



Carolina Power & Light Company

P. O. Box 101, New Hill, NC 27562
April 12, 1985

Dr. J. Nelson Grace
United States Nuclear Regulatory Commission
Region II
101 Marietta Street, Northwest (Suite 2900)
Atlanta, Georgia 30323

NRC-350

CAROLINA POWER & LIGHT COMPANY
SHEARON HARRIS NUCLEAR POWER PLANT
1986 - 900,000 KW - UNIT 1
MOTOR STARTER-MECHANICAL VERTICAL
INTERLOCK BINDING, ITEM 204

Dear Dr. Grace:

Attached is our final report on the subject item which was deemed reportable per the provisions of 10CFR50.55(e) and 10CFR, Part 21 on January 22, 1985. 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
Completion Assurance
Shearon Harris Nuclear Power Plant

RMP/bs

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 1

FINAL REPORT

MECHANICAL INTERLOCK BINDING
NEMA 5/2 SPEED-1 WINDING STARTER

ITEM NO. 204
(NCR-85-0055)

April 12, 1985

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 involves binding mechanical interlocks on two speed starter which prevent low speed operation of fan coolers.

ITEM: 480 V NEMA 5/2 speed - 1 winding starter

SUPPLIED BY: Gould, Inc., Westminster, Maryland

NATURE OF DEFICIENCY: Due to variations in tolerance, the vertical interlock installed between the tie contactor and the corresponding starter binds, preventing the full transfer between high and low speed.

DATE PROBLEM IDENTIFIED: The Shearon Harris Site received vendor notification of a potential problem on January 7, 1985. HPES verified that this binding problem existed at Shearon Harris and evaluated this item as reportable.

DATE PROBLEM REPORTED: On January 22, 1985, CP&L (Mr. N. J. Chiangi) notified the NRC (Mr. A. Hardin) that the item was reportable per the provisions of 10CFR 50.55(e) and 10CFR Part 21.

SCOPE OF PROBLEM: The problem could occur in any of eight identical safety-related starters supplied by Gould, Inc. under Ebasco Purchase Order NY-435143.

SAFETY IMPLICATIONS: When the interlock binds, the associated motor cannot change speeds. In an attempt to go from high speed to low speed, this perturbation would prevent operation of a motor, as the low speed contactor would be prevented from closing. This would prevent the motors from performing their safety function of driving fan cooler units needed to provide de-humidification and air mixing of the containment atmosphere.

REASON DEFICIENCY IS REPORTABLE: The deficiencies are reportable because the inoperable fan coolers could lead to hydrogen pocket formation in the containment. This compromises safety systems and adversely reduces the degree of protection to public health.

CORRECTIVE ACTION: A vendor representative was dispatched to SHNPP to rework the interlock actuators to an improved design developed by Gould, Inc. The rework was performed by the vendor representative in accordance with approved design (FCR-E-3883) and documented under the WP-137 program. This matter is now considered resolved.