



Carolina Power & Light Company

P.O. Box 101, New Hill, NC 27562
June 27, 1985

15 JUN 1 1985
NRC-372
P12:25

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

**CAROLINA POWER & LIGHT COMPANY
SHEARON HARRIS NUCLEAR POWER PLANT
1986 - 900,000 KW - UNIT 1
ENGINE MOUNTED FUEL OIL LINES
EMERGENCY DIESEL-ENGINE GENERATOR SETS
PURCHASE ORDER NY-435079, ITEM 149**

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 November 18, 1983. 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. A. Watson
Vice President
Shearon Harris Nuclear Power Plant

RAW:sae

Attachment

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 NO. 1

FINAL REPORT

POTENTIALLY DEFECTIVE ENGINE MOUNTED FUEL OIL LINES
EMERGENCY DIESEL GENERATOR SET

ITEM 149
NCR 84-390

JUNE 27, 1985

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

SUBJECT:

Shearon Harris Nuclear Power Plant Unit No. 1 10CFR50.55(e) and 10CFR21 Reportable Deficiency. Potential defect with engine mounted fuel oil lines on the emergency diesel engine generator sets.

ITEM:

Engine mounted fuel oil lines of the emergency diesel engine generator sets.

SUPPLIED BY:

Transamerica DeLaval, Inc., Oakland, California under CP&L Purchase Order NY-435079.

NATURE OF DEFICIENCY:

Transamerica DeLaval, Inc. shipped two diesel engines to the Shearon Harris site in May and June 1981.

In September 1983, Transamerica Delaval notified CP&L that a potential problem existed with the engine-mounted fuel oil lines of the emergency diesel generator engines. The initial report from TDI indicated that the cause of failure may have been excessive line vibration due to improperly balanced fuel injection equipment. Subsequent information provided by TDI (October 1983) and Mississippi Power & Light Co. (LER 83-126 Rev.3) substantiated that the cause of failure was due to a combination of vibration and a missing required tubing support.

DATE PROBLEM OCCURRED:

Refer to the above section.

DATE PROBLEM REPORTED:

On October 24, 1983, CP&L (Mr. N. J. Chiangi) notified the NRC (Mr. A. Hardin) that this item was potentially reportable per the provisions of 10CFR50.55(e) and 10CFR21.

On November 18, 1983, CP&L (Mr. N. J. Chiangi) notified the NRC (Mr. A. Hardin) that this item was reportable per the provisions of 10CFR50.55(e) and 10CFR21.

SCOPE OF PROBLEM:

The potential defect affects both emergency diesel engines purchased on NY-435079.

**SAFETY
IMPLICATION:**

The diesel engine generator sets supply power to the ESF buses in the event that both normal on-site and off-site power sources are lost.

**REASON
DEFICIENCY
IS REPORTABLE:**

If left uncorrected, failure of the fuel oil lines could result in the loss of emergency on-site AC power.

**CORRECTIVE
ACTION:**

A complete inspection of fuel oil line clamps and brackets was performed using vendor supplied drawings. Evaluation of the fuel oil lines shows that Engine 1A-SA had the clamp and shield per the latest TDI drawing sent November 4, 1983. Additional welding required on the clamp for Engine 1A-SA and installation of the shield and clamp for Engine 1B-SB were completed in May 1985. Balancing the engine fuel oil injection pumps is part of normal start-up procedure any time an engine is down for maintenance that might affect the pumps. This will be performed during start-up. The engine vibration will also be monitored during start-up runs. Because the cause of failure has been determined to be lack of a tubing support and the applicable situation has been remedied, CP&L considers this to be the final report.