

CP&L

Carolina Power & Light Company

34 MAY 31 P 1: 41

P. O. Box 101, New Hill, N. C. 27562
May 24, 1984

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

NRC-221

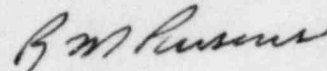
**CAROLINA POWER & LIGHT COMPANY
SHEARON HARRIS NUCLEAR POWER PLANT
1986 - 900,000 KW - UNIT 1
DEFECTIVE GOVERNOR DRIVE COUPLING
PURCHASE ORDER NY-435079, ITEM 101**

Dear Mr. O'Reilly:

Attached is our fifth 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. CP&L is pursuing this matter, and it is currently projected that corrective action and submission of the final report will be accomplished by November 20, 1984.

Thank you for your consideration in this matter.

Yours very truly,



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

RMP/sh

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

FIFTH INTERIM REPORT

MAY 22, 1984

DEFECTIVE GOVERNOR DRIVE COUPLING

ITEM 101
(DDR-1056)

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 isoprene element of the governor drive coupling will be replaced in accordance with the instructions attached to the Transamerica DeLaval to CP&L letter dated August 18, 1982 (FCR-M-1067, Revision 1). This work 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 November 20, 1984.