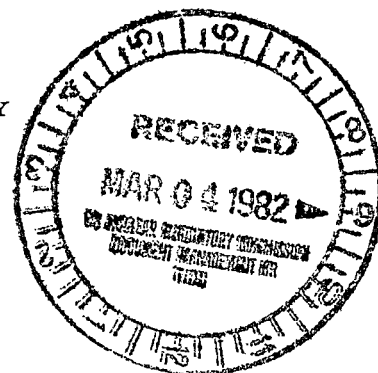


VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261



R. H. LEASBURG
VICE PRESIDENT
NUCLEAR OPERATIONS

February 24, 1982

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. 329A
NO/RGS:lms
Docket No. 50-281
License No. DPR-37

Gentlemen:

REVISION TO RESPONSE TO SAFETY EVALUATION REPORT
FOR ENVIRONMENTAL QUALIFICATION OF SAFETY RELATED ELECTRICAL EQUIPMENT
CABLE TERMINATIONS AND SPLICES
I.E. BULLETIN 79-01B 90-DAY REVIEW
SURRY POWER STATION UNIT 2

This letter provides a revision to Veeco's response to the Safety Evaluation Report (SER) submitted to you on August 24, 1981 for Surry Unit 2.

In our SER response we indicated that, "As part of the field verification program, all terminal blocks in safety related circuits located inside containment were replaced with qualified Raychem Splices (WCSF-N)." During a January 1982 meeting with our architect-engineer on the environmental qualification modification project, we were informed that apparently a number of cable terminations had not been modified during the December 1981 Refueling Outage. In response to this information, we made a full-power Unit 2 Containment entry to check sample circuits and conducted a search of our documentation files. As a result of our review, it appears that a large percentage of the subject cable terminations were not replaced with the qualified Raychem Splices.

In view of the above situation, it is our intent to modify a significant number of the cable terminations in the Unit 2 Containment Building with the Raychem Splice material during the upcoming May 1982 Spring Maintenance Outage on Unit 2. The remaining cable terminations shall be modified with the qualified material during the Fall 1982 Maintenance Outage.

It is my understanding that the terminal blocks and splices that exist in the plant have been specified and installed in strict accordance with established power industry practices. We have identified three (3) types of terminal blocks that are installed in the Unit 2 Containment:

*Adg
5/10*

1. General Electric terminal blocks -

The GE EB 25 AW terminal blocks are made of phenolic material which is not affected by less than 10^7 Rads (NUREG C12-1682, SANDBO-1957 Rv, page 56, Section C, Para. 1). The blocks were chemically sprayed with boric acid concentration of 2600 ppm at an average temperature of 286°F for about 25 hours (FIRL-DOCK 50-213). These terminal blocks have been irradiated up to 10^8 Rads by Wyle Labs and presently are under test by Burndy for more severe LOCA temperature, pressure and chemical spray profiles for 30 days.

2. Buchanan terminal blocks -


The block phenolic material is typical of acceptable industrial quality terminal blocks. These terminal blocks are similar in quality to the GE EB type block. In addition, they are protected by NEMA enclosures. The environmental conditions at the block location outside the cranewell are relatively mild, particularly the 40 year plus LOCA gamma dose of only 7.4 Megarads.

3. Ceramic terminal blocks -

The ceramic type terminal blocks are mounted in junction boxes serving the hydrogen recombiners. The terminal blocks are installed in NEMA enclosures which provides significant protection against moisture and chemical spray. The ceramic material provides radiation resistance and evidence of high-temperature suitability.

On the basis of the above discussions, it is reasonable to conclude that these terminal blocks will perform their intended safety function when exposed to harsh environments. Therefore, continued operation of Unit 2 with this equipment, albeit incomplete qualification documentation, will have no impact on plant safety.

Very truly yours,



R. H. Leasburg

Attachments

cc: Mr. Richard C. DeYoung, Director
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