



Carolina Power & Light Company

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P. O. Box 101, New Hill, N. C. 27562

January 21, 1983

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

NRC-36

CAROLINA POWER & LIGHT COMPANY
SHEARON HARRIS NUCLEAR POWER PLANT
1985-89 - 900,000 KW - UNITS 1 & 2
DEFECTIVE GOVERNOR DRIVE COUPLING
PURCHASE ORDER NY-435079, ITEM 101

dkn: 50-400
50-401

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 September 9, 1982. As stated in the attached report, it is currently projected that submission of the final report will be accomplished by December 19, 1983.

Thank you for your consideration in this matter.

Yours very truly,

R. M. Parsons
Project General Manager

RMP/bs

Attachment

cc: Mr. G. Maxwell (NRC-SHnPP)
Mr. V. Stelio (NRC)

CAROLINA POWER & LIGHT COMPANY
SHEARON HARRIS NUCLEAR POWER PLANT

UNIT NO. 1

Interim Report
January 19, 1983

DEFECTIVE GOVERNOR DRIVE COUPLING
ITEM 101

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

SUBJECT: Shearon Harris Nuclear Power Plant - Unit No. 1
10CFR50.55(e) and 10CFR21 Reportable Deficiency.
Defective governor drive coupling installed in the
emergency diesel engine-generator sets under Purchase
Order NY-435079 from Transamerica DeLaval, Inc.

ITEM: Isoprene governor drive coupling located in the engine's
gear case. Part No. AK-007-000

SUPPLIED BY: Transamerica DeLaval, Inc., Oakland, California
The governor drive coupling is manufactured by Koppers
Co., Inc.

NATURE OF DEFICIENCY: Transamerica DeLaval, Inc. shipped two diesel engines to
the Shearon Harris site on Purchase Order NY-435079 in
May and June, 1981.

In June 1982, Transamerica DeLaval notified CP&L that the
engines contain an isoprene governor drive coupling and
there is a potential problem since the material, isoprene,
is designed for atmospheric use and it is not suitable
for use in the high temperature, oil atmosphere encountered
in the engine's gear case.

DATE PROBLEM OCCURRED: Refer to section above.

DATE PROBLEM REPORTED: September 9, 1982 - CP&L (N. J. Chiangi) notified the NRC
Region II (A. Hardin) that this item was reportable under
10CFR50.55(e) and 10CFR21.

SCOPE OF PROBLEM: The problem involves the two diesel engines shipped on
Purchase Order NY-435079. These engines have isoprene
governor drive couplings installed.

SAFETY IMPLICATION: The diesel-generator sets supply power to the ESF buses
in case of a loss of both normal on-site and off-site
power sources.

In the high temperature, oil atmosphere encountered in
the engine's gear case, the rubber deteriorates rapidly
and ultimately fails. While the coupling is "fail safe"
and will mechanically lock up when the element fails,
sufficient frequency instability could be induced that
would result in the engine's tripping off line, thereby
affecting engine availability.

REASON
DEFICIENCY
IS
REPORTABLE:

If left uncorrected, failure of the governor drive coupling could result in the loss of the emergency on-site AC power supply.

CORRECTIVE
ACTION:

The diesel engines are currently on "hold" at the Shearon Harris site. The isoprene governor drive coupling will be replaced according to the instructions attached to the Transamerica DeLaval to CP&L letter dated August 18, 1982. (Requires capability to "bar" the engine over.)

FINAL REPORT:

A final report will be issued once the corrective action described above has been completed. It is currently projected that the submittal date will be December 19, 1983.