CP&L
Carolina Power & Light Company

P. O. Box 101, New Hill, N. C. 27562
June 27, 1984

Mr. James P. O'Reilly
United States Nuclear Regulatory Commission
Region II
101 Marietta Street, Northwest (Suite 2900)
Atlanta, Georgia 30323

NRC-234

CAROLINA POWER & LIGHT COMPANY
SHEARON HARRIS NUCLEAR POWER PLANT
1986 - 900,000 KW - UNIT 1
SHOP WELDING DEFICIENCIES ON SEISMIC CLASS I
CABLE TRAY, CONDUIT, AND HVAC HANGERS
ITEM 77

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 August 2, 1982. 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.

Very truly yours,

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

RMP/jam

Attachment

cc: Messrs. G. Maxwell/R. Prevatte (NRC-SHNPP)
Mr. R. C. DeYoung (NRC)

50-400

CAROLINA POWER & LIGHT COMPANY
SHEARON HARRIS NUCLEAR POWER PLANT

UNIT NO. 1

FINAL REPORT

SHOP WELDING DEFICIENCIES IN SEISMIC CLASS I CABLE TRAY, CONDUIT, AND HVAC HANGERS

ITEM 77

JUNE 27, 1984

REPORTABLE UNDER 10CFR50.55(e) AND 10CFR, PART 21

SUBJECT: Shearon Harris Nuclear Power Plant Units No. 1 and 2, 10CFR50.55(e) and 10CFR Part 21, Reportable Deficiency. Shop welding deficiencies in Seismic Class I cable tray, conduit, and HVAC hangers.

ITEM: Shop welding on cable tray, conduit, and HVAC hangers is not in accordance with Codes and Standards to which they were procured.

SUPPLIED BY: Peden Steel Company, Raleigh, NC.

NATURE OF DEFICIENCY: Shop welds on cable tray, conduit, and HVAC hangers do not meet AWS D1.1 code requirements. Undersize welds, overlap, porosity are examples of the types of deficiencies.

DATE PROBLEM WAS CONFIRMED TO EXIST: March 19, 1982

DATE PROBLEM REPORTED: On April 2, 1982, Mr. L. E. Jones notified the NRC, Region II (Mr. C. Julian), that the item was potentially reportable. On August 2, 1982, Mr. L. E. Jones notified the NRC, Region II (Mr. A. Hardin), that this item was reportable per the provisions of 10CFR50.55(e).

SCOPE OF PROBLEM: A large number of cable tray, conduit, and HVAC hangers have been installed and accepted by QA/QC personnel. Cable tray, HVAC duct, and conduit have been installed in the hangers. Inspection of shop welds was completed in the containment, reactor auxiliary, and reactor auxiliary - common buildings, as well as in the warehouse laydown yards.

SAFETY IMPLICATIONS: Cable tray, conduit, and HVAC duct are supported by these hangers. Hangers having unacceptable welding could possibly fail in normal operation or during a seismic event. This, in turn, could lead to the failure of the items the hangers were supporting. The reinspections performed did not reveal any problems this severe.

REASON DEFICIENCY IS REPORTABLE: Reportable due to the Quality Assurance Program breakdowns at Peden Steel Company and during Ebasco vendor QA surveillance activities.

CORRECTIVE ACTION: Since May 14, 1982, all material fabricated by Peden Steel on A/E purchase orders has received a 100 percent primary welding inspection by CP&L Welding QC personnel prior to shipment. A complete reinspection of all cable tray, conduit, and HVAC hangers furnished by Peden Steel has been completed. All hangers have been found to be acceptable "as-is" or have been repaired and accepted. Those hangers with welds which were not fully accessible for a complete inspection were also reported to Engineering on Permanent Waivers (PWs) and were evaluated for acceptability. This evaluation was based on individual analysis of inaccessible welds using capacity reduction factors. These factors were based on statistical data on accessible welds which were inspected.