

50-400

USNRC REGION II
ATLANTA, GEORGIA
CP&L

83 JUL 19 10:28
Carolina Power & Light Company

P. O. Box 101, New Hill, N. C. 27562
July 14, 1983

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

NRC-99

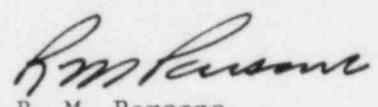
CAROLINA POWER & LIGHT COMPANY
SHEARON HARRIS NUCLEAR POWER PLANT
1986-90 - 900,000 KW - UNITS 1 & 2
DEFECTIVE VALVE SPRINGS ON DIESEL ENGINES,
PURCHASE ORDER NY-435079, ITEM 61

Dear Mr. O'Reilly:

Attached is our fourth interim report on the subject item which was deemed reportable per the provisions of 10CFR50.55(e) and 10CFR, Part 21, on August 28, 1981. As stated in the attached report, it is currently projected that corrective action and submission of the final report will be submitted by January 6, 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)

OFFICIAL COPY

8307250404 830714
PDR ADOCK 05000400
S PDR

IE 27
1/1

CAROLINA POWER & LIGHT COMPANY
SHEARON HARRIS NUCLEAR POWER PLANT

UNIT NO. 1

INTERIM REPORT

DEFECTIVE VALVE SPRINGS ON DIESEL ENGINES

ITEM NO. 61

JULY 13, 1983

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

SUBJECT: Shearon Harris Nuclear Power Plant/Unit No. 1
10CFR50.55(e) and 10CFR21, reportable deficiency.
Valve springs for emergency diesel engine-generator
units purchased from Transamerica DeLaval, Inc. under
Purchase Order NY-435079

ITEM: Intake and exhaust valve springs installed in engine
cylinder head assemblies. Total of 128 springs in
two diesel engines.

SUPPLIED BY: Transamerica DeLaval, Inc., Oakland, California. Springs
manufactured by Melrose Spring and Tool Works, Oakland,
California, as subvendor to Transamerica DeLaval.

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

In August 1981, Transamerica DeLaval advised CP&L that
the engines may contain valve springs which were not
shot-peened properly. The shot-peening is necessary to
relieve external stresses incurred in cold working the
spring wire. The lack of shot-peening could lead to
fatigue failure, which then would affect engine availability.

Telephone conversations with Transamerica DeLaval and a
visual inspection confirmed that the defective valve
springs had been installed in the two engines shipped to
the Shearon Harris plant site.

DATE PROBLEM
OCCURRED: Refer to section above.

DATE PROBLEM
REPORTED: August 28, 1981 - CP&L (L. E. Jones) notified the NRC
Region II (R. Butcher) that this item was reportable
under 10CFR50.55(e) and 10CFR, Part 21.

SCOPE OF
PROBLEM: The deficiency involves the two diesel engines shipped on
Purchase Order NY-435079. These engines have defective
valve springs installed.

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

The improper shot-peening of the valve spring could lead
to failure of the spring. If the valve spring fails,
engine availability could be affected.

REASON
DEFICIENCY IS
REPORTABLE:

If left uncorrected, failure of the valve spring could result in loss of the emergency on-site AC power supply.

CORRECTIVE
ACTION:

The diesel engines have been placed on "hold" at the Shearon Harris site. Valve spring changeout requires the ability to bar the engine over, which cannot be accomplished until the engine is sitting on its foundation with the flywheel installed. The engines are currently mounted on their foundations without the flywheels.

Transamerica DeLaval has removed all defective springs from stock and has taken extra receiving inspection measures to assure this problem does not reoccur.

FINAL REPORT:

Due to delays, a final report cannot be issued at this time because the engines cannot be barred over until the flywheel is attached.

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 January 6, 1984.