DMB 50.55(e)
DN 50-382

LOUISIANA POWER & LIGHT / 142 DELARONDE STREET
P. O. BOX 6008 • NEW ORLEANS, LOUISIANA 70174 • (504) 366-2345
MIDDLE SOUTH UTILITIES SYSTEM

D. L. ASWELL
Vice President-Power Production

July 14, 1981

W3K81-0257
Q-3-A35.07.29
Q-3-A35.02.01

Mr. K. V. Seyfrit, Director, Region IV
U. S. Nuclear Regulatory Commission
Office of Inspection and Enforcement
611 Ryan Plaza Drive, Suite 1000
Arlington, Texas 76012

SUBJECT: Waterford SES Unit 3
Revised Interim Report of
Significant Construction Deficiency No. 29
"Inadequate Clearance Between Process Piping
Systems and Box-Type Pipe Supports/Restraints"

Reference: Telecon, L. L. Bass to L. Martin on June 1, 1981

Dear Mr. Seyfrit:

In the above referenced telecon, LP&L committed to revise the interim report on SCD #29. Attached is the revised report which more clearly describes the problem.

Please replace the original report with this revised report.

If you have any questions, please let us know.

Very truly yours,

D L Aswell

D. L. Aswell

LLB:grf

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)

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LOUISIANA POWER & LIGHT COMPANY

WATERFORD SES UNIT NO. 3

Interim Report of
Significant Construction Deficiency No. 29

Inadequate Clearance Between Process Piping Systems
And Box-Type Pipe Supports/Restraints

Reviewed by _____ 7/13/81
R. J. Milhiser, Site Manager — Date

Reviewed by _____ 7/10/81
J. L. Wills, Project Superintendent — Date

Reviewed by _____ 7-13-81
for J. Hart, Project Licensing Engineer — Date

Reviewed by _____ 7-13-81
R. A. Hartnett, Q. A. Site Supervisor — Date

July 9, 1981

INTERIM REPORT OF
SIGNIFICANT CONSTRUCTION DEFICIENCY NO. 29
INADEQUATE CLEARANCE BETWEEN PROCESS PIPING SYSTEMS
AND BOX-TYPE PIPE SUPPORTS/RESTRAINTS

INTRODUCTION

This report is submitted pursuant to 10CFR50.55(e). It describes deficiencies relative to clearance between process piping systems and box-type supports/restraints. This problem is considered reportable under 10CFR50.55(e). This problem has not been reported under 10CFR21.

DESCRIPTION

On April 23, 1981, it was established that a problem existed with the box-type restraints for process piping being installed by Tompkins-Beckwith, Inc.

The elements of the problem are:

a) Confusing and in some cases incorrect restraint design drawings provided by Bergen-Patterson.

b) Tompkins-Beckwith's Contract conflicts with the design drawings as to the required and allowable gap between the pipe and restraint structure. The criteria entered in Tompkins-Beckwith, Inc.'s contract was 1/16" maximum and 0" minimum.

c) Incorrect installation by Tompkins-Beckwith, Inc.

The significant problem which resulted from the above defined problem elements is that the as-built installation has insufficient clearance to allow pipe thermal movement as required.

This problem exists in the following piping systems: Fuel Pool, Containment Spray, Component Cooling Water, Safety Injection, Boron Management, Waste Management, Turbine Cooling Water, Nitrogen Gas, Chemical Volume Control, Blowdown, Emergency Generator, Extraction Steam, Condensate, Reactor Cooling, Main Steam, Heater Drain, Air Evacuation and Auxiliary Steam. The total number of restraints affected is estimated at 1,900. Of this number, it is estimated that approximately 450 supports will require some form of modification (shim, trim lugs or add gap) in order to make them acceptable.

SAFETY IMPLICATIONS

If these deficiencies were left uncorrected, possible degradation of safety systems could occur. Such degradation could occur through the exceeding of ASME Code allowable stresses creating the possibility that systems would be overstressed in some way not analyzed in the FSAR. Additionally, these deficiencies present the potential for common mode failures within/between systems. Such failures are not analyzed in the FSAR.

CORRECTIVE ACTION

The corrective action plan being undertaken to correct the deficiencies is delineated as follows:

A. Evaluation

1) Ebasco Site Support Engineering (ESSE) Hanger Group will measure all as-built gaps.

2) Analysis of as-built gaps versus calculated thermal movements and maximum expected radial expansion of pipe will be conducted by Ebasco to determine acceptability of the as-built installation.

3) Bergen-Patterson will be requested to comment on technique and logic of Ebasco analysis.

B. Corrective Action Implementation

1) Restraints which require modifications will be remeasured by Tompkins-Beckwith, Inc., after modifications are completed.

2) Nonconformance Report W3-2644 will be the vehicle used by Tompkins-Beckwith, Inc., to implement corrective action (modifications) and document as-built gaps of restraints which are modified.

For those restraints not installed to date, the gap criteria has been redefined and distributed through issue of field sketches Series M694. These requirements have been incorporated into the respective Tompkins-Beckwith program procedures.

Corrective Action will be completed on or before June 30, 1982, at which time the Final Report will be submitted.