

CP&L

Carolina Power & Light Company

P.O. Box 101, New Hill, N.C. 27562
July 19, 1984

Mr. James P. O'Reilly
United States Nuclear Regulatory Commission
Region II
101 Marietta Street, Northwest (Suite 2900)
Atlanta, Georgia 30323

NRC-240

CAROLINA POWER & LIGHT COMPANY
SHEARON HARRIS NUCLEAR POWER PLANT
1986 - 900,000 KW - UNIT 1
ELECTRIC CABLES - HI-POT TEST FAILURE, ITEM 176

Dear Mr. O'Reilly:

Attached is an interim report on the subject item which was deemed reportable per the provisions of 10CFR50.55(e) on June 19, 1984. CP&L is pursuing this matter, and it is currently projected that corrective action and submission of the final report will be accomplished by December 15, 1984.

Thank you for your consideration in this matter.

Yours very truly,



R. M. Parsons
Project General Manager
Shearon Harris Nuclear Power Plant

RMP/jam

Attachment

cc: Messrs. G. Maxwell/R. Prevatte (NRC-SHNPP)
Mr. R. C. DeYoung (NRC)

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CAROLINA POWER & LIGHT COMPANY
SHEARON HARRIS NUCLEAR POWER PLANT

UNIT NO. 1

INTERIM REPORT

ELECTRIC CABLES
HI-POT TEST FAILURE

ITEM 176

JULY 19, 1984

REPORTABLE UNDER 10CFR50.55(e)

SUBJECT: Shearon Harris Nuclear Power Plant, Unit No. 1, 10CFR50.55(e) reportable deficiency. Single conductor cables were damaged but not detected by inspection and testing.

ITEM: All single conductor power cable

SUPPLIED BY: The Kerite Company, 49 Day Street, Seymour, Connecticut 06483

NATURE OF DEFICIENCY: Cables 11755A-SB and 11755B-SE were installed in accordance with design requirements, site installation procedures, and accepted based on inspection procedures. However, due to a low initial reading in one of the phases in each of the three-single conductor 500 MCM circuits, the cables were suspect and additional testing not required by procedures or design documents was performed. As a result of the testing, cable damage was detected in both circuits.

DATE PROBLEM OCCURRED: May 10, 1984

DATE PROBLEM WAS REPORTED: On June 19, 1984, Mr. K. V. Hate' notified the NRC (Mr. A. Hardin) that this item was reportable per the provisions of 10CFR50.55(e).

SCOPE OF PROBLEM: Until testing is completed, it is not possible to accurately define the scope of the problem; however, at the present time, all single conductor power cables are suspect.

SAFETY IMPLICATION: If undetected damage has occurred to safety-related cables, failure could occur resulting in a loss of power to safety-related equipment.

REASON DEFICIENCY IS REPORTABLE: This is reportable since there is a possibility that safety-related cables which have been installed, inspected, and accepted in accordance with design requirements and site procedures could be damaged and fail when put into service.

CORRECTIVE
ACTION:

Additional testing is being performed in which the single conductor power cables are being high potential tested to determine if they are acceptable. Since the weight of the cable is a significant factor in contributing to the cable damage, the larger size cables are being tested first. After test results are obtained for the larger cables and statistical testing of the smaller cables is completed, an evaluation will be performed to determine what additional testing of the smaller cables (if any) will be required. All cables that fail the high potential testing will be repaired or replaced based on a case-by-case engineering evaluation.

PREVENTIVE
MEASURES:

Once the evaluation is completed and the cable types which are subject to undetected damage are identified, Work Procedures WP-209 (General Meggering Procedure for Equipment and Cable) and WP-210 (Installation and Termination of Wire and Cable) will be revised to include additional testing or other measures as appropriate.

FINAL REPORT:

A final report will be issued once the corrective actions stated above are completed. It is currently projected that the final report will be issued by December 15, 1984.