

CP&L

01 JAN 3 1984  
Carolina Power & Light Company

P. O. Box 101, New Hill, N. C. 27562  
December 28, 1983

50-400

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

NRC-162

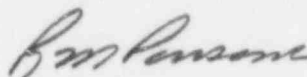
CAROLINA POWER & LIGHT COMPANY  
SHEARON HARRIS NUCLEAR POWER PLANT  
1986 - 900,000 KW - UNIT 1  
WELDING DEFICIENCIES ON CLASS 1E 6.9KV CIRCUIT  
BREAKERS - ITEM 117

Dear Mr. O'Reilly:

Attached is our fourth interim report on the subject item which was deemed reportable per the provisions of 10CFR50.55(e) and 10CFR, Part 21, on March 11, 1983. CP&L is pursuing this matter, and it is currently projected that corrective action and submission of the final report will be accomplished by February 29, 1984.

Thank you for your consideration in this matter.

Yours very truly,



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

RMP/bs

Attachment

cc: Mr. 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

FOURTH INTERIM REPORT

WELDING ON 6.9kV SWITCHGEAR BREAKERS  
ITEM 117

DECEMBER 28, 1983

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

SUBJECT: Shearon Harris Nuclear Power Plant/Unit No. 1  
10CFR50.55(e) and 10CFR, Part 21 Reportable Deficiency.  
Welding for 6.9kV Class 1E switchgear breakers purchased  
under Purchase Orders NY-435112 and NY-435113 from  
Siemens-Allis, Inc.

ITEM: Welding in Class 1E 6.9kV switchgear breakers.

SUPPLIED BY: Siemens-Allis, Inc., Sanford, North Carolina.

NATURE OF  
DEFICIENCY: During 1980, the Switchgear Division of Siemens-Allis,  
Inc., Sanford, North Carolina, shipped 6.9kV switchgear  
breakers to the CP&L site on Purchase Orders NY-435112  
and NY-435113. Welding in the breakers was not inspected  
by Ebasco's Vendor Quality Assurance representative prior  
to shipment, as the check plan did not include mechanical  
inspection requirements.

On January 10, 1983, Siemens-Allis furnished shop  
drawings so that an inspection of the welding could be  
performed. The inspection revealed that the weld lengths  
and sizing were not in conformance with the vendor shop  
drawings. It was also noted that the quality of the  
welding was poor.

Although the switchgear breakers on site and those  
seismically tested exhibit similar welding deficiencies,  
they were not similar enough to conclude that the  
equipment on site adequately reflected the same  
structural construction of the equipment seismically  
tested.

DATE PROBLEM  
OCCURRED: Refer to section above.

DATE PROBLEM  
REPORTED: February 11, 1983 - CP&L (N. J. Chiangi) notified the NRC  
(Ms. L. Watson) that this item was potentially reportable  
under 10CFR50.55(e) and 10CFR, Part 21.

On March 11, 1983, CP&L (N. J. Chiangi) notified the NRC  
(Mr. C. Hehl) that this item was reportable under  
10CFR50.55(e) and 10CFR, Part 21.

SCOPE OF  
PROBLEM: The deficiency involves the twenty-five Unit 1 Class 1E  
6.9kV switchgear breakers.

SAFETY

IMPLICATION:

Seismic qualification of the Class 1E switchgear assembly is required to assure that safety-related loads are capable of being powered during a seismic event.

REASONS

DEFICIENCY IS  
REPORTABLE:

Failure of the supplier's QA Program to control the welding on the switchgear breakers has resulted in breakers being shipped to the site which did not adequately reflect the same structural construction as that of the piece of equipment which has been seismically tested and whose test report has been accepted. Failure of the breakers to be seismically constructed could result in the loss of power supply to safety-related loads during a seismic event as a result of failure of the breaker.

CORRECTIVE  
ACTION:

1. Inspection of structural construction has been added to the VQA inspection check sheet for seismically-designed AC and DC distribution equipment yet to be shipped. Any equipment on site will be inspected by Site QA by sampling on each Purchase Order. In order to preclude a similar situation, suppliers of seismically-designed AC and DC distribution equipment have been requested to provide a written response describing the provisions in their quality assurance program, which would assure that the drawings and/or procedures used for manufacturing/fabrication of the equipment will reflect the actual structural and operational characteristics of the equipment being seismically qualified.
2. All Class 1E breakers at the site have been returned to the vendor. The vendor will fabricate new breakers to meet the following weld criteria:
  - a. All welds on the braces meet the acceptance criteria of Siemens-Allis.
  - b. Quantity of weld on connected pieces is at least the amount on the test unit.

FINAL  
REPORT:

In our last interim report, we projected completion of corrective action and submission of the final report by December 30, 1983. Siemens-Allis has indicated that corrective action will not be completed at this time.

A final report will be issued once the corrective action described in Item 2 is completed. It is currently projected that the submittal date will be February 29, 1984.