

Dominion Nuclear Connecticut, Inc.
Millstone Power Station
Rope Ferry Road
Waterford, CT 06385



Dominion™

JUN 24 2003

Docket No. 50-423
B18921

RE: 10 CFR 50.90

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

Millstone Power Station, Unit No. 3
License Basis Document Change Request 3-13-02
Elimination of 'N-1' Loop Operation from Technical Specifications
Response to Request for Additional Information

By letter dated December 11, 2002,⁽¹⁾ Dominion Nuclear Connecticut, Inc. (DNC) submitted a proposed amendment to the Technical Specifications for Millstone Unit No. 3. The proposed amendment would eliminate technical specification requirements associated with 'N-1' loop operation from the Millstone Unit No. 3 Technical Specifications.

By facsimile dated May 5, 2003,⁽²⁾ a Request for Additional Information (RAI) was received from the Nuclear Regulatory Commission (NRC) staff, which contained three questions related to the aforementioned license amendment request. On June 3, 2003, a teleconference was held with the NRC staff to discuss this RAI.

Attachment 1 provides the DNC response to the questions received in the RAI dated May 5, 2003, which is consistent with the discussion held with the NRC staff on June 3, 2003.

The additional information provided in this letter will not affect the conclusions of the Safety Summary and Significant Hazards Consideration discussion in the DNC December 11, 2002, letter.

(1) J. A. Price letter to the Nuclear Regulatory Commission, "Millstone Power Station, Unit No. 3, License Basis Document Change Request 3-13-02, Elimination of 'N-1' Loop Operation from Technical Specifications," dated December 11, 2002.

(2) V. Nerses (NRC) facsimile to R. Joshi, "Millstone Power Station, Unit No. 3, Facsimile Transmission, Draft Request For Additional Information (RAI) to be Discussed in An Upcoming Conference Call (TAC NOS. MB6944)," dated May 5, 2003.

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There are no regulatory commitments contained in this letter.

If you should have any questions regarding this submittal, please contact Mr. Ravi Joshi at (860) 440-2080.

Very truly yours,

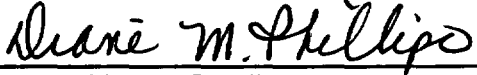
DOMINION NUCLEAR CONNECTICUT, INC.



J. Alan Price
Site Vice President - Millstone

Sworn to and subscribed before me

this 24 day of June, 2003



Notary Public

DIANE M. PHILLIP
NOTARY PUBLIC

My Commission expires _____ MY COMMISSION EXPIRES 12/31/2005

cc: H. J. Miller, Region I Administrator
V. Nerses, NRC Senior Project Manager, Unit No. 3
Millstone Senior Resident Inspector

Director
Bureau of Air Management
Monitoring and Radiation Division
Department of Environmental Protection
79 Elm Street
Hartford, CT 06106-5127

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Attachment 1

Millstone Power Station, Unit No. 3

**License Basis Document Change Request 3-13-02
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Question No. 1:

On page 2 of its application, the licensee states “Additionally, since the capability to operate the plant in the ‘N-1’ loop, or three loop operation is being removed, except for the mitigation of an emergency or abnormal event, specific references to four (4) loop operation, which are only used to distinguish from ‘N-1’ loop operation, are also being eliminated.” Any operator action to mitigate an emergency or abnormal event would not normally be specified in the technical specification. Provide clarification of what is meant by the statement “except for the mitigation of an emergency or abnormal event” with regards to the changes being made to the Millstone Unit 3 Technical Specifications.

Response:

The term “except for the mitigation of an emergency or abnormal event” was taken directly from the January 9, 2002, Nuclear Regulatory Commission (NRC) letter⁽¹⁾ issued for Millstone Unit No. 3 License Amendment 202. In this letter, it is stated that Amendment 202 was approved contingent on the condition that operation with one or more Reactor Coolant System (RCS) loops isolated in MODES 1 through 4 was prohibited, except for mitigation of abnormal or emergency events. As referenced in the NRC letter, the November 13, 2001, Dominion Nuclear Connecticut, Inc. (DNC) letter⁽²⁾ provides supplemental information for Amendment 202 that further clarifies the meaning of emergency and abnormal events.

Question No. 2:

Table 3.3-1 Functional Unit 12.b (page 3/4 3-3) does not propose to remove the phrase ‘in two operating loops’ in Channels to Trip. Provide an explanation as to why 12.b is not being changed for Channels to Trip whereas 12.a and 13 are being modified to delete the phrase.

(1) V. Nerses (NRC) letter to J. A. Price (DNC), “Millstone Nuclear Power Station, Unit No. 3 - Issuance of Amendment Re: Reactor Coolant System – Isolated Loop Startup (TAC NO. MB1785), dated January 9, 2002.

(2) J. Alan Price (DNC) letter to NRC, “Millstone Nuclear Power Station, Unit No. 3 License Condition – Isolated RCS Loop Operation Technical Specifications Change Request 3-11-00 Reactor Coolant System Heatup and Cooldown Curves,” dated November 13, 2001.

Response:

Table 3.3-1, Functional Unit 12.b, the Reactor Coolant Flow-Low, two loops (above P-7 and below P-8) trip function ensures that protection is provided against violating the Departure from Nucleate Boiling Ratio (DNBR) limit due to low flow in two or more RCS loops, while avoiding reactor trips due to normal variation in loop flow. When power level is between the P-7 and P-8 interlocks, a low reactor coolant flow reactor trip will occur only if the flow in two or more RCS loops is below the low flow setpoint. Therefore, Table 3.3-1, Functional Unit 12.b, is not proposed to be changed. The information related to the subject reactor trip functional unit is described in the current Millstone Unit No. 3 Technical Specification Limiting Safety System Settings Bases, Section 2.2.1.

Question No. 3:

FSAR Section 15.4.1 describes the assumption made for the uncontrolled rod withdrawal from subcritical. For this event, three loops are assumed in operation with all of the loop stop valves open in Mode 3. Please provide justification on how this safety analysis will bound the potential plant operation at Mode 3 with four loops in operation.

Response:

The proposed Technical Specification change to eliminate 'N-1' loop operation has no impact on the analyses described in Final Safety Analysis Report (FSAR) Section 15.4.1, "Uncontrolled Rod Cluster Control Assembly Bank Withdrawal from a Subcritical or Low Power Startup Condition." The analysis described in FSAR Section 15.4.1 describes the limiting assumptions for the four-loop configuration. Since the analysis addresses subcritical (MODE 3) conditions and Technical Specification 3.4.1.2 requires a minimum of three operating RCS loops, the analysis assumes only three RCS pumps in operation. The lower flow with three Reactor Coolant Pumps (RCPs) in operation will minimize the available DNBR flow margin. Since the RCS is essentially isothermal at subcritical or low power conditions, the number of RCPs in operation will have a negligible impact on initial RCS temperature and pressure. Thus, the limiting condition is three RCPs in operation. The RCS temperature and pressure assumptions are conservatively selected values that are independent of the number of RCPs in operation. The assumptions of three RCPs operating and conservatively chosen values of temperature and pressure result in a bounding calculation of DNBR for the four-loop configuration.