



LOUISIANA
POWER & LIGHT

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July 9, 1982

G. D. McLENDON
Senior Vice President

W3K82-0399
Q-3-A35.07.57

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
Interim Report of Significant Construction Deficiency No. 57
"Inadequate Instrumentation and Control Installations and
Turnover Documentation"

Reference: Telecon - L. L. Bass (LP&L) to W. Crossman (NRC) on 7/2/82

Dear Mr. Collins:

In accordance with the requirements of 10CFR50.55(e), we are hereby providing two copies of the Interim Report of Significant Construction Deficiency No. 57, "Inadequate Instrumentation and Control Installations and Turnover Documentation."

If you have any questions, please advise.

Very truly yours,

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)

LOUISIANA POWER & LIGHT COMPANY

WATERFORD SES UNIT NO. 3

Interim Report of
Significant Construction Deficiency No. 57

INADEQUATE INSTRUMENTATION AND CONTROL
INSTALLATIONS AND TURNOVER DOCUMENTATION

Reviewed by *J. J. Will for RGM.* *7/8/82*
R. J. Milhiser - Site Manager Date

Reviewed by *J. L. Wills* *7/8/82*
J. L. Wills - Project Superintendent Date

Reviewed by *Per Telecom J. L. Hart* *7-8-82*
J. Hart - Project Licensing Engineer Date

Reviewed by *W. Yaeger* *7/8/82*
W. Yaeger - Sr. Resident Engineer Date

Reviewed by *J. Gutierrez* *7-8-82*
J. Gutierrez - Q. A. Site Supervisor Date

July 8, 1982

INTERIM REPORT
SIGNIFICANT CONSTRUCTION DEFICIENCY NO. 57
INADEQUATE INSTRUMENTATION AND CONTROL
INSTALLATION AND TURNOVER DOCUMENTATION

INTRODUCTION

This report is submitted pursuant to 10CFR50.55(e). It describes Instrumentation and Control (I&C) System Installations which are not in accordance with the design specifications. Additionally, the recently prepared system "as-built" drawings do not accurately reflect the actual installed conditions. These problems are considered reportable under the requirements of 10CFR50.55(e). To the best of our knowledge, this problem has not been reported to the Nuclear Regulatory Commission pursuant to 10CFR21.

DESCRIPTION

In preparation for ECCS Flow Testing and Primary System Cold Hydrostatic Testing, Mercury Company of Norwood, Inc., (Installation Contractor for Instrumentation and Control Systems), submitted their installation, inspection, and test documentation and "as-built" drawings for the following plant start-up systems:

- a) Start-Up System (SUS) No. 59 - Containment Spray
- b) SUS No. 60A - High Pressure Safety Injection
- c) SUS No. 60B - Low Pressure Safety Injection
- d) SUS No. 60C - Safety Injection Tanks

The Mercury submittal contained exceptions such that final Quality Assurance/Quality Control certification was not provided.

Audits of the I&C System documentation in conjunction with field surveillance revealed that:

- a) The "as-built" drawings did not accurately reflect field conditions. Problems such as (1) reverse slope of tubing runs, (2) incorrect seismic support designations, and (3) dimensional errors were identified.
- b) Physical problems existed with the actual installations such as (1) reverse slope of tubing runs, (2) supports not installed, (3) improper bolting, (4) deformed tubing, and (5) tubing touching track or bolt heads not allowing for thermal expansion.

SAFETY IMPLICATIONS

Instrumentation associated with these systems included Safety Class 2 and 3 instrumentation. These instruments are required for safety system actuation and for plant parameter monitoring by the Reactor Operations. If left uncorrected, these problems could result in the failure of essential safety-related equipment to operate when required and the failure of the instruments to provide reliable information to the Reactor Operators.

CORRECTIVE ACTION

On June 23, 1982, Mercury Company of Norwood, Inc., was directed to:

- a) Reassign crafts off safety-related systems installation and rework until directed by the Engineer.
- b) Identify rework teams of Craft, Foremen, Field Engineers, QC Inspectors Supervision who, upon completion of an immediate retraining program satisfactory to the Engineer, will proceed with rework required for acceptable construction completion, documentation, and turnover of the aforementioned systems.
- c) Develop a documented retraining program, related to correcting the problems being encountered, to be submitted to the Engineer for approval no later than June 25, 1982.
- d) Upon approval by the Engineer of this retraining program, implement this program under the purview of the Engineer with the rework teams identified in (b) above.
- e) Upon concurrence by the Engineer that this retraining program has been properly executed for the teams, the Engineer will authorize reassignment of craft to safety-related work.
- f) Extend the retraining program to all Mercury personnel consistent with the training schedule included in the aforementioned retraining program.
- g) Implement organizational changes resulting from the scheduled meeting with LP&L and Ebasco on June 24, 1982.

Reinspection and rework of the four systems listed above (Description Section) is in progress.

Corrective action applicable to the other safety-related instrumentation systems will be established upon assessment of the results of the above defined actions for the four systems currently in question.

A Final Report will be submitted to the USNRC by September 15, 1982.

LOUISIANA POWER & LIGHT COMPANY

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