

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

December 12, 2001

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

Serial No.: 01- 711
CM/RAB R0
Docket Nos.: 50-338
50-339
License Nos.: NPF-4
NPF-7

Gentlemen:

VIRGINIA ELECTRIC AND POWER COMPANY (DOMINION)
NORTH ANNA POWER STATION UNITS 1 AND 2
PROPOSED IMPROVED TECHNICAL SPECIFICATIONS
REQUEST FOR ADDITIONAL INFORMATION
SECTION 3.3.1: DISCUSSION OF CHANGE A.24
BEYOND SCOPE ISSUE (TAC Nos. MB 2073 and MB 2075)

This letter transmits our response to the NRC's request for additional information (RAI) regarding the North Anna Power Station (NAPS) Units 1 and 2 proposed Improved Technical Specifications (ITS). The North Anna ITS license amendment request was submitted to the NRC in a December 11, 2000 letter (Serial No. 00-606). The NRC requested additional information regarding the movement of the constants and gains for the overtemperature delta temperature ($OT\Delta T$) and overpower delta temperature ($OP\Delta T$) allowable values to the Core Operating Limits Report. This information was requested in a NRC letter dated November 7, 2001 (TAC Nos. MB2073 and MB2075).

Attached is the NRC's RAI and our response to the RAI.

If you have any further questions or require additional information, please contact us.

Very truly yours,



Leslie N. Hartz
Vice President - Nuclear Engineering

Attachment

Commitments made in this letter: None.

A001

cc: U.S. Nuclear Regulatory Commission
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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 Virginia Electric and Power Company. 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 12th day of December, 2001.

My Commission Expires: 3-31-04.

Maggie McCause
Notary Public

(SEAL)

Attachment

**Proposed Improved Technical Specifications
Response to Request for Additional Information
Section 3.3.1: Beyond Scope Issue
OT Δ T and OP Δ T Constants and Gains**

**Virginia Electric and Power Company
(Dominion)**

North Anna Power Station Units 1 and 2

North Anna ITS RAI
LCO 3.3.1 – RTS Instrumentation
Beyond Scope Issue (TAC Nos. MB2073 and MB 2075)

RAI: Virginia Electric and Power Company (VEPCO) has proposed to move the constants and gains for the overtemperature ΔT (OT ΔT) and overpower ΔT (OP ΔT) allowable values to the Core Operating Limits Report (COLR). WCAP-14483-A, "Generic Methodology for Expanded Core Operating Limits Report" identifies the NRC-approved methodologies that can be used to permit relocation of the OT ΔT and OP ΔT constants and gains to the COLR. In the safety evaluation for WCAP-14483-A, the staff has identified WCAP-8745-P-A, "Design Bases for Thermal Overpower Delta-T and Thermal Overtemperature Delta-T Trip Function," as the approved methodology for relocation of the specified values to the COLR. WCAP-8745-P-A provides a methodology used to calculate the OT ΔT and OP ΔT gains and allowable values.

In a conference call held on October 25, 2001, VEPCO stated that OT ΔT and OP ΔT allowable values were being determined using NRC-approved methodologies. VEPCO has since identified EE-0101 as the methodology used to calculate the allowable values. The staff is unfamiliar with the specified technical report. **Comment:** Therefore, VEPCO is requested to provide one of the following: 1) a copy of the staff's safety evaluation approving the North Anna methodology, 2) the submittal of the North Anna methodology for technical review and approval by the staff, or 3) technical specification values for OT ΔT and OP ΔT gains and allowable values that have been calculated using NRC-approved methodologies.

Response: The company will take the action proposed in the Comment, with certain modifications. VEPCO (Dominion) is currently using an NRC-approved methodology to calculate the OT ΔT and OP ΔT setpoints. The methodology used by Dominion to determine the OT ΔT and OP ΔT setpoints at North Anna is WCAP-8745-P-A, "Design Bases for Thermal Overpower Delta-T and Thermal Overtemperature Delta-T Trip Function." EE-0101 does not describe a methodology for calculating OT ΔT and OP ΔT . EE-0101 summarizes the results of various setpoint calculations into a single reference document.

WCAP-14483-A, "Generic Methodology for Expanded Core Operating Limits Report," dated November 1995 documents the generic basis for relocating the OT ΔT and OP ΔT values from the Technical Specifications to the COLR in Section 3.0, "Relocation of the OT ΔT and OP ΔT Setpoint Parameter Values to the COLR." The information in Section 3.0 is applicable to North Anna with two exceptions. First, the NRC-approved reload methodology used for North Anna is VEP-FRD-42, Rev. 1-A, "Reload Nuclear Design Methodology," dated September 1986, instead of the referenced Westinghouse reload methodology. Second, unlike the description in paragraph D of Section 3.2, plant-specific evaluations have determined that it is not always necessary to revise the T' and T'' constants in the equations for OT ΔT and OP ΔT , respectively, when operating at reduced T-avg.

With this response, Dominion is informing the NRC that we are adopting WCAP-14483-A, "Generic Methodology for Expanded Core Operating Limits Report," and WCAP-8745-P-A, "Design Bases for Thermal Overpower Delta-T and Thermal Overtemperature Delta-T Trip Function." In a future supplement to the North Anna ITS submittal, these documents will be added to the list of analytical methods used to determine the core operating limits provided in ITS 5.6.5, "CORE OPERATING LIMITS REPORT (COLR)".