UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

February 10, 2009

Mr. David A. Christian
President and Chief Nuclear Officer
Dominion Nuclear Connecticut, Inc.
Innsbrook Technical Center
5000 Dominion Boulevard
Glen Allen, VA 23060-6711

SUBJECT: MILLSTONE POWER STATION, UNIT NOS. 2 AND 3 – CORRECTION TO AMENDMENT NOS. 307 AND 246 RE: DELETION OF E BAR DEFINITION AND REVISION TO THE REACTOR COOLANT SYSTEM SPECIFIC ACTIVITY (TAC NOS. MD8492 AND MD8493)

Dear Mr. Christian:

On October 27, 2008, the Nuclear Regulatory Commission (NRC) issued Amendment Nos. 307 and 246 to Renewed Facility Operating License No. DPR 65 for the Millstone Power Station, Unit No. 2 (MPS2), and to Renewed Facility Operating License No. NPF-49 for the Millstone Power Station, Unit No. 3 (MPS3), respectively. This document is available in the Agencywide Documents Access and Management System under Accession No. ML082820615. Enclosed in the October 27, 2008, letter were revised pages for incorporation into the MPS2 and MPS3 Technical Specifications (TS).

Subsequently, your staff noted that there was an incorrect fuel failure value for MPS3 in section 3.1.6 of the safety evaluation (SE) and a typographical error in section 3.1.6.1 of the SE. The NRC staff reviewed the sections in question, and agrees with your staff. Accordingly, a revised section 3.1.6 and 3.1.6.1 of the SE are enclosed in this letter. These revisions do not alter the conclusions in the SE as issued on October 27, 2008.

If you have any additional questions regarding this matter, I may be reached via telephone at (301) 415-1603.

Sincerely,

Carleen J. Sanders, Project Manager
Plant Licensing Branch I-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-336 and 50-423

Enclosures:
1. Revised page 6 of SE
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decay heat removal, the RCS and SGs are depressurized and primary to secondary leakage is minimal. The change to modify MPS2 and MPS3 TS 3.4.8 Applicability to include all of MODE 3 and MODE 4 is necessary to limit the potential radiological consequences of an SGTR or MSLB that may occur during these MODES and is, therefore, acceptable from a radiological dose perspective.

3.1.5 TS 3.4.8 Action a

Per the licensee's letter dated March 25, 2008, neither MPS2 nor MPS3 has adopted the STS. DNC is proposing minor variations and/or deviations from the TS changes described in TSTF-490, Revision 0, to provide consistent terminology and format with the MPS2 and MPS3 TS. The proposed changes will not alter current TS requirements and is acceptable from a radiological dose perspective. TS 3.4.8 Required Action a is revised for MPS2 and MPS3 to remove the reference to Figure 3.4-1 "DOSE EQUIVALENT I-131 REACTOR COOLANT SPECIFIC ACTIVITY LIMIT VERSUS PERCENT OF RATED THERMAL POWER WITH THE REACTOR COOLANT SPECIFIC ACTIVITY >1 µCi/gm DOSE EQUIVALENT I-131" and insert a limit of less than or equal to the site specific DEI spiking limit. Radiological dose consequence analyses for SGTR and MSLB accidents that take into account the pre-accident iodine spike do not consider the elevated RCS iodine specific activities permitted by Figure 3.4.-1 for operation at power levels below 80% rated thermal power (RTP). Instead, the pre-accident iodine spike analyses assume a DEI concentration 60 times higher than the corresponding long-term equilibrium value, which corresponds to the specific activity limit associated with 100% RTP operation. It is acceptable that MPS2 and MPS3 TS 3.4.8 Required Action a should be based on the short term site-specific DEI spiking limit to be consistent with the assumptions contained in the radiological consequence analyses.

3.1.6 TS 3.4.8 Action b Revision to include Action for DEX Limit

DEX specific activity limits are required to be within limits as discussed above in Section 3.1.3. The DEX limit is site specific and the numerical value in units of µCi/gram is contained in revised SR 4.4.8.1. The site-specific limit of DEX in µCi/gram is established based on the maximum accident analysis RCS activity corresponding to 1% fuel clad defects for MPS2 and 0.29% fuel clad defects for MPS3 with sufficient margin to accommodate the exclusion of those isotopes based on low concentration, short half life, or small dose conversion factors. The primary purpose of the TS LCO 3.4.8 on RCS specific activity and its associated Actions is to support the dose analyses for DBAs. The whole body dose is primarily dependent on the noble gas activity, not the non-gaseous activity currently captured in the E Bar definition.

The Completion Time for revised MPS2 and MPS3 LCO 3.4.8 Required Action b will require restoration of DEX to within limit in 48 hours. This is consistent with the Completion Time for current Required Action a for DEI. The radiological consequences for the SGTR and the MSLB accidents demonstrate that the calculated thyroid doses are generally at a greater percentage of the applicable acceptance criteria than the calculated whole body doses. It then follows that the Completion Time for noble gas activity being out of specification in the revised Required Action b should be at least as great as the Completion Time for iodine specific activity being out of specification in current Required Action a. Therefore, the Completion Time of 48 hours for revised Required Action b is acceptable from a radiological dose perspective.

3.1.6.1 MPS2 Non-applicability of Specification 3.0.4

In response to NRC staff's request for additional information, DNC responded with the following information regarding the non-applicability of Specification 3.0.4.

A statement specifying the non-applicability of Specification 3.0.4 for proposed MPS2 LCO 3.4.8 Action d is added to be consistent with the non-applicability statement in the proposed LCO 3.4.8 Action b. (currently Action a.). Consistent with NRC approved TSTF-490, Rev. 0, this exception to LCO 3.0.4 permits entry into the applicable MODE(s), relying on Action d, while the DOSE EQUIVALENT XE-133 LCO is not met. This exception is acceptable due to the significant conservatism incorporated into the RCS specific activity limit, the low probability of an event which is limiting due to exceeding this limit, and the ability to restore transient-specific activity excursions while the plant remains at, or proceeds to, power operation.

As written, the MPS2 TS 3.0.4 requires a specific statement of non-applicability be included in the individual specification in order to permit entry into an operational MODE or condition when the LCO is not met. This is accomplished in MPS2 TS by including statement that TS 3.0.4 is not applicable to this specification.

The non-applicability of Specification 3.0.4 is specified for MPS2, as opposed to the applicability of LCO 3.0.4.c which was specified in TSTF-490, Rev. 0, for Improved Technical Specifications (ITS) plants, due to the different structure of the TS. The MPS2 TS do not have an LCO 3.0.4.c. The non-applicability statement in MPS2 does not introduce any nonconservatism in the changes proposed for MPS2. Because MPS2 has not adopted ITS, minor variations and/or deviations from TS changes described in TSTF-490, Rev. 0, are necessary to provide consistent terminology, format, and usage of the MPS2 TS. The allowance for the applicability of LCO 3.0.4.c. stated in TSTF-490, Rev. 0, and the non-applicability of Specification 3.0.4 in the MPS2 TS, both permit entry into a MODE or other specified condition when an LCO is not met as discussed above.

The NRC staff finds the licensee's proposed changes to be acceptable due to the significant conservatism incorporated into the DEX specific activity limit, the low probability of an event occurring which is limiting due to exceeding the DEX specific activity limit, and the ability to restore transient specific excursions while the plant remains at, or proceeds to power operation.

3.1.6.2 MPS3 Non-applicability of Specification 3.0.4

In response to NRC staff's request for additional information, DNC responded with the following information regarding the non-applicability of Specification 3.0.4.

For MPS3, a statement in Action b indicates the provisions of LCO 3.0.4 are not applicable. Consistent with NRC approved TSTF-490, this exception to LCO 3.0.4 permits entry into the applicable MODE(s), relying on Actions a and b while the DOSE EQUIVALENT 1-131 LCO is not met. This exception is acceptable due to the significant conservatism incorporated into the RCS specific activity limit, the low probability of an event which is limiting due to exceeding this limit, and the ability to restore transient-specific activity excursions while the plant remains at, or proceeds to, power operation.

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