

**CP&L**

84 NOV 1 1984  
**Carolina Power & Light Company**

P.O. Box 101, New Hill, NC 27562  
October 25, 1984

NRC-283

Mr. James P. O'Reilly  
United States Nuclear Regulatory Commission  
Region II  
101 Marietta Street, Northwest (Suite 2900)  
Atlanta, Georgia 30323

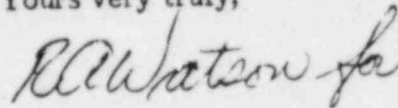
CARCLINA POWER & LIGHT COMPANY  
SHEARON HARRIS NUCLEAR POWER PLANT  
1986 - 900, 000 KW - UNIT I  
AIR-OPERATED DIAPHRAGM  
VALVES-NATURAL FREQUENCIES  
ITEM 188

Dear Mr. O'Reilly:

Attached is an interim report on the subject item, which was deemed reportable per the provisions of 10CFR50.55(e) and 10CFR, Part 21 on September 26, 1984. CP&L is pursuing this matter, and it is currently projected that corrective action and submission of the final report will be accomplished by June 30, 1985.

Thank you for your consideration in this matter.

Yours very truly,



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

RMP/rt

Attachment

cc: Messrs. G. Maxwell/R. Prevatte (NRC-SHNPP)  
Mr. R. C. DeYoung (NRC)

8411210041

OFFICIAL COPY

TE 27

11

Mr. James P. O'Reilly

NRC-283

bcc: Mr. H. R. Banks  
Mr. C. S. Bohanan  
Mr. H. W. Bowles  
Mr. C. Carmichael (2)  
Mr. G. S. Cashell  
Mr. N. J. Chiangi  
Mr. A. B. Cutter  
Dr. T. S. Elleman  
Ms. S. F. Flynn  
Mr. G. L. Forehand  
Mr. J. F. Garibaldi (Ebasco)  
Mr. J. L. Harness  
Mr. P. C. Hopkins  
Dr. J. D. E. Jeffries  
Mr. I. A. Johnson  
Mr. S. A. Laur  
Mr. L. I. Loflin  
Mr. R. E. Lumsden  
Mr. R. L. Mayton, Jr.  
Mr. M. A. McDuffie  
Mr. S. McManus  
Mr. C. H. Moseley, Jr.  
Mr. D. L. Nordstrom (LIS)  
Mr. R. M. Parsons  
Mr. Sheldon D. Smith  
Mr. A. C. Tollison  
Mr. R. A. Watson  
Mr. F. Scapellato (Westinghouse)  
Mr. J. L. Willis  
Mr. T. A. Baxter (Shaw, Pittman, Potts & Trowsbridge)  
Mr. M. F. Thompson, Jr.  
Mr. S. Hinnant  
Mr. J. F. Nevill  
File: HI/A-2D  
File: H-K-0544

CAROLINA POWER & LIGHT COMPANY  
SHEARON HARRIS NUCLEAR POWER PLANT

UNIT 1

FIRST INTERIM REPORT

ITT-GRINNELL AIR-OPERATED DIAPHRAGM VALVES  
NATURAL FREQUENCIES

ITEM 188

OCTOBER 23, 1984

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

SUBJECT: 10CFR50.55(e) and 10CFR21 Reportable Item  
Shearon Harris Nuclear Power Plant Unit 1  
ITT-Grinnell Air-Operated Diaphragm Valves Natural  
Frequencies.

ITEM: Air-Operated Diaphragm Valves for SHNPP Unit 1

SUPPLIED BY: Westinghouse Water Reactor Division/ITT-Grinnell

NATURE OF  
DEFICIENCY: Westinghouse notified CP&L in September 1984 that a  
problem existed with a number of air-operated  
diaphragm valves supplied by ITT-Grinnell. The  
valves, designed to have natural frequencies greater  
than 33 hz, were found by test not to meet this  
requirement. Further investigation revealed valves  
of the same type supplied directly by ITT-Grinnell to  
CP&L. These valves are supplied as ASME Class 2 and  
3 components.

DATE PROBLEM  
WAS CONFIRMED  
TO EXIST: Westinghouse Letter CQL-8174 dated September 4, 1984  
and received September 11, 1984.

PROBLEM  
REPORTED: N. J. Chiangi notified the NRC (Mr. A. Hardin) that  
this item was reportable under 10CFR50.55(e) and  
10CFR21 on September 26, 1984.

SCOPE OF  
PROBLEM: Twenty-seven (27) NSSS-supplied valves and nine (9)  
BOP-supplied valves.

SAFETY  
IMPLICATIONS: Potential for increasing piping stresses and support  
loads in affected piping systems.

REASON PROBLEM  
IS REPORTABLE: Erroneous analysis/support of the valves (due to  
non-rigidity) could cause the design loads or  
stresses to be exceeded.

CORRECTIVE  
ACTION:

CP&L is investigating the problem with Ebasco, Westinghouse, and ITT-Grinnell. Reanalysis of the affected lines/restraints is anticipated to begin shortly with a potential for additional restraints being added.

FINAL  
REPORT:

A final report is anticipated to be submitted by June 30, 1985.