



Carolina Power & Light Company

P. O. Box 101, New Hill, N. C. 27562
April 6, 1984

Mr. James P. O'Reilly
United States Nuclear Regulatory Commission
Region II
101 Marietta Street, Northwest (Suite 2900)
Atlanta, Georgia 30303

NRC-206

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 Mr. O'Reilly:

Attached is our second interim report on the subject item which was deemed reportable per the provisions of 10CFR50.55(e) and 10CFR, Part 21, on November 18, 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 October 31, 1984.

Thank you for your consideration in this matter.

Yours very truly,

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

RMP/bk

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

INTERIM REPORT

APRIL 6, 1984

POTENTIALLY DEFECTIVE ENGINE-MOUNTED FUEL OIL LINES
EMERGENCY DIESEL ENGINE GENERATOR SET

ITEM 149
(DDR 2209)

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.
Excessive line vibration due to improperly balanced fuel
injection equipment could cause the fuel oil lines to
rupture, resulting in engine nonavailability and possibly
fire in the Diesel Generator Building.

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 is 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.

The potential defect of excessive vibration in the fuel oil lines could affect engine operation and possibly present a safety hazard.

REASON

DEFICIENCY

IS REPORTABLE: If left uncorrected, rupturing 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 will be made using vendor-supplied drawings. Engine balance is to be checked and maintained. Mechanical Engineering will evaluate the fuel oil lines' installation and make a decision concerning the necessity of adding a spray shield as a fire preventive measure in the event of a fuel oil line rupture.

FINAL REPORT:

Evaluation of the fuel oil lines shows that Engine 1A-SA has the clamp and shield per the latest TDI drawing sent November 4, 1983. The shield and clamp for Engine 1B-SB will be installed by June 15, 1984. The engine vibration will be checked during start-up to determine properly balanced fuel injection equipment. The engine start-up is projected to be October 31, 1984, at which time a final report will be submitted.