

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

W. L. STEWART
VICE PRESIDENT
NUCLEAR OPERATIONS

December 3, 1985

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
Attn: Mr. Steven A. Varga, Chief
Operating Reactors Branch No. 1
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Serial No. 85-136A
NO/MSW/acm
Docket Nos. 50-280
50-281
License Nos. DPR-32
DPR-37

Gentlemen:

VIRGINIA ELECTRIC AND POWER COMPANY
SURRY POWER STATION UNIT NOS. 1 AND 2
REQUEST FOR PARTIAL EXEMPTION FROM GENERAL DESIGN CRITERION 4-SUPPLEMENT

By letter dated November 5, 1985 (Serial No. 85-136A), the Virginia Electric and Power Company requested an exemption from General Design Criterion (GDC) 4 applicable to Surry Power Station Unit Nos. 1 and 2 to the extent that protection against the dynamic effects of postulated pipe rupture on primary system components and piping may be eliminated.

The Attachment to that letter provided the scope and justification for the exemption request. The scope of the request included elimination of need for any backfit modifications reviewed by NRC Generic Letter 84-04. In addition, the scope of the request would allow elimination of eighteen large bore snubbers on each unit's Reactor Coolant System which are required only for pipe rupture loading.

The justification for the request was based upon the use of advanced fracture mechanics technology as applied to primary system piping in Westinghouse Electric Corporation topical reports WCAP-9958, Revision 2 and WCAP-9787, Revision 0. Generic Letter 84-04 provided the NRC staff Safety Evaluation Report for analysis of materials submitted for a group of utilities operating PWR's to resolve generic issue A-2. The staff evaluation concluded that, provided certain conditions were met, an acceptable technical basis exists so that dynamic effects resulting from large breaks in main coolant loop piping need not be considered as a design basis for the plants for which the analysis applies, including Surry Units 1 and 2.

The aforementioned November 5, 1985 letter provided for additional submittals to be made to the NRC to more fully address the subjects of loading evaluation with the affected snubbers removed; evaluation of the RCS leakage detection systems; and a safety balance assessment. This letter transmits these three evaluations which have been developed in conjunction with our consultants--Westinghouse Electric Corporation and Stone & Webster Engineering Corporation.

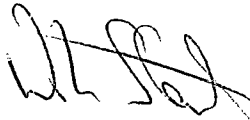
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To take advantage of the relief offered through Generic Letter 84-04 during the 1986 Surry refueling outages, your formal approval of the exemption request by February 1986 is requested. In order to expedite your approval, a technical meeting has been scheduled through the NRC Surry Project Manager for December 19, 1985, to allow us to review our request with you and answer any questions you may have.

If you have any questions or require additional information to support this effort, please contact us immediately.

Very truly yours,



W. L. Stewart

Attachments:

1. Loading Evaluation
2. Leakage Detection System Assessment
3. Safety Balance Assessment

cc: Dr. J. Nelson Grace
Regional Administrator
NRC Region II

Mr. D. J. Burke
NRC Resident Inspector
Surry Power Station