

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



**Dominion™**

Docket No. 50-423

B18991

RE: 10 CFR 50.90

SEP 18 2003

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

**Millstone Power Station, Unit No. 3  
Response to Request For Additional Information  
License Basis Document Change Request (LBDCR) 3-01-03  
Selective Implementation of the Alternative Source Term -  
Fuel Handling Accident Analyses**

By a letter dated March 4, 2003,<sup>(1)</sup> Dominion Nuclear Connecticut, Inc. (DNC) proposed to amend Operating License NPF-49 by incorporating changes into the Millstone Unit No. 3 Technical Specifications. The proposed changes would selectively implement the Alternative Source Term for the Fuel Handling Accident analysis.

By a facsimile dated September 3, 2003,<sup>(2)</sup> a Request For Additional Information (RAI) was received from the Nuclear Regulatory Commission staff, which contains one question related to the aforementioned license amendment request.

Attachment 1 provides the DNC response to the September 3, 2003, RAI. The additional information provided in this letter will not affect the conclusions of the Safety Summary and Significant Hazards Consideration discussion in the DNC March 4, 2003, letter.

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(1) J. A. Price letter to the U.S. NRC, "Millstone Power Station, Unit No. 3, License Basis Document Change Request (LBDCR) 3-01-03, Selective Implementation of the Alternative Source Term - Fuel Handling Accident Analyses," dated March 4, 2003.

(2) V. Nerses (NRC) facsimile, "Millstone Power Station, Unit No. 3, Facsimile Transmission, Draft Request For Additional Information (RAI) to be Discussed in an Upcoming Conference call (TAC No. MB8137)," dated September 3, 2003.

A001

There are no regulatory commitments contained within 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 18 day of September, 2003

  
\_\_\_\_\_  
Notary Public

My Commission expires \_\_\_\_\_  
**DIANE M. PHILLIPO**  
**NOTARY PUBLIC**  
**MY COMMISSION EXPIRES 12/31/2005**

Attachment (1)

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

**Attachment 1**

**Millstone Power Station, Unit No. 3**

**License Basis Document Change Request (LBD CR) 3-01-03  
Selective Implementation of the Alternative Source Term -  
Fuel Handling Accident Analyses**

**Response to Request For Additional Information**

**License Basis Document Change Request (LBDCR) 3-01-03  
Selective Implementation of the Alternative Source Term -  
Fuel Handling Accident Analyses  
Response to Request For Additional Information**

Question 1:

By letter dated March 4, 2003, Dominion Nuclear Connecticut, Inc. (the licensee) submitted a proposed amendment to the Technical Specifications (TS) for Millstone Unit 3. The proposed amendment would selectively implement the Alternate Source Term for The Fuel Handling Accident (FHA) Analyses. The Nuclear Regulatory Commission (NRC) staff has reviewed the information the licensee provided that supports the proposed changes to the TS. In order for the staff to complete its evaluation, the following additional information is requested:

In the licensee's submittal, a request was made to delete technical specifications (TS) 3.3.2. "Engineered Safety Features Actuation System Instrumentation, functional unit 3.c," "Containment Isolation, Purge Isolation" and the related Surveillance Requirements, Instrumentation Trip Setpoints, and notes related to that functional unit. The licensee states that the proposed changes under re-analyses of the FHA, allow plant operation without the capability for an automatic purge valve closure during core alterations and during movement of irradiated fuel. The staff considers that this deletion from TS should be treated as a relocation of selected TS requirements and as such the licensee should follow the guidance provided in NRC Generic Letter 95-10, "Relocation of Selected Technical Specifications Requirements Related to Instrumentation." Therefore, the licensee is requested to justify why this deleted item no longer meets the four criteria in 10 CFR 50.36(c)(2)(ii), regarding TS limiting condition for operation.

Response:

Technical Specification 3.3.2, Functional unit 3.c of Table 3.3-2, Functional unit 3.c of Table 3.3-4, and Functional unit 3.c of Table 4.3-2 provide operability requirements, the trip set points, allowable values, and surveillance requirements for the containment purge isolation instrumentation. The proposed changes to Specification 3.3.2 will delete the above-mentioned functional units from the Millstone Unit No. 3 Technical Specifications. These proposed changes, which are associated with the containment purge isolation instrumentation, are consistent with the revised Fuel Handling Accident (FHA) analyses.

This Specification provides the operability criteria used for the instrumentation, which provides automatic actuation of the containment purge isolation valves. The revised FHA analyses, which are the only accident analyses applicable for this instrumentation, do not credit the automatic closure of the containment purge isolation valves. Additionally, as discussed below, this specification (i.e., Functional

units 3.c of Tables 3.3-3, 3.3-4 and 4.3-2) does not meet any of the criteria of 10 CFR 50.36(c)(2)(ii).

10 CFR 50.36(c)(2)(ii) contains the requirements for items that must be in Technical Specifications. This regulation provides four (4) criteria that can be used to determine the requirements that must be met for items to be included in the Technical Specifications.

#### Criterion 1

Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.

This specification provides the criteria used in determining operability of the instrumentation that automatically actuates the containment purge isolation valves. This specification does not cover installed instrumentation that is used to detect and indicate in the control room a significant degradation of the reactor coolant pressure boundary. Therefore, this specification does not satisfy criterion 1.

#### Criterion 2

A process variable, design feature, or operating restriction that is an initial condition of a design basis accident (DBA) or transient analysis that either assumes the failure of, or presents a challenge to the integrity of a fission product barrier.

This Specification provides the criteria used in determining operability of the instrumentation that automatically actuates the containment purge isolation valves. This specification does not cover a process variable, design feature, or operating restriction that is an initial condition of a DBA or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. Therefore, this specification does not satisfy Criterion 2.

#### Criterion 3

A System, Structure, or Component (SSC) that is part of the primary success path and which functions or actuates to mitigate a design basis accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

This Specification requires the instrumentation that provides a containment purge valve isolation signal to be OPERABLE in MODE 5 and in MODE 6 while CORE ALTERATIONS or the movement of irradiated fuel is occurring within containment. The signal is generated on increasing radioactivity levels within containment. The only events, which are postulated to occur in MODES 5 and 6

are the FHA and boron dilution events. Technical specification 3.3.5, "Instrumentation, Shutdown Margin Monitor," Technical Specification 3.1.1.2, "Reactivity Control Systems, Shutdown Margin - Cold Shutdown-Loops not Filled," 3.9.1.1, "Refueling Operations, Boron Concentration," and Technical Requirement Manual Section 3.1.2.1, "Boration Systems, Flow Path- Shutdown," provide the appropriate controls for mitigating boron dilution events. The revised FHA inside containment does not assume automatic closure of the containment purge valves on increasing airborne radioactivity levels. The proposed changes to Technical Specification 3.9.4 provide administrative controls for the closure of all containment penetrations, including the containment purge valves. Therefore, this feature does not cover a SSC that is part of the primary success path which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. This Specification does not satisfy Criterion 3.

#### Criterion 4

A SSC, which operating experience or probabilistic risk assessment has shown to be significant to public health and safety.

This Specification, which provides the operability criteria for the instrumentation that automatically actuates the containment purge isolation valves, has been shown not to be risk significant to public health and safety by either operating experience or probabilistic safety assessment. The subject instrumentation is no longer credited to ensure that the radiological dose criteria are met for the Exclusion Area Boundary (EAB), Low Population Zone (LPZ), and control room. Thus, the operability of the instrumentation is not risk significant. This Specification does not satisfy Criterion 4.

In conclusion, the proposed changes to this specification (deletion of Functional units 3.c of Tables 3.3-3, 3.3-4 and 4.3-2) eliminate requirements for plant equipment, which is no longer credited for accident mitigation. Additionally, the requirements contained in this Specification do not meet any of 10 CFR 50.36(c)(2)(ii) criteria on items for which Technical Specifications must be established. Therefore, the proposed changes to delete Functional units 3.c of Tables 3.3-3, 3.3-4 and 4.3-2 are consistent with regulation and are safe.