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Dominion®

June 1, 2006

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

Serial No. 06-319
NL&OS/ETS R0
Docket Nos. 50-336/423
50-338/339
50-280/281
License Nos. DPR-65
NPF-49
NPF-4/7
DPR-32/37

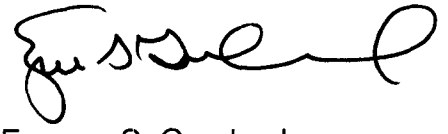
DOMINION NUCLEAR CONNECTICUT, INC. (DNC)
VIRGINIA ELECTRIC AND POWER COMPANY (DOMINION)
MILLSTONE POWER STATION UNIT NOS. 2 AND 3
NORTH ANNA POWER STATION UNIT NOS. 1 AND 2
SURRY POWER STATION UNIT NOS. 1 AND 2
REQUESTED CLARIFICATION OF THE NRC SER
FOR DOMINION FLEET REPORT DOM-NAF-2
(TAC NOS. MC4571, MC4572, MC4573, MC4574, MC4575, AND MC4576)

In a September 30, 2004 letter, as supplemented in letters dated January 13, June 30 and September 8, 2005, Dominion requested approval of fleet report DOM-NAF-2, "Reactor Core Thermal-Hydraulics Using the VIPRE-D Computer Code." By letter dated April 4, 2006, the NRC documented approval of Dominion's fleet report DOM-NAF-2. In a May 18, 2006 telephone conference call with the NRC staff (Messrs. S.R. Monarque and L. W. Ward), Dominion discussed SER language that could potentially limit the application of the fleet report to specific fuel types or vendors. The NRC staff concurred that the current wording could impose unintended restrictions on the application of DOM-NAF-2, and verbally agreed to revise the SER. For convenience, the NRC staff requested that Dominion provide specific mark-ups identifying the locations in the SER that are believed to limit the application of DOM-NAF-2 to specific fuel vendors. The requested information is provided in the attachment to this letter.

During the May 18th conference call, the NRC also stated that the request to publish the accepted version of DOM-NAF-2 within 90-days of approval could be postponed until after a revised SER was issued by the NRC staff.

If you have any questions or require additional information, please contact Mr. Thomas Shaub at (804) 273-2763.

Very truly yours,



Eugene S. Grecheck
Vice President – Nuclear Support Services

Virginia Electric and Power Company
Dominion Nuclear Connecticut, Inc.

Attachment

Commitments made in this letter: None

cc: U.S. Nuclear Regulatory Commission
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ATTACHMENT

Serial No. 06-319

Clarification of the NRC SER for Dominion Fleet Report DOM-NAF-2
Dated April 4, 2006
(TAC Nos. MC4571, MC4572, MC4573, MC4574, MC4575, and MC4576)

Dominion Nuclear Connecticut, Inc.
Virginia Electric and Power Company

Dominion Nuclear Connecticut, Inc.
Virginia Electric and Power Company

Clarification of the NRC SER for Dominion Fleet Report DOM-NAF-2
Dated April 4, 2006

Discussion

In a September 30, 2004 letter, as supplemented in letters dated January 13, June 30 and September 8, 2005, Dominion requested approval of fleet report DOM-NAF-2, "Reactor Core Thermal-Hydraulics Using the VIPRE-D Computer Code." By letter dated April 4, 2006, the NRC documented approval of Dominion's fleet report DOM-NAF-2. In a May 18, 2006 telephone conference call with the NRC staff (Messrs. S.R. Monarque and L. W. Ward), Dominion discussed SER language that could potentially limit the application of the fleet report to specific fuel types or vendors. The staff agreed that there is no specific reason to limit the use of the fleet report DOM-NAF-2 to Westinghouse and Framatome (AREVA) fuel and that DOM-NAF-2 could be used with NRC-approved PWR fuel types. While it is true that AREVA and Westinghouse are currently the only available fuel vendors for PWR nuclear reactors in the US, this situation may change in the future. If that were the case, Dominion would be required to submit for NRC review and approval an additional appendix to DOM-NAF-2 qualifying any new CHF correlations associated with the new fuel type with the VIPRE-D code.

For convenience, the NRC staff requested that Dominion provide specific mark-ups identifying the locations in the SER that are believed to limit the application of DOM-NAF-2 to specific fuel vendors (Westinghouse and AREVA). These locations and a few editorial changes are provided below:

SER Clarification

SER Section	Paragraph/Sentence	SER Page
2.0 Regulatory Evaluation	Second paragraph - third sentence	1

Therefore, this review addresses the specific application of VIPRE-01 by the licensees to the ~~**Framatome and Westinghouse**~~ **NRC-approved PWR** fuel types in the licensees' nuclear steam supply system (NSSS).

2.0 Regulatory Evaluation	Last paragraph - second sentence	2

The licensees have previously used the COBRA IIIc/MIT computer code (Reference 3) to perform the thermal hydraulic analyses and is submitting this fleet report to replace COBRA IIIc/MIT computer code with the VIPRE-D computer program along with the new CHF correlations for the various ~~**Framatome and Westinghouse**~~ **NRC-approved PWR** fuel designs.

SER Section	Paragraph/Sentence	SER Page
3.0 Technical Evaluation	First paragraph - first sentence	2

In order to evaluate DNB in the licensees' NSSS for the ~~Framatome and Westinghouse~~ **NRC-approved PWR** fuel types, the NRC staff reviewed the application of the VIPRE-D code along with the various pertinent code correlations and models, fuel-specific CHF correlations, and DNBR design limits.

3.0 Technical Evaluation	Fourth paragraph - second sentence	2

The licensees only added the new CHF correlations (Reference 1, Appendix A and Reference 2, Appendix B) to accommodate the DNBR assessments of the ~~Framatome and Westinghouse~~ **NRC-approved PWR** fuel types.

3.3 Compliance with the VIPRE-01 SER	Fifth paragraph - item (4)	4

(4) As required by the NRC staff in Reference 4, the following model options were reviewed and justified by the licensees for use in the DNB evaluation of the ~~Framatome fuels~~ **NRC-approved PWR fuel**.

4.0 Conclusion	First paragraph - third sentence	9

The VIPRE-D fuel design limits are also found to be acceptable by the NRC staff for the ~~Framatome and Westinghouse~~ **NRC-approved PWR** fuels types listed herein.

In addition, Dominion has identified the following typographical errors:

SER Section	Paragraph/Sentence	SER Page
3.3 Compliance with the VIPRE-01 SER	Sixth paragraph – Fuel Rod Model – third sentence	5

This approach is consistent with previous approved licensees' methodologies ~~(Reference 10)~~ **(Reference 3)**.

3.5 Correlations and DNBR Limits	Last paragraph – last sentence	8

For the MSLB the limit of 1.45 will be used for pressures 500 to ~~100 psia~~ **1000 psia** and the limit of 1.3 will be used for pressures above 1000 psia.