

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

W. L. STEWART
VICE PRESIDENT
NUCLEAR OPERATIONS

July 18, 1984

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

Serial No. 415
PSE/JOE:klh:2005N
Docket No. 50-339
License No. NPF-7

Gentlemen:

VIRGINIA ELECTRIC AND POWER COMPANY
NORTH ANNA POWER STATION UNIT NO. 2
RELOAD INFORMATION FOR CYCLE 4

North Anna Unit No. 2 is scheduled to complete its third cycle of operation on August 17, 1984, and will go into an outage for refueling. The purpose of this letter is to advise you of our plans for the Cycle 4 reload core and to transmit to you the Core Surveillance Report containing specific power distribution limits applicable for Cycle 4 operation.

The Cycle 4 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 4 operation 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. 40 are appropriate and require no additional changes.

The analyses necessary to support Cycle 4 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 4 reload core.

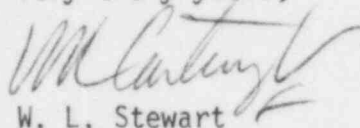
Attachment 1 provides the Core Surveillance Report containing the specific Cycle 4 values for Fxy and the axial power distribution surveillance limit, Pm. This report is being provided as required by North Anna Unit No. 2 Technical Specification 6.9.1.10 and is based on the current total peaking factor (F_Q) limit of 2.20.

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This letter is provided for your information and planning. 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 4

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

Mr. Leon B. Engle
NRC Project Manager - North Anna
Operating Reactors Branch No. 3
Division of Licensing

Mr. M. W. Branch
NRC Resident Inspector
North Anna Power Station

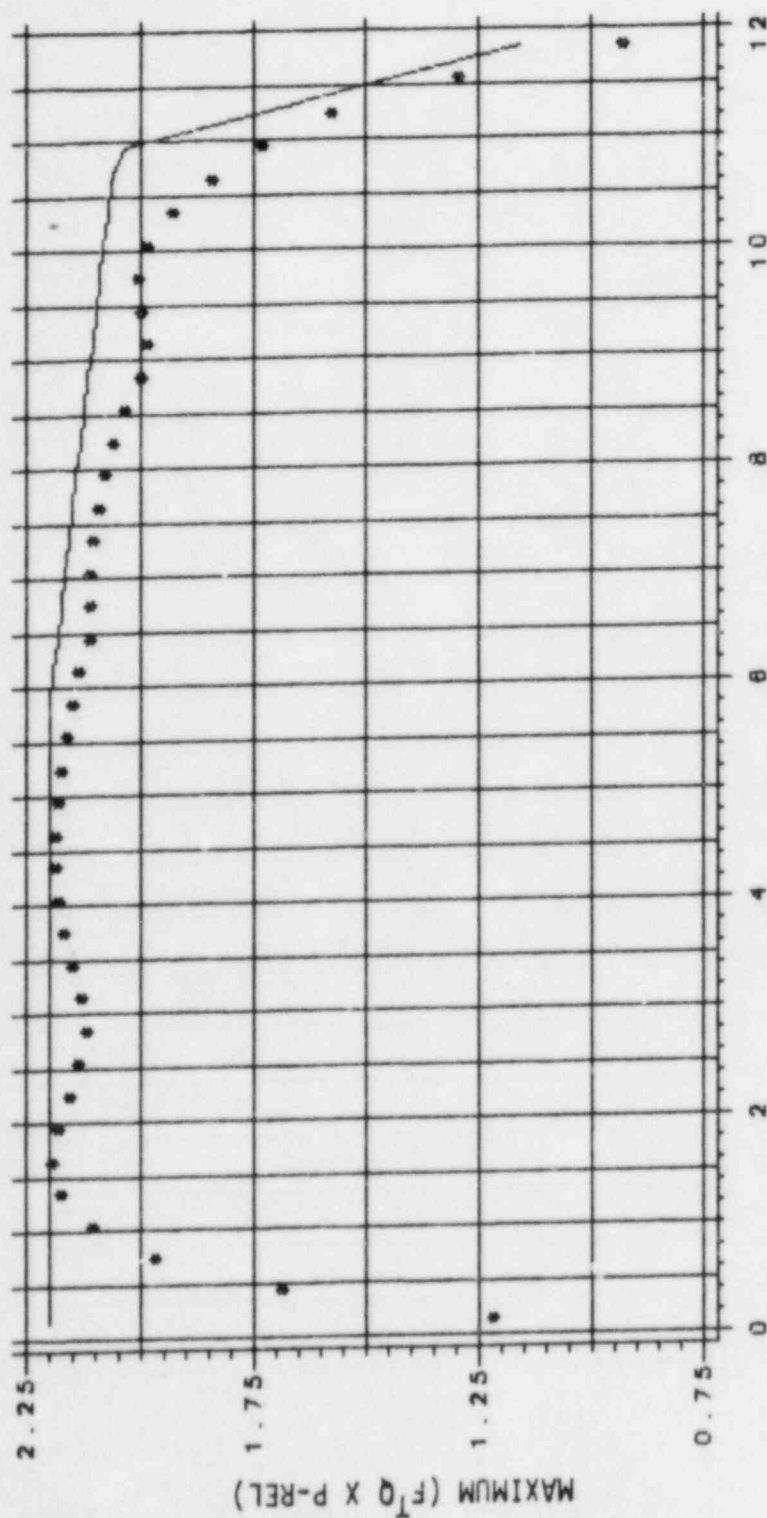
ATTACHMENT 1
CORE SURVEILLANCE REPORT
NORTH ANNA 2, CYCLE 4

TABLE 1NORTH ANNA UNIT 2, CYCLE 4 CORE SURVEILLANCE LIMITS, FQ = 2.20

- I. The F-xy limits for RATED THERMAL POWER within specific core planes shall be:
 1. $F_{xy-RTP} \leq 1.71$ for all core planes containing bank "D" control rods, and
 2. $F_{xy-RTP} \leq 1.61$ for all unrodded core planes.
- II. The axial power distribution surveillance threshold power level shall be:
 1. $P_m = 100\%$ of RATED THERMAL POWER.

NORTH ANNA UNIT 2, CYCLE 4

MAXIMUM ($F_{TQ} \times P-REL$) VS. AXIAL CORE HEIGHT
DURING NORMAL OPERATION



LINE = TECH SPEC LIMIT

STAR = CALCULATED FQ