

Dominion Nuclear Connecticut, Inc.
Millstone Power Station
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NOV 23 2009



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

Serial No. 09-709
NSS&L/MLC R0
Docket No. 50-423
License No. NPF-49

DOMINION NUCLEAR CONNECTICUT, INC.
MILLSTONE POWER STATION UNIT 3
RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION REGARDING 2008 STEAM
GENERATOR TUBE INSPECTIONS

On March 13, 2009, in accordance with Millstone Power Station Unit 3 (MPS3) Technical Specification (TS) 6.9.1.7, Dominion Nuclear Connecticut, Inc. (DNC) submitted the End of Cycle 12 Steam Generator Tube Inspection Report (Serial No. 09-125). The report summarized the results of the MPS3 steam generator tube inspections performed during the fall 2008 refueling outage, in accordance with TS 6.8.4.g, "Steam Generator (SG) Program."

The NRC issued a request for additional information (RAI) on November 2, 2009. Attachment 1 to this letter contains DNC's response to the RAI.

If you have any questions or require additional information, please contact Mr. William D. Bartron at (860) 444-4301.

Sincerely,

A. J. Jordan
Site Vice President – Millstone

Attachments: (1)

Commitments made in this letter: None.

cc: U.S. Nuclear Regulatory Commission
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LHR

ATTACHMENT 1

**RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION
REGARDING STEAM GENERATOR TUBE INSPECTION REPORT (TAC NO. ME0942)**

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

**RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION
REGARDING STEAM GENERATOR TUBE INSPECTION REPORT (TAC NO. ME0942)**

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In reviewing DNC's report, the Nuclear Regulatory Commission (NRC) staff has determined that the following information is required in order to complete their review.

NRC Question 1

Technical Specification (TS) 6.9.1.7.j states that the SG report shall include, "...the primary-to-secondary LEAKAGE rate observed in each steam generator (if it is not practical to assign leakage to an individual SG, the entire primary-to-secondary LEAKAGE should be conservatively assumed to be from one steam generator) during the cycle preceding the inspection which is the subject of the report..." On page 26 of the March 13, 2009, submittal, it was stated that, "[t]he leakage rate at the EOC [end of cycle] 12 (prior to 3R12) was less than one gallon per day (GPD). The detection threshold is approximately 1 GPD – actual leakage was too small to measure accurately."

Please specify whether the primary-to-secondary leakage was assigned to one SG or distributed between all SGs.

DNC Response

Primary-to-secondary leakage was assigned to one SG.

NRC Question 2

TS 6.9.1.7.k states that the SG report shall include, "...the calculated accident leakage rate from the portion of the tube below 17 inches from the top of the tubesheet for the most limiting accident in the most limiting steam generator." To calculate this rate, the operational leakage from the most limiting SG is multiplied by a factor of 2.5.

The aforementioned information was not provided, please provide the required information.

DNC Response

The accident induced leak rate was less than 2.5 GPD.

NRC Question 3

The calculations provided in section j and k of Enclosure 1 to the March 13, 2009, submittal do not appear to have been required to be submitted.

- a. The calculation appears to calculate the administrative limit for operational leakage following the formula in TS Amendment No. 245; if this is the case, please explain why sources of leakage, other than the tube sheet, were not included in these calculations. In addition, please explain why 2.5 gallons per day (presumably attributed to leakage from indications below 17 inches from the top of the tubesheet) was subtracted from the accident induced leakage limit in determining the administrative limit for operational leakage.
- b. If this is not the case, please explain what these calculations are for.

DNC Response

- a. The calculations were not required. In response to section j, the primary-to-secondary leakage rate during the cycle prior to the inspection was less than 1 GPD and was conservatively assumed to be from one SG. In response to section k, the calculated accident leakage rate is 2.5 times the 1 GPD operational leakage rate with all leakage assumed to be from the portion of the tube below 17 inches below the top of the tube sheet and all leakage conservatively assumed to be from one SG.
- b. Paragraph a. above provides a more appropriate response to sections j and k.

NRC Question 4

Table 2, of the March 13, 2009, submittal, indicates that visual examinations of the plugs were performed during 3R12. TS requirement 6.9.1.7.b requires a report of the degradation mechanisms found during the inspection. Please clarify whether any degradation was associated with the plugs.

DNC Response

No degradation of tube plugs was detected.

NRC Question 5

Per TS requirement 6.9.1.7.b, you indicated that tube end cracking was found. Please clarify whether this cracking initiated from the inside or outside diameter of the tube.

DNC Response

Diagnostic examinations were used to confirm that the cracking initiated from the inside diameter.