row	Column	Hot/Cold	BET
13	61	TSH	-0.58
17	68	TSH	-0.65
12	61	TSH	-0.68
12	105	TSH	-0.69
14	60	TSH	-0.72
5	59	TSH	-0.84
12	57	TSH	-0.95
9	52	TSH	-1.03
11	50	TSH	-1.07
15	61	TSH	-1.16
11	60	TSH	-1.22
12	59	TSH	-1.25
6	59	TSH	-1.65
13	60	TSH	-1.74

Steam Generator A – Cold Leg

Row	Column	Hot/Cold	BET
9	41	TSC	-0.65

Steam Generator B - Hot Leg

Row	Column	Hot/Cold	BET
9	90	TSH	-0.40
9	102	TSH	-0.40
12	101	TSH	-0.40
13	92	TSH	-0.40
38	45	TSH	-0.40
44	62	TSH	-0.40
44	63	TSH	-0.40
48	63	TSH	-0.40
54	72	TSH	-0.40
56	65	TSH	-0.40
57	69	TSH	-0.40
33	63	TSH	-0.41
53	78	TSH	-0.41
7	109	TSH	-0.42
12	90	TSH	-0.43
23	32	TSH	-0.48
4	91	TSH	-0.74

Steam Generator B – Cold Leg

None

Steam Generator C – Hot Leg

Row	Column	Hot/Cold	BET
22	52	TSH	-0.40
39	98	TSH	-0.40
40	45	TSH	-0.40
50	57	TSH	-0.40
17	42	TSH	-0.58
39	43	TSH	-0.91

Steam Generator C – Cold Leg

None

Steam Generator D – Hot Leg

None

Steam Generator D – Cold Leg

Row	Column	Hot/Cold	BET
12	3	TSC	-0.66