DISTRIBUTION Docket File 50-280 TERA <del>50-2</del>81 J. Buchanan and NRC PDR (2) ACRS (16) MAY 2 5 1979 Local PDR 1) Masnan NRR Rdg J. P. Knight ORB1 Rdg L. Heller V. Stello J. Schauer Docket Nos. 50-280 D. Eisenhut and 50-281 R. Vollmer B. Grimes W. Russell J. Carter Mr. W. L. Proffitt A. Schwencer Senior Vice President - Power D. Neighbors Virginia Electric and Power Company D. Wigginton Post Office Box 26666 C. Parrish Richmond, Virginia 23261 P. Kreutzer 0ELD Dear Mr. Proffitt: I&E (3)

The purpose of this letter is to state our position regarding the use of soil structure interaction for the seismic pipestress analyses being performed for Surry Power Station, Units 1 and 2.

Based on the results of the information you provided by your letter dated May 24, 1979 in response to our May 18, 1979 letter and in other meetings, we confirm that soil structure interaction methodology may be used for Surry provided that seismic stresses calculated are increased by a factor of 1.5. This factor applies to the seismic stresses derived from amplified response spectra using 1% damping. It is further acknowledged that certain individual analyses may require consideration on a case by case basis.

The earthquake of primary safety concern is the SSE. However, due to the nonlinearities of the soil which are considered in the soil structure interaction analyses, the stiffness of the subgrade is a function of the earthquake level. Since the floor response spectra are sensitive to the stiffness of the subgrade, they too are dependent on the earthquake level. Therefore, it is requested that the following two points be addressed:

 Discuss in detail why it can be concluded that the piping analyzed for the SSE condition will safely withstand all earthquakes up to and including the SSE.

2. For any piping systems which meet SSE requirements but do not meet the FSAR OBE design requirements, provide the level of earthquake for which the FSAR OBE design requirements are met.

DSS:AD:E JRKhight 05/1/79

DOR:S&P WTRussell 05/**1**%/79 DOR: EB VNoorian

Sincerely,

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DOR: ORBA DOR: ORBA DOR: AD/S&P

JDNe Aghbors: jbASchwencer RVolumer D. C. Eisenhut; Deputy Director

05/25/79 05/ /79 05/ /79 Division of Operating Reactors



## UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

May 25, 1979

Docket Nos. 50-280 and 50-281

Mr. W. L. Proffitt Senior Vice President - Power Virginia Electric and Power Company Post Office Box 26666 Richmond, Virginia 23261

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Sincerely,

D. G. Eisenhut, Deputy Director Division of Operating Reactors

cc: See next page

Mr. W. L. Proffitt Virginia Electric and Power Company

cc: Mr. Michael W. Maupin Hunton and Williams Post Office Box 1535 Richmond, Virginia 23213

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