



Carolina Power & Light Company

P. O. Box 101, New Hill, N. C. 27562  
January 31, 1984

Mr. James P. O'Reilly  
United States Nuclear Regulatory Commission  
Region II  
101 Marietta Street, Northwest (Suite 2900)  
Atlanta, Georgia 30303

NRC-176

CAROLINA POWER & LIGHT COMPANY  
SHEARON HARRIS NUCLEAR POWER PLANT  
1986 - 900,000 KW - UNIT 1  
CLASS IE 480V MOTOR CONTROL CENTER PROTECTIVE GROMMET  
DEFICIENCY, PURCHASE ORDER NY-435143, ITEM 122

Dear Mr. O'Reilly:

Attached is the final report on the subject item which was deemed reportable per the provisions of 10CFR<sup>5</sup>0.55(e) and 19CFR, Part 21, on April 25, 1983. With this report, Carolina Power & Light Company considers this matter closed.

If you have any questions regarding this matter, please do not hesitate to contact me.

Yours very truly,

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

RMP/sh

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

FINAL REPORT

JANUARY 31, 1984

CLASS 1E 480V MOTOR CONTROL CENTER  
PROTECTIVE GROMMET DEFICIENCY

ITEM 122

REPORTABLE UNDER 10CFR50.55(e) AND 10CFR21

SUBJECT: Shearon Harris Nuclear Power Plant Unit No. 1  
10CFR50.55(e) and 10CFR21 Reportable Deficiency  
480V Motor Control Center Protective Grommet Deficiency.

ITEM: The grommets protecting cable from the edges on the 1½" and 1½" knockouts between the wireway and circuit breaker compartment on the 480V Motor Control Centers (MCCs).

SUPPLIED BY: Gould, Inc., Industrial Controls Division, Westminster, Maryland, under Purchase Order NY-435143.

NATURE OF DEFICIENCY:

In March 1983, the craft electrical superintendent reported that a problem existed in a nonsafety MCC where the circuit breaker constantly tripped. It was observed that the insulation on the cable running from the circuit breaker to a wireway had been damaged. The cable conductor was in contact with the sheet steel of the MCC and created a ground fault anytime the circuit was energized. A plastic protective grommet had become dislodged from the knockout through which this cable passed and allowed the cable conductor to come in direct contact with the sharp edges of the knockout.

CP&L QA personnel conducted a survey to determine if grommets becoming dislodged was a generic problem that affected safety class MCCs. It was observed that this problem affected all Class 1E and Nonclass 1E MCCs.

DATE PROBLEM REPORTED:

April 25, 1983, CP&L (N. J. Chiangi) notified the NRC (A. Hardin) that this item was reportable under 10CFR50.55(e) and 10CFR21.

SCOPE OF PROBLEM:

This problem affects the 20 Class 1E Motor Control Centers.

REASON DEFICIENCY IS REPORTABLE:

If the protective grommet should become dislodged, then the Class 1E cable would come in contact with the sharp edges of the knockouts. Movement of the cable on the sharp edges of the knockout can wear away the insulation and create a ground fault causing the breaker to trip. This will affect power availability to safety class loads.

CORRECTIVE

ACTION:

Could has been made aware of this problem. Our resolution to install either of the following in the 1½" and 1½" knockouts:

1. A conduit nipple with a locknut. (This is the same part being used to terminate conduit at Class 1E equipment.)
2. Flexible embossed vinyl steel core trim around the sharp edges of the knockout.

The above two solutions will eliminate the concern of cable being exposed to the sharp edges of the knockouts.

FINAL REPORT: The corrective action stated above has been completed. We now consider this problem resolved with no further action required.