

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

November 10, 1994

United States Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D. C. 20555

Serial No. 94-595
NL&P/ETS R
Docket Nos. 50-280
50-281
50-338
50-339
License Nos. DPR-32
DPR-37
NPF-4
NPF-7

Gentlemen:

VIRGINIA ELECTRIC AND POWER COMPANY
SURRY POWER STATION UNITS 1 AND 2
NORTH ANNA POWER STATION UNITS 1 AND 2
SEISMIC VERIFICATION OF EXISTING, NEW AND
REPLACEMENT EQUIPMENT, INCLUDING RG 1.97 EQUIPMENT

Over the past several years, the Seismic Qualification Utility Group (SQUG) developed an approach to resolve Unresolved Safety Issue A-46, "Seismic Qualification of Equipment in Operating Plants." The NRC approved this approach and in May 1992 issued its final Supplemental Safety Evaluation Report (SSER-2) on SQUG's Generic Implementation Procedure (GIP), Revision 2. The SSER states that, "... (GIP) criteria and procedures may be applied to new and replacement equipment on a case-by-case basis with the provision that the seismic evaluations are performed in a systematic and controlled manner..."

The SSER acknowledges that it is impractical and inconsistent to require that new equipment should meet current seismic qualification requirements, whereas the seismic adequacy of all other safe-shutdown equipment is verified through the USI A - 46 (GIP) procedures. However, the SSER also states that any previous commitments, such as for RG 1.97 and TMI Action Plan Item II.F.2, should not be superseded by the resolution methods of the GIP. Therefore, Virginia Electric and Power Company (Virginia Power) is requesting NRC approval to use the GIP/SSER methodology as an option, and on a systematic, controlled and case-by-case basis, to verify the seismic adequacy of any existing, new or replacement equipment, including RG 1.97 and TMI Action Plan II.F.2 equipment, at Surry and North Anna Power Stations.

180042
9411210274 941110
PDR ADOCK 05000280
P PDR

AD251/0

Virginia Power concurs with the Staff that the GIP/SSER procedures and criteria can be used to verify the seismic adequacy of existing, new and replacement equipment. Additionally, it is our position that systematic, controlled and case-by-case use of the GIP/SSER procedures will meet the intent of General Design Criterion 2 of 10 CFR Part 50 Appendix A for those existing, new and replacement equipment, including RG 1.97 equipment, for which we may have made previous seismic design criteria commitments. A discussion of our previous seismic commitments, and the corresponding use of the USI A-46 procedures and criteria for them is provided below.

Our original licensing commitment for seismic qualification of equipment at North Anna was IEEE Std. 344-1971, and for Surry, the licensing basis did not commit to using any specific industry standard but rather used good engineering practices or customized test and analysis criteria which were Surry specific. Virginia Power intends to use the USI A-46 procedures and criteria, as an option, for those existing, new and replacement equipment for which these original commitments are still applicable. This is consistent with SSER-2 on the GIP.

Over the past several years, a number of new and replacement equipment items at both North Anna and Surry have been procured and installed to the more current industry standards of IEEE Std. 344-1975 and IEEE Std. 344-1987, as endorsed by RG 1.100 Revisions 1 and 2, respectively. Use of these updated seismic qualification standards as conservative substitute standards has been documented in our specifications, procedures, and Design Basis Documents. However, since these actions do not formally constitute licensing basis commitments, use of the USI A-46 procedures and criteria, as an option, is again consistent with SSER-2 for future replacement of such equipment or parts. In other cases, we have revised our Safety Analyses Reports or have otherwise informed the NRC of our upgrading of commitments to IEEE Std. 344-1975 and IEEE Std. 344-1987. In these cases also, it is our position that systematic, controlled, and case-by-case use of the USI A-46 procedures and criteria is appropriate for future replacement of equipment or parts.

Specifically, with regard to the RG 1.97 and TMI Action Plan Items, our previous seismic qualification commitments were defined in our January 31, 1984 letters (Serial No. 053 and 054) for Surry Units 1 and 2, and North Anna Units 1 and 2, respectively. These letters identified the extent of our compliance to RG 1.100, and stated that the review basis for both North Anna and Surry was IEEE Std. 344-1971 or the seismic conditions referenced in the test reports for existing equipment. For North Anna, we also stated that the test reports were reviewed to determine compliance with the intent of IEEE Std. 344-1975. Additionally, our responses to NUREG-0737, TMI Action Plan, Item II.F.2, "Instrumentation for the Detection of Inadequate Core Cooling" for Surry and North Anna committed to qualify the inadequate core cooling instrumentation in accordance with the intent of RG 1.97 and Appendix B of NUREG-0737 criteria. Consistent with these commitments, our programs have addressed seismic qualification of such equipment. As part of providing closure to an NRC Notice of Deviation, we specifically used the SQUG methodology for the verification of seismic adequacy of certain RG 1.97 indicators and recorders at Surry for which the original seismic test data had been determined to be incomplete or inadequate. We have previously advised you of our intention to use the SQUG methodology for these

instruments via our letter dated October 8, 1990 (Serial No. 90-568). This approach is consistent both with our licensing basis commitments and with SSER-2.

In view of the site specific seismic licensing basis commitments summarized above, Virginia Power requests NRC approval to use the GIP/SSER methodology as an option, and on a systematic, controlled and case-by-case basis, to verify the seismic adequacy of any existing, new or replacement equipment, including RG 1.97 and TMI Action Plan II.F.2 equipment, at Surry and North Anna Power Stations. This clarification is being requested as part of our ongoing assessment of regulatory requirements of marginal safety significance.

Should you have any questions or need additional information, please contact us.

Very truly yours,



James P. O'Hanlon
Senior Vice President - Nuclear

cc: U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, N. W.
Suite 2900
Atlanta, Georgia 30323

Mr. M. W. Branch
NRC Senior Resident Inspector
Surry Power Station

Mr. R. D. McWhorter
NRC Senior Resident Inspector
North Anna Power Station

Mr. Eugene V. Imbro, Director
Regulatory Review Group/CBLA Programs
United States Nuclear Regulatory Commission
Washington, D. C. 20555