

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

August 1, 1979

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Serial No. 453A
PSE&C/CMRjr:mac:wang

Docket Nos. 50-280

License Nos. DPR-32

Dear Mr. Denton:

REVISED REPORT ON THE REANALYSIS OF
SAFETY RELATED PIPING SYSTEMS
SURRY POWER STATION UNIT 1

The Nuclear Regulatory Commission Order to Show Cause of March 13, 1979 required that certain piping systems associated with Surry Power Station Units 1 and 2 be reanalyzed using an appropriate piping code to account for seismic loads. Pursuant to that Order, Vepco has submitted numerous documents to the NRC relating to the conduct and progress of the reanalysis effort. One such report was submitted June 5, 1979 (Serial No. 453) which presented in detail the status of the reanalysis for all problems. The purpose of the attached report is to update our June 5 report.

The analysis effort has progressed substantially, and we are now confident that the Unit can be put back in service while the analysis continues without significantly affecting the health and safety of the public or our operating personnel. We therefore request that Surry Unit 1 be allowed to resume operation immediately after modifications identified in this report are completed.

The attached report represents the completion of a substantial amount of work to the extent that we believe interim operation of the Unit is warranted and justifiable while additional analysis continues. The report contains information based on the following:

1. Completion of the pipe stress reanalyses for all pipe stress problems formerly run on the SHOCK II computer program.
2. Completion of detailed support analyses for SHOCK II problems inside the containment structure.
3. Tabulation of loads for all supports outside the containment, for which detailed analyses are not yet complete.

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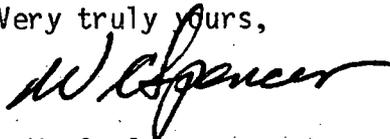
Completion of the above items represents a substantial milestone in the overall analysis effort. All piping and supports as analyzed and modified (as a result of the analysis) are capable of performing their intended function without experiencing an overstressed condition. This includes all piping systems under the Order and those supports within the containment. All modifications associated with the pipe stress reanalysis and all modifications associated with support reanalysis within the containment are scheduled to be completed on or about August 10, 1979. Analysis of remaining supports outside the containment will continue and be completed by October 15.

Six problems have been reanalyzed by NUPIPE which were originally analyzed by simplified analysis (hand calculation). Five of the six problems are due to change in Velan valve weights identified in I.E. Bulletin 79-04. The pipe stress on all of these problems is acceptable. All 31 supports on these five problems have been analyzed, and three minor modifications were identified. These modifications will be completed prior to startup.

The information requested in Enclosure III to the NRC's letter of April 2, 1979, is presently available in part for inspection if additional review of the reanalysis on these problems (not specifically addressed in the "Show Cause Order") is required. Full problem packages will be completed 60 days after startup.

We would appreciate your prompt review and approval of our request for startup of Surry Unit 1 at the earliest possible opportunity as the availability and cost of power are being severely impacted by the shutdown of Surry. If you have any questions, please contact us.

Very truly yours,



W. C. Spencer
Vice President - Power Station
Engineering and Construction
Services