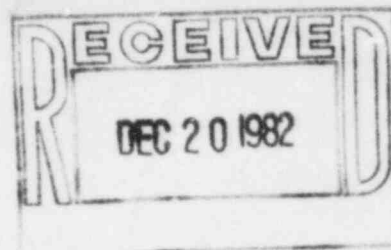


**LOUISIANA
POWER & LIGHT**

142 DELARONDE STREET
P. O. BOX 6008 • NEW ORLEANS, LOUISIANA 70174 • (504) 366-2345



December 17, 1982

L. V. MAURIN
Vice President Nuclear Operations

W3I82-0122
Q-3-A35.07.48

Mr. John T. Collins, Regional Administrator, Region IV
U. S. Nuclear Regulatory Commission
611 Ryan Plaza Drive, Suite 1000
Arlington, Texas 76012

SUBJECT: Waterford SES Unit No. 3
Docket No. 50-382
Significant Construction Deficiency No. 48
"Design Application of Break Flanges at Elevated Temperatures"
Final Report

REFERENCE: LP&L Letter W3I82-0052 dated September 30, 1982

Dear Mr. Collins:

In accordance with the requirements of 10CFR50.55(e), we are hereby providing two copies of the Final Report of Significant Construction Deficiency No. 48, "Design Application of Break Flanges at Elevated Temperatures."

If you have any questions, please advise.

Very truly yours,

L. V. Maurin

L. V. Maurin

LVM/WAC:keh

Attachment

- cc: 1) Director
Office of Inspection & Enforcement
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555
(with 15 copies of report)
- 2) Director
Office of Management
Information and Program Control
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555
(with 1 copy of report)
- 3) E. Blake
- 4) W. Stevenson

8212280143 821217
PDR ADOCK 05000382
S PDR

IF-27

FINAL REPORT OF
SIGNIFICANT CONSTRUCTION DEFICIENCY NO. 48
"DESIGN APPLICATION OF BREAK FLANGES AT ELEVATED TEMPERATURES"

INTRODUCTION

This report is submitted pursuant to 10CFR50.55(e). It describes a defect with the Reactor Coolant (RC), Safety Injection (SI), and Chemical and Volume Control(CH) system flanges. The flange material that had been specified was not the material used in making the flanges. This problem is considered reportable under the requirements of 10CFR50.55(e).

To the best of our knowledge, this problem has not been identified to the Nuclear Regulatory Commission pursuant to 10CFR21.

DESCRIPTION

Class 1500 and Class 900 Type 304 flanges have been installed in systems where the maximum operating conditions exceed the pressure-temperature ratings of the installed flanges. There are forty-eight (48) flanges which do not meet ASME code requirements.

Examination of the Station Piping Specification and the Waterford 3 Piping Line List indicated the correct flanges were specified in these documents for large bore isometrics. The error was introduced in the preparation of the isometric drawings. A material conflict between the design drawings and the piping line list was noted on the small bore piping. These documents were utilized to develop the small bore piping isometrics.

Under operating conditions approaching the design conditions, the stress level experienced by the flanges may reach a high enough value to cause distortion, resulting in leakage or malfunction of the joint.

SAFETY IMPLICATIONS

The subject flanges are located in the Reactor Coolant, Safety Injection and Chemical and Volume Control systems. Failure of these flanges could cause a small LOCA, or degrade operation or render inoperable a safety system. Therefore, this deviation could adversely affect the safety of the plant if left uncorrected.

CORRECTIVE ACTION

The following corrective action was taken to correct this deficiency:

- 1) Nonconformance Report (NCR-W3-3302 S/1) was issued to identify, disposition and track all flanges that were not within allowable design limits.
- 2) Deficient material noted on NCR-W3-3302 S/1 was replaced with correct material, as per disposition of the NCR.
- 3) All corrective action is completed and the NCR (W3-3302 S/1) has been reviewed, accepted and closed on September 25, 1982.

This report is submitted as the Final Report.