

Dominion Nuclear Connecticut, Inc.
Millstone Power Station
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January 26, 2005

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

Serial No.: 04-140B
NL&OS/PRW Rev 3
Docket No.: 50-336
License No.: DPR-65

DOMINION NUCLEAR CONNECTICUT, INC.
MILLSTONE POWER STATION UNIT 2
CHANGE TO REQUEST RR-89-35, REVISION 1
USE OF AN ALTERNATIVE TO ASME CODE SECTION XI FOR
INSTALLATION OF MECHANICAL NOZZLE SEAL ASSEMBLIES ON
PRESSURIZER HEATER PENETRATION NOZZLES

In a letter dated February 19, 2002, Dominion Nuclear Connecticut, Inc. (DNC) forwarded relief request RR-89-35, "Use of an Alternative to ASME Code Section XI for Installation of Mechanical Nozzle Seal Assemblies (MNSAs) on Pressurizer Heater Penetration Nozzles," to the Nuclear Regulatory Commission (NRC). The request was approved in NRC letter, "Safety Evaluation of Relief Request RR-89-35, Temporary Installation of Mechanical Nozzle Seal Assemblies on Pressurizer Heater Penetration Nozzles, Millstone Nuclear Power Station, Unit No. 2 (TAC No. MB4039)" dated March 22, 2002 (Accession No. ML020730271). The NRC found that the request complied with 10 CFR 50.55a(a)(3)(i) that the proposed *"alternative provides an acceptable level of quality and safety."* In a letter dated June 3, 2004, Dominion Nuclear Connecticut, Inc. (DNC) forwarded relief request RR-89-35, Revision 1, "Use of an Alternative to ASME Code Section XI for Installation of Mechanical Nozzle Seal Assemblies (MNSAs) on Pressurizer Heater Penetration Nozzles," to the Nuclear Regulatory Commission (NRC). This relief request addressed continued use of the MNSAs as a permanent alternative. In a conference call on November 18, 2004, the NRC advised DNC that with a commitment to replace the Millstone Power Station Unit 2 (MPS2) pressurizer in the fall of 2006, DNC could extend the use of the MNSAs for an additional cycle and that a permanent relief request was not necessary. In a letter dated December 23, 2004, DNC advised the NRC it was withdrawing its June 3, 2004 request. Subsequently, in a conference call on January 12, 2005, the NRC requested that DNC include more definitive information regarding its intended inspection requirements.

Accordingly, DNC reiterates it is hereby withdrawing its request dated June 3, 2004, as well as its letter of December 23, 2004. DNC commits to replace the MPS2 pressurizer during Refueling Outage 2R17 currently scheduled for the fall of 2006. DNC requests that the NRC revise its previous approval and associated safety evaluation dated June 19, 2002, which authorized use of MNSAs at MPS2, to allow use of the MNSAs one additional cycle.

Installation of the MNSAs will continue consistent with the previously approved relief request RR-89-35. Inspection of the MNSAs will be performed as follows:

- (1) The MNSAs have been added to the MPS2 inservice inspection plan.
- (2) If the MNSA includes a leakage detection/diversion fitting, it will be examined for evidence of leakage before other visual examinations are performed.
- (3) Pressure retaining bolting will be subject to the equivalent of a Table IWB-2500-1 Category B-G-1 examination with bolting in place. Category B-G-2 examination will be performed when the MNSA is disassembled for any reason after the initial installation. Category B-G-2 examination shall be performed for the type of component on which the MNSA is installed on component surfaces, including bore, counterbore (if any), bolt holes and bolting, following disassembly.
- (4) Disassembly of a sample (10% rounded to the next larger integer value) of MNSAs shall be performed once an interval. Category B-G-2 examination shall be performed on component surfaces, including bore, counterbore (if any), bolt holes and bolting, following disassembly. The MNSA to be disassembled shall be selected based on the longest installed service life with preference given to the presence of known through-wall flaws in the original pressure boundary, if any, or locations identified for high susceptibility to primary water stress corrosion cracking (PWSCC).
- (5) During each refueling outage, a VT-3 visual examination of each MNSA shall be performed. The following relevant conditions shall require corrective action:
 - (a) structural distortion or displacement of parts to the extent that component function may be impaired;
 - (b) loose, missing, cracked, or fractured parts, bolting, or fasteners;
 - (c) foreign materials or accumulation of corrosion products;
 - (d) corrosion or erosion that reduces the nominal section thickness by more than 5%, or
 - (e) wear of mating surfaces that may lead to loss of function.
- (6) A VT-2 visual examination shall be performed with insulation removed in accordance with IWA-5240 on each MNSA location during the IWB-5000 System Pressure Test conducted in accordance with Table IWB-2500-1, Category B-P during each refueling outage. MNSAs shall be VT-2 examined. If leakage is detected, the entire MNSA

shall be disassembled and inspected. The following relevant conditions shall require corrective action:

- (a) structural distortion or displacement of parts to the extent that component function may be impaired;
- (b) loose, missing, cracked, or fractured parts, bolting, or fasteners;
- (c) foreign materials or accumulation of corrosion products;
- (d) corrosion or erosion that reduces the nominal section thickness by more than 5%, or
- (e) wear of mating surfaces that may lead to loss of function.

There shall be no evidence of leakage upon startup.

Since the analysis provided in the original submittal of Request RR-89-35, dated February 19, 2002, would still be applicable for an additional cycle and the inspection program described above will be capable of monitoring any degradation of the MNSA, DNC requests approval to extend the use of Request RR-89-35 for an additional cycle, i.e., until refueling outage 2R17, currently scheduled for fall 2006. DNC believes the approval to extend Request RR-89-35 for use of the MNSAs for an additional cycle continues to provide an acceptable level of quality and safety in accordance with 10CFR50.55a(a)(3)(i).

Should you have any questions regarding the above, please contact Mr. Paul R. Willoughby at (804) 273-3572.

Very truly yours,



Leslie N. Hartz
Vice President – Nuclear Engineering

Commitments contained within this letter:

DNC commits to replace the MPS2 pressurizer during Refueling Outage 2RO17 currently scheduled for the fall of 2006.

cc: U. S. Nuclear Regulatory Commission
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