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VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

July 8, 1980

Mr. James P. O'Reilly, Director
Office of Inspection & Enforcement
U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, Suite 3100
Atlanta, Georgia 30303

Serial No. 591
PSE&CS/CMR:jr:mac:wang

Docket No. 50-281

License No. DPR-37

Dear Mr. O'Reilly:

I.E. BULLETIN 79-14 SYSTEMS OUTSIDE CONTAINMENT
SURRY POWER STATION UNIT 2

The purpose of this letter is to identify those actions which we propose to take with regard to I.E. Bulletin 79-14 upon start-up of Surry Power Station Unit 2. Our proposal is predicated on previous precedents and commitments set for Surry and other power stations under similar circumstances, and we therefore consider our proposal to be consistent with our mutual concern for safe operation of the unit.

Our request for start-up of Unit 2 in our letter of February 26, 1980 (Vepco Serial No. 144) delineated what work would be completed prior to start-up. The work that would not be completed prior to start-up was identified as support analysis and modifications on I.E. Bulletin 79-14 systems outside containment. The lines for these systems are identified on the Surry Unit 2 QA Category I Pipe Line Table. Analysis and modifications will continue on these systems based on the following logic:

1. A screening process will be used for Technical Specification systems to identify significantly overstressed supports, for which immediate action will be taken.

   The screening process will involve two categories of supports:

   a. The first category consists of those modification packages which Vepco has received for the identified systems outside the containment up to the time of start-up. The screening process for these supports will be completed within 30 days from the start-up date.

   b. Those modification packages which Vepco receives after start-up is the second category. The screening process for this category of modification packages will in all cases take place within 30 days from the receipt of the modification packages from Vepco's Architect-Engineers.

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2. A significantly overstressed support is defined to be one that fails to have a Factor of Safety of at least 2 with respect to ultimate capacity for the Design Basis Earthquake load case and also exceeds the criteria in Subsection NF of ASME III, Appendix F, Rules for Evaluation of Faulted Conditions.

3. For supports that are significantly overstressed as defined by the criteria in item 2 above, the applicable plant Technical Specifications will be invoked to determine operability and reports will be submitted as required.

4. Only supports that are significantly overstressed, as defined above, will be designated as nonconformances.

5. All modification packages for supports will be issued by Vepco's Architect-Engineers within 90 days of the date of start up. At the conclusion of this 90 day period, Vepco will provide a completion date for installation of all remaining modifications.

The only exceptions to this logic and schedule are portions of the service water system containing fiber glass piping identified in our letter of March 17, 1980 (Serial No. 195). Your approval for a separate schedule on this piping was granted in Mr. Charles E. Murphy's letter of May 29, 1980 (RII:RMC 50-280).

The completion of analysis of the remaining systems outside the containment for I.E. Bulletin 79-14 while the unit is operational represents a significantly reduced risk to the health and safety of the public. Our conclusions are based on the following observations regarding this approach:

1. All systems which were originally dynamically analyzed as a result of the March 13, 1979 Order to Show Cause have now been reanalyzed, both inside and outside the containment, and resulting modifications have been installed. Completion of this reanalysis assures that the plant can attain a hot standby condition for all operating and design conditions. The Show Cause Order generally affected piping greater than 6" in diameter.

2. The I.E. Bulletin 79-14 systems for which reanalysis is continuing are outside containment and are accessible for all normal operating conditions. This will expedite installation for required modifications (nonconformances) and facilitate continued installation of other supports.

3. All new supports and modified supports due to pipe stress reanalysis for I.E. Bulletin 79-14 on Technical Specification systems outside containment will already be completed prior to start-up.

4. The I.E. Bulletin 79-14 systems are generally 2 1/2" to 6" diameter piping. These systems are of less safety significance than the Show Cause systems and therefore can be treated with a generally reduced severity level.

We believe our approach to determining those supports with significantly overstressed conditions is in conformance with the criteria suggested in I.E. Bulletin 79-14. This general approach was also followed for Show Cause systems while analyses continued on Surry power Station Unit 1 as directed by the NRC Order of August 22, 1979. We also understand that this approach was also followed under similar circumstances other utilities. The precedents are numerous, and the reasoning presents a sound, responsible position toward continued safe operation of the unit with no significant risk to the health and safety of the public.

In the past year and a half, Vepco has undertaken and completed a very extensive reanalysis effort for the Surry Power Station. This effort has resulted in an increased confidence level of our piping systems to perform their intended functions. The only area remaining for completion is a portion of the I.E. Bulletin 79-14 systems outside the containment, for a smaller scope and reduced significance from the original scope of reanalyzing all piping systems 2 1/2" diameter and greater for both inside and outside the containment. The approach offered herein has been used by Vepco and others to complete their analysis and is expected to be satisfactory once again.

Please contact us if there are outstanding questions on our proposal. We respectfully request confirmation as soon as possible as Unit 2 is presently scheduled for commercial operation at the end of July.

Very truly yours,

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

cc: Mr. Victor Stello, Director
Office of Inspection and Enforcement

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation