

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



Dominion™

MAY 13 2003

Docket No. 50-423
B18889

RE: 10 CFR 50.90

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

Millstone Power Station, Unit No. 3
Licensing Basis Document Change Request (LBDCR) 3-01-03
Selective Implementation of the Alternative Source Term
Fuel Handling Accident Analyses
Revised Significant Hazards Consideration Discussion

In a letter dated March 4, 2003,⁽¹⁾ Dominion Nuclear Connecticut, Inc. (DNC) submitted a license amendment request in the form of changes to the Millstone Unit No. 3 Technical Specifications. In addition, DNC requested Nuclear Regulatory Commission (NRC) approval of a re-analysis of the Millstone Unit No. 3 limiting design basis Fuel Handling Accidents using a selective implementation of the Alternative Source Term (AST) methodology in accordance with 10 CFR 50.67 and Regulatory Guide 1.183.

As part of the proposed Technical Specification Changes, DNC evaluated the changes against the criteria of 10 CFR 50.92 and has determined the proposed changes did not constitute a Significant Hazards Consideration (SHC). The basis for that determination was provided in March 4, 2003,⁽¹⁾ submittal. As a result of a subsequent conversation with your staff, we are providing a revision to the SHC discussion (Attachment 1). The revised SHC discussion will not affect the conclusions of the safety summary and the original SHC determination.

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

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There are no regulatory commitments contained within this letter.

If you should have any questions on the above, please contact Mr. Ravi Joshi at (860) 440-2080.

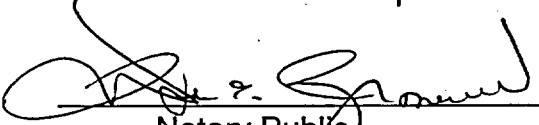
Very Truly Yours,
DOMINION NUCLEAR CONNECTICUT, INC.



J. A. Price
Site Vice President – Millstone

Subscribed and sworn to before me

this 13 day of May, 2003.



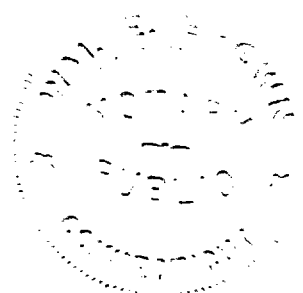
Notary Public

My Commission Expires: WM. E. BROWN
NOTARY PUBLIC
MY COMMISSION EXPIRES MAR. 31, 2006

Attachment (1)

cc: H. J. Miller, Region 1 Administrator
V. Nerses, NRC Senior Project Manager, Millstone 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 06107-5127



Attachment 1

Millstone Power Station, Unit No. 3

Licensing Basis Document Change Request (LBDCR) 3-01-03
Selective Implementation of the Alternative Source Term
Fuel Handling Accident Analyses
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Licensing Basis Document Change Request (LBDCR) 3-01-03
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Description of License Amendment Request

Dominion Nuclear Connecticut, Inc. (DNC), hereby proposes to amend Operating License NPF-49 by incorporating the attached proposed changes into the Millstone Unit No. 3 Technical Specifications. DNC is proposing to change Millstone Unit No. 3 Technical Specifications 3.3.2, "Instrumentation, Engineered Safety Features Actuation System Instrumentation," 3.7.7, "Plant Systems, Control Room Emergency Ventilation System," 3.7.8, "Plant Systems, Control Room Envelope Pressurization System," 3.9.4, "Refueling Operations, Containment Building Penetrations," 3.9.9, "Refueling Operations, Containment Purge and Exhaust Isolation System," and 3.9.12, "Refueling Operations, Fuel Building Exhaust Filter System." These proposed changes are based upon the re-analysis of a Fuel Handling Accident (FHA) in the containment and a FHA in the fuel building area. The revised analysis, based on the Alternative Source Term (AST) in accordance with 10 CFR 50.67, will replace the existing analysis of accident consequences, which are based on methodologies and assumptions derived from Regulatory Guide 1.25, Standard Review Plan (SRP) 15.7.4, SRP 15.7.5, and TID-14844. Refer to Attachment 1 of our submittal dated March 4, 2003 for a detailed discussion of the revised FHA analyses and Attachment 2 of our submittal dated March 4, 2003, for a detailed discussion of the proposed Technical Specification Changes.

The proposed changes to the Technical Specifications reflect the assumptions of the revised fuel handling accident analyses. The proposed changes to the Technical Specifications modify requirements regarding containment closure and fuel building area ventilation during movement of fuel in containment and in the fuel building area. The proposed changes will allow containment penetrations, including the equipment access hatch and personnel access hatch doors, to be maintained open under administrative control. The proposed changes will eliminate the requirements for automatic closure of containment purge during MODE 6 fuel movement. The Technical Specifications associated with fuel building area ventilation will be deleted. These Technical Specifications are no longer required to maintain accident consequences within regulatory limits and are no longer required by the criteria of 10 CFR 50.36.

A brief summary of the proposed changes is provided below.

Technical Specification Changes

- The Technical Specification requirements for the Control Room Emergency Ventilation Systems will be revised such that the Control Room Ventilation Systems are required to be operable in MODES 1, 2, 3, and 4; and during the movement of fuel.

- The Containment Purge Valve Isolation Signal is removed from the Technical Specifications and will no longer be credited with automatic closure of the containment purge valves during fuel movement.
- The Technical Specifications will be revised to include administrative controls if the containment atmosphere boundary is open during fuel movement.
- The Technical Specification requirements associated with the Fuel Building Exhaust Filter System will be deleted.

Basis for No Significant Hazards Consideration

In accordance with 10 CFR 50.92, DNC has reviewed the proposed changes and has concluded that they do not involve a Significant Hazards Consideration (SHC). The basis for this conclusion is that the three criteria of 10 CFR 50.92(c) are not compromised. The proposed changes do not involve an SHC because the changes do not:

- 1) Involve a significant increase in the probability or consequences of an accident previously evaluated.

The proposed changes do not involve physical modifications to the plant equipment and do not change the operational methods or procedures used for the physical movement of fuel in containment or in the fuel building. As such, the proposed changes have no effect on the probability of occurrence of any accident previously evaluated.

The proposed changes are based upon the re-analysis of a FHA in the containment and a FHA in the fuel building area. The consequences of the re-analyzed events are expressed in terms of total effective dose equivalent (TEDE), and are not directly comparable to either the thyroid or whole body doses reported in the existing analyses. However, even taking this comparison into consideration, any dose increase is considered to be not significant as the revised analyses results meet the applicable TEDE acceptance criteria for alternative source implementation.

- 2) Create the possibility of a new or different kind of accident from any accident previously evaluated.

The containment closure components (e.g., equipment access hatch, personnel access hatch doors, and various containment penetrations) and filtration systems are not accident initiators. The proposed changes do not involve the addition of new systems or components nor do they involve the modification of existing plant systems. The proposed changes do not change the operational modes or procedure used for the physical movements of fuel in containment or in the fuel building. The proposed changes do not affect the way in which a FHA is

postulated to occur. Therefore, the proposed changes do not create the possibility of a new or different kind of accident from any previously evaluated.

3) Involve a significant reduction in a margin of safety.

The margin of safety for the dose consequence analysis is considered to be that provided by meeting the applicable regulatory limits. The dose consequence of the existing FHA are within regulatory limits for whole body and thyroid doses as established in 10 CFR 100. The revised FHA using the AST method demonstrates that the dose consequences are within the limits established in 10 CFR 50.67 and Regulatory Guide 1.183. The acceptance criteria for both dose analyses have been developed for the purpose of use in design basis accident analyses such that meeting the stated limits demonstrates adequate protection of public health and safety. Therefore, it is concluded that the margin of safety will not be reduced by the implementation of changes.