

Carolina Power & Light Company

001 20 1983

Director of Nuclear Reactor Regulation Attention: Mr. D. B. Vassallo, Chief Operating Reactors Branch No. 2 Division of Licensing United States Nuclear Regulatory Commission Washington, DC 20555

> BRUNSWICK STEAM ELECTRIC PLANT, UNIT NOS. 1 AND 2 DOCKET NOS. 50-325 AND 50-324 LICENSE NOS. DPR-71 AND DPR-62 RAYCHEM CABLE DEMONSTRATION PROGRAM

Dear Mr. Vassallo:

In a letter dated February 28, 1983, Carolina Power & Light Company (CP&L) submitted for your review and comment a draft document outlining a test program intended to demonstrate the suitability of certain cables in use in Safety Class 1E systems at the Brunswick Steam Electric Plant (BSEP). The subject cable is generally described as unshielded multiconductor Raychem/Flametrol cable having a combined insulation thickness of 120 mils or more. In subsequent meetings and telephone conversations, members of your staff made a number of comments which CP&L has taken note of in preparing the enclosed program outline.

Attachment (1) outlines a test which will demonstrate the capability of Raychem cable installed at BSEP to perform its function in the environment of a postulated design basis event in the Brunswick plant. The program was developed with the guidance of IEEE Standards 323-1974, 383-1974 and Regulatory Guide 1.131 using the plant specific environment for BSEP. It includes descriptions of methods used in selecting test samples and determining accelerated aging parameters used in preaging the cables prior to testing.

Attachment (2) describes a post-LOCA test which is intended to determine the residual margin in addition to those demonstrated margins of time, temperature, pressure, voltage and current. Because neither of these programs is concerned with the generic qualification of the cable, no residual margin requirement exists, and therefore, this post-LOCA test is not addressed in the demonstration program described above.



A001 111

411 Fayetteville Street * P. O. Box 1551 * Raleigh, N. C. 27602

D. B. Vassallo

The primary objective of this program is to assure that the Raychem cable installed at Brunswick will perform its intended function throughout the harsh environment of a postulated LOCA event. Therefore, the "pass-fail" determination for the program shall be based on the ability of the test samples to sustain operating voltage throughout the environmental test exposure only.

Carolina Power & Light Company expects to begin the described test sequence by January 1984. Therefore, we request that the NRC provide written concurrence with the intent and methods of the enclosed program outline as soon as possible so as not to impact scheduling of the required test facilities.

Should you have any questions regarding this issue, please contact a member of our Licensing Staff.

Yours very trul P.W. Home

P. W. Howe Vice President Brunswick Nuclear Project

JSD/ccc (8016JSD) Attachments

cc: Mr. D. O. Myers (NRC-BSEP) Mr. J. P. O'Reilly (NRC-RII) Mr. S. D. MacKay (NRC)