



Carolina Power & Light Company

P. O. Box 101, New Hill, N. C. 27562
May 26, 1983

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

CAROLINA POWER & LIGHT COMPANY
SHEARON HARRIS NUCLEAR POWER PLANT
1986-90 - 900,000 KW - UNITS 1 & 2
MAIN REACTOR TRIP BREAKERS, SHOP ORDER 386, ITEM 130

Dear Mr. O'Reilly:

Attached is an interim report on the subject item which was deemed reportable per the provisions of 10CFR50.55(e) and 10CFR, Part 21, on April 27, 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 June 30, 1984.

Thank you for your consideration in this matter.

Yours very truly,

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)

NRC

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CAROLINA POWER & LIGHT COMPANY
SHEARON HARRIS NUCLEAR POWER PLANT

UNITS 1 AND 2

INTERIM REPORT

SHNPP MAIN REACTOR TRIP BREAKERS
ITEM 130

MAY 24, 1983

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

SUBJECT: SHNPP Units 1 and 2 Main Reactor Trip Breakers,
Westinghouse Model DS-416 purchased under NSSS
contract with Westinghouse NY-435002, Shop Order 386.

ITEM: Misoperation of the undervoltage attachments.

SUPPLIED BY: Westinghouse Electric Corporation Switchgear Division.

NATURE OF DEFICIENCY: A design discrepancy exists concerning a retaining ring on the undervoltage attachment pivot shafts. Specifically, a design change increased the width of a retaining ring, while the groove in which the retaining ring seats, was not changed. This allows improper seating of the retaining ring. The result is that the retaining ring may detach itself from the pivot shaft with the potential for misoperation of the undervoltage attachment.

DATE PROBLEM OCCURRED: On April 12, 1983, Westinghouse informed CP&L (CQL-7343) of a potential problem concerning minimum gap clearances on the same item. On April 21, 1983, Westinghouse informed CP&L (CQL-7360) of a potential problem concerning a retaining ring design discrepancy on the undervoltage attachment.

DATE PROBLEM REPORTED: On April 18, 1983, CP&L (Mr. N. J. Chiangi) notified the NRC (Mr. C. Hehl) that this item was potentially reportable. On April 27, 1983, CP&L (Mr. N. J. Chiangi) notified the NRC (Mr. A. Hardin) that this item was reportable under 10CFR50.55(e) and 10CFR21.

SCOPE OF PROBLEM: This deficiency involves two Unit 1 and two Unit 2 Reactor Trip Breakers and two Unit 1 and two Unit 2 Reactor Trip Bypass Breakers.

SAFETY IMPLICATIONS: The potential for misoperation of the undervoltage attachment could create a condition wherein the reactor trip breakers might not open on automatic demand from the reactor protection system. This could prevent a safe shutdown of the reactor unless prompt operator action is taken to "manually" trip the reactor.

REASONS DEFICIENCY REPORTABLE: This item is reportable because the deficiency reported may affect the ability of safety related equipment to perform its intended function.

CORRECTIVE

ACTION:

1. Westinghouse has committed to replacing the undervoltage attachments which includes a replacement pivot shaft with wider grooves to accommodate the new retaining ring. Westinghouse is developing new procedures for the installation and proper alignment and interface of this attachment with the breaker trip shaft.

PREVENTATIVE

ACTION:

1. Westinghouse has revised manufacturing drawings and quality control procedures to assure that critical design dimensions are maintained during manufacture.
2. To prevent trip breaker failure as a result of any undervoltage attachment malfunction, CP&L is reviewing industry information as a precursor to initiating a design change for the automatic dual trip operation by activating both the undervoltage attachment and the shunt coil attachment on receipt of an automatic undervoltage signal from the reactor protection system.

FINAL

REPORT:

CP&L expects to complete the corrective action plan and submit a final report by June 30, 1984.