VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

March 8, 1982

R. H. LEASBURG
VICE PRESIDENT
NUCLEAR OPERATIONS

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
Attn: Mr. Robert A. Clark, Chief
Operating Reactors Branch No. 3
Division of Licensing
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Serial No: 131
FR/GLD: bjc
Docket No: 50-339

License No: NPF-7

Dear Mr. Denton:

RELOAD INFORMATION FOR CYCLE 2
NORTH ANNA NUCLEAR POWER STATION UNIT NO. 2

North Anna Unit No. 2 is scheduled to complete its first cycle of operation on March 5, 1982 and will go into an outage for refueling. The purpose of this letter is to advise you of our plans for the Cycle 2 reload core and to transmit to you the Core Surveillance Report containing specific power distribution limits applicable for Cycle 2 operation.

The Cycle 2 reload core was analyzed in accordance with the methodology documented in Westinghouse Topical Report WCAP-9272 entitled "Westinghouse Reload Safety Evaluation Methodology." The results of this analysis indicated that no key analysis parameters would become more limiting during Cycle 2 operations than the values assumed in the currently applicable safety analysis. Further, the analysis demonstrated that the current Technical Specifications, as approved through Operating License Amendment No. 18, are appropriate and require no additional changes.

A detailed review of the Westinghouse methodology, analysis techniques and results has been conducted by our technical staff. In addition, a review has been performed by both the Station Nuclear Safety and Operating Committee and the Safety Evaluation and Control staff. It has been determined that no unreviewed safety questions as defined in 10CFR 50.59 will exist as a result of the Cycle 2 reload core.

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Attachment 1 provides the Core Surveillance Report containing the specific Cycle 2 values for Fxy and the axial power distribution surveillance limit, Pm. This report is being provided as required by letter (Serial No. 069, dated February 5, 1982) from the NRC (L. B. Engle) to me approving removal of these specific values from the Technical Specifications.

Verification of the reload core will be performed through a startup physics testing program. Unless otherwise indicated, this program will be consistent with documentation provided in our topical report VEP-FRD-36A, "Control Rod Reactivity Worth Determination by the Rod Swap Technique," transmitted by our letter to you dated January 16, 1981 (Serial No. 023). This report is a revision of VEP-FRD-36, an earlier topical report of the same title.

This letter is provided for your information. However, should you have questions, please contact us at your earliest convenience.

Very truly yours,

R. H. Leasburg

Attachment

(1) Core Surveillance Report for North Anna 2, Cycle 2

cc: Mr. James P. O'Reilly, Regional Administrator
Office of Inspection and Enforcement
Region II

ATTACHMENT 1

Core Surveillance Report

North Anna 2, Cycle 2

TABLE 1

NORTH ANNA UNIT 2, CYCLE 2 CORE SURVEILLANCE LIMITS, FQ = 2.10

I. The F-XY limits for RATED THERMAL POWER within specific core planes shall be:

1. Fxy-RTP $\leq$ 1.71 for all core planes containing bank "D" control rods,

2. Fxy-RTP $\leq$ 1.57 for all unrodded core planes from 0 to 19% of core height,

3. Fxy-RTP $\leq$ 1.60 for all unrodded core planes from 19% to 71% of core height, and

4. Fxy-RTP $\leq$ 1.57 for all unrodded core planes above 71% of core height.

II. The axial power distribution surveillance threshold power level shall be:

1. Pm = 100% of RATED THERMAL POWER.

NORTH ANNA UNIT 2, CYCLE 2

MAXIMUM ($F_Q^T \cdot P_{Rel}$) vs. AXIAL CORE HEIGHT

DURING NORMAL CORE OPERATION