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OFFICE OF NUCLEAR REACTOR REGULATION

REQUEST FOR ADDITIONAL INFORMATION

STEAM GENERATOR TUBE INSERVICE INSPECTION

REPORT FOR END OF CYCLE 13

MILLSTONE POWER STATION, UNIT NO. 3

DOCKET NUMBER: 50-423

By letter dated October 28, 2010 (Agencywide Document Access and Management System (ADAMS) Accession No. ML103130038), Dominion Nuclear Connecticut, Inc. (DNC or the licensee), information summarizing the results of the 2010 steam generator (SG) tube inspections at Millstone Power Station, Unit No. 3 (MPS3). The U.S. Nuclear Regulatory Commission (NRC) staff has reviewed the information provided by the licensee and has determined that the following additional information is needed in order to complete the review.

The information provided in response to Technical Specification (TS) 6.9.1.7.j does not appear to follow the methodology outlined in your supporting technical documents for the H\* alternate repair criteria.

In item (j), you indicated that the administrative limit for operational leakage should be: leakage through faulted SG (500 gallons per day (GPD) –  $2.49 \times 0.22 = 499.5$  GPD). Later in the report, you indicated that the administrative limit for operational leakage is  $499.5 \text{ GPD} / 2.49 = 200.6$  GPD.

In order to calculate the administrative limit for operational leakage (for the next operating cycle), consistent with the H\* approved methodology, the accident induced leakage rate (for the next operating cycle) from all other sources, other than the tube end indications, must be determined. This value must then be subtracted from your accident induced leakage limit, (presumably 500 GPD based on your submittal), and the resultant value is then divided by 2.49.

If there is no projected accident induced leakage for the next operating interval from any other sources (e.g., plugs, flaws in the free-span), then the limit on operational leakage to account for the accident induced leakage from the tube ends during the next operating interval would be  $500 \text{ GPD} / 2.49$ , or 200.8 GPD. Since this number exceeds your current technical specification limit on operating leakage, the limit in your technical specifications would be governing.

RAI -01: Please confirm that the latter approach is being used to calculate your administrative limit for operational leakage and that you have determined the accident induced leakage from sources other than the tube ends for the next operating interval.

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TS 6.9.1.7.a requires that a report of the scope of the inspection performed on each SG be generated. Table 2 in the submittal implies that visual inspections of the plugs were performed and that a visual inspection of secondary side internals (other than for Foreign Object Search and Retrieval (FOSAR)) may have been performed.

RAI-02: Please discuss the scope and results of any tube plug inspections and or secondary side inspections (other than FOSAR).

A list of newly reported tube support plate (TSP) wear indications is provided in Table 7 of the submittal. Results for previously reported volumetric degradation (non-support related) wear is summarized in Table 9. Tube R30 C52 in SG B appears in both tables with the same wear indication.

RAI-03: Please clarify whether the wear indication for tube R30 C52 in SG B is new or previously reported. Additionally, clarify whether it is a TSP wear indication or a non-support related indication since Table 9 lists the results for the previously reported, non-support related, volumetric degradation and the only entry in the table has a suspected cause of TSP wear.

The report stated that three tubes in SG B had shallow probable foreign object wear in locations that were not accessible by FOSAR. The report further stated that the three inaccessible tubes were removed from service since the probability of continued wear growth could not be confirmed visually. Table 8, which summarizes the results for the newly reported non-support related volumetric degradation, shows the three tubes that were plugged in SG B, but also indicates that the suspected cause was due to a foreign object that is no longer present.

RAI-04: Please clarify whether the foreign object has been confirmed to be no longer present at the tubes in question.

RAI-05: Please clarify the nature of the indication in tube R44 C98 in SG B listed in Table 8 of the submittal.