

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

W. L. STEWART
VICE PRESIDENT
NUCLEAR OPERATIONS

March 3, 1983

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. 091
GLD:cdk:0325C
Docket No. 50-339
License No. NPF-7

Gentlemen:

RELOAD INFORMATION FOR CYCLE 3
NORTH ANNA NUCLEAR POWER STATION UNIT NO. 2

North Anna Unit No. 2 is scheduled to complete its second cycle of operation on March 31, 1983, and will go into an outage for refueling. The purpose of this letter is to advise you of our plans for the Cycle 3 reload core and to transmit to you the Core Surveillance Report containing specific power distribution limits applicable for Cycle 3 operation.

The Cycle 3 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 3 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. 28, are appropriate and require no additional changes.

The analyses necessary to support Cycle 3 operation have been performed and reviewed by our technical staff, using the Westinghouse methodology and analysis techniques. 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 10 CFR 50.59 will exist as a result of the Cycle 3 reload core.

Attachment 1 provides the Core Surveillance Report containing the specific Cycle 3 values for Fxy and the axial power distribution surveillance limit, Pm. This report is being provided as required by North Anna Unit No. 2 Technical Specification 6.9.1.10 and is based on the recently approved total peaking factor (Fq) limit of 2.20.

Ap01

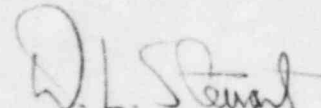
VIRGINIA ELECTRIC AND POWER COMPANY TO

Mr. Harold R. Denton, Director

Verification of the reload core will be performed through a start-up physics testing program. Unless otherwise indicated, this program will be consistent with the program proposed for North Anna Unit No. 2 in the Vepco letter from Mr. R. H. Leasburg to you dated April 8, 1982, Serial No. 204.

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

Very truly yours,



W. L. Stewart

Attachment

(1) Core Surveillance Report for North Anna 2, Cycle 3

cc: Mr. James P. O'Reilly,
Regional Administrator
Region II

ATTACHMENT 1

Core Surveillance Report

North Anna 2, Cycle 3

TABLE 1

NORTH ANNA UNIT 2, CYCLE 3 CORE SURVEILLANCE LIMITS, $FQ = 2.20$

I. The F_{xy} limits for RATED THERMAL POWER within specific core planes shall be:

1. $F_{xy}\text{-RTP} \leq 1.71$ for all core planes containing bank "D" control rods, and
2. $F_{xy}\text{-RTP} \leq 1.65$ for all unrodded core planes between 15 % and 25 % of core height, or
3. $F_{xy}\text{-RTP} \leq 1.60$ for all unrodded core planes between 25 % and 55 % of core height, or
4. $F_{xy}\text{-RTP} \leq 1.65$ for all unrodded core planes between 55 % and 85 % of core height.

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

1. $P_m = 100\%$ of RATED THERMAL POWER.

NORTH ANNA UNIT 2, CYCLE 3

MAXIMUM ($F^T Q \times P \text{ REL}$) VS. ACTUAL CORE HEIGHT
DURING NORMAL CORE OPERATION