83-810-000

50-400
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P. O. Box 101, New Hill, N. C. 27562
April 29, 1983

Mr. James P. O'Reilly
United States Nuclear Regulatory Commission
Region II
101 Marietta Street, Northwest (Suite 3100)
Atlanta, Georgia 30303

NRC-66

CAROLINA POWER & LIGHT COMPANY
SHEARON HARRIS NUCLEAR POWER PLANT
1986-90 - 900,000 KW - UNITS 1 & 2
480V SWITCHGEAR DESIGN DEFICIENCY OF THE SECONDARY
DISCONNECTS, NY-435171, ITEM 106

Dear Mr. O'Reilly:

Attached is the final report on the subject item which was deemed reportable per the provisions of 10CFR50.55(e) and 10CFR, Part 21, on November 2, 1982. With this report, Carolina Power and 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 by Sheearon D. Harris

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

RMP/sh

Attachment

cc: Mr. G. Maxwell (NRC-SHNPP)
Mr. R. Prevatte (NRC-SHNPP)
Mr. V. Stello (NRC)

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CAROLINA POWER & LIGHT COMPANY
SHEARON HARRIS NUCLEAR POWER PLANT

UNIT NO. 1

480V SWITCHGEAR
DESIGN DEFICIENCY OF THE SECONDARY DISCONNECTS

ITEM 106

FINAL REPORT
April 29, 1983

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

SUBJECT: Shearon Harris Nuclear Power Plant Unit 1 10CFR50.55(e) and 10CFR21 reportable deficiency on the secondary disconnects on the 480V switchgear: Item 106.

ITEM: Secondary disconnects located on the circuit breaker cradles on the 480V switchgear which mate with the finger contacts on the circuit breaker.

SUPPLIED BY: Brown-Boveri Company, Chalfont, Pa.

NATURE OF DEFICIENCY: From April 1982 to November 1982, Brown-Boveri Company shipped Class 1E 480V switchgear to the Shearon Harris site under Purchase Order NY-435171. In October 1982, it was discovered that the circuit breaker cradles were assembled using an older design of the secondary disconnects. (The secondary disconnects are the points where control power is supplied to the circuit breaker.) This older design was manufactured with rectangular tabs, that hold contact strips in place, and also a small cut-out in the contact strip located directly behand the rectangular tab (Part No. 712209-T1).

Brown-Boveri has advised us that there is a chance that the finger contacts can get caught behind the rectangular tabs in the contact strip cut-out and can break-off when the circuit breakers are racked out of the cradles. Therefore, control power to the circuit breakers could be lost.

DATE PROBLEM REPORTED: November 2, 1982 - CP&L (C. L. McKenzie) notified the NRC (C. Hehl) that this item is reportable under 10CFR50.55(e) and 10CFR21.

SCOPE OF PROBLEM: The deficiency involves four Unit 1 Class 1E 480V switchgear (52 cubicles).

SAFETY IMPLICATIONS: The Class 1E 480V switchgear supplies electrical power to nuclear safety-related equipment. Loss of control power to certain circuits in the 480V switchgear circuit breaker could result in improper functioning of the circuit breaker and thus affect power availability to nuclear safety-related equipment.

CORRECTIVE ACTION: The secondary disconnects presently installed in the breaker cradle will be replaced with a newly designed secondary disconnect that will not cause the finger contacts on the circuit breaker to break (Brown-Boveri Part No. 712209-T2).

FINAL REPORT: A Brown-Boveri Service Representative has completed the change-out of all the old style stationary secondary disconnects (Part No. 712209-T1) to the new style stationary disconnects (Part No. 712207-72). A site construction inspector observed and checked to ensure that all work was performed in accordance with the BBC supplied change-out procedure. We now consider all work on this item to be complete.