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

Dominion

June 18, 2004

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

Serial No. 04-193A
MPS Lic/MAE R0
Docket No. 50-336
License No. DPR-65

DOMINION NUCLEAR CONNECTICUT, INC.
MILLSTONE POWER STATION UNIT 2
RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION
LICENSE BASIS DOCUMENT CHANGE REQUEST (LBDCR) 2-18-02
SELECTIVE IMPLEMENTATION OF THE ALTERNATIVE SOURCE TERM – FUEL HANDLING ACCIDENT ANALYSES

By a letter dated September 26, 2002, as supplemented May 7, 2004, with an alternate method to determine bounding gap fractions for the small number of rods having the potential to exceed the linear heat generation rate (LHGR) and burnup criteria of footnote 11 to Table 3 of RG 1.183. Dominion Nuclear Connecticut, Inc. (DNC) proposed to amend Operating License DPR-65 by incorporating changes into the Millstone Unit 2 Technical Specifications. The proposed changes would selectively implement the Alternative Source Term for the Fuel Handling Accident analysis.

On June 14, 2004, a Request For Additional Information (RAI) was received from the Nuclear Regulatory Commission (NRC) staff, which contained one question related to the aforementioned license amendment request.

Attachment 1 provides the DNC response to the question received in the RAI dated June 14, 2004.

The additional information provided in this letter will not affect the conclusions of the Safety Summary and Significant Hazards Consideration discussion in the DNC September 26, 2002 letter.

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If you have any questions or require additional information, please contact Mr. David W. Dodson at (860) 447-1791, extension 2346.

Very truly yours,

Leslie N. Hartz
Vice President – Nuclear Engineering

Attachments: (1)

Commitments made in this letter: None.

cc: U.S. Nuclear Regulatory Commission
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Mr. S. M. Schneider
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Millstone Power Station

SN: 04-193A
Docket Nos.: 50-336
Subject: RAI – Proposed TS Change
AST – Fuel Handling Accident Analyses

COMMONWEALTH OF VIRGINIA)
)
COUNTY OF HENRICO)

The foregoing document was acknowledged before me, in and for the County and Commonwealth aforesaid, today by Leslie N. Hartz, who is Vice President - Nuclear Engineering, of Dominion Nuclear Connecticut, Inc. She has affirmed before me that she is duly authorized to execute and file the foregoing document in behalf of that Company, and that the statements in the document are true to the best of her knowledge and belief.

Acknowledged before me this 18th day of June, 2004.

My Commission Expires: March 31, 2008.

Maggie McClure
Notary Public

(SEAL)

ATTACHMENT 1

LICENSE BASIS DOCUMENT CHANGE REQUEST 2-18-02
SELECTIVE IMPLEMENTATION OF THE ALTERNATIVE SOURCE TERM -
FUEL HANDLING ACCIDENT ANALYSES
RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

MILLSTONE POWER STATION, UNIT 2
DOMINION NUCLEAR CONNECTICUT, INC. (DNC)

LICENSE BASIS DOCUMENT CHANGE REQUEST 2-18-02
SELECTIVE IMPLEMENTATION OF THE ALTERNATIVE SOURCE TERM - FUEL HANDLING ACCIDENT ANALYSES
RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

Question No 1:

"The May 7, 2004 letter does not address the impact of the increases on the cask drop accident that was analyzed in the September 26, 2002 submittal. The NRC staff notes that in the cask drop analysis, the licensee assumed that only I-129 and Kr85 would be present and assumed an 'other halogen' fraction of 0.05 and a Kr85 fraction of 0.1. Since both these gap fractions have increased (right column, Table 1 of May 7 letter), the NRC staff expects that the impact on dose would be discernable. In this regard, please provide an assessment of the impact on the cask drop accident of the proposed gap fractions of Table 1 in the May 7, 2004, letter."

Response:

The analysis labeled as a cask drop accident in the MP2 FSAR Section 14.7.5 involves a cask falling onto spent fuel assemblies in the spent fuel pool. The cask drop accident as analyzed in FSAR Section 14.7.5 represents a non-limiting (results in lower offsite doses) case of the fuel handling accident analyzed in FSAR Section 14.7.4. The limiting case is the drop of a spent fuel assembly onto spent fuel either in containment or the spent fuel pool. Since this cask drop accident is bounded by the results of the fuel assembly drop, the May 7, 2004 supplemental information letter did not explicitly address the impact on this fuel handling accident case.

As noted by the Nuclear Regulatory Commission (NRC) staff, the increase in assumed gap fraction of Kr-85 from 0.1 to 0.15 and for "other halogens" from 0.05 to 0.08 will have a discernable impact on the calculated doses for this non-limiting case. Calculations have been performed to quantify the impact as shown in the table below.

Dose Location	Previous TEDE Result rem	New TEDE Result rem	TEDE Limit rem
EAB	1.1E-01	1.6E-01	6.3
LPZ	1.4E-02	2.1E-02	6.3
Control Room	5.0E-02	7.5E-02	5.0

As expected, the increases are small and the original conclusions for the dose consequences of a cask drop accident remain valid. The cask drop accident remains bounded by the drop of a spent fuel assembly and will not present any undue hazard to the health and safety of the public, nor will it compromise control room operations.