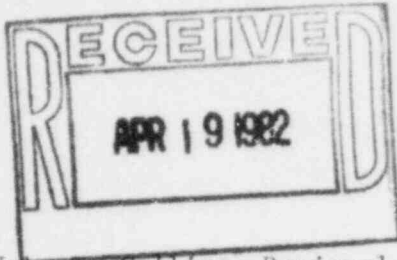




LOUISIANA
POWER & LIGHT

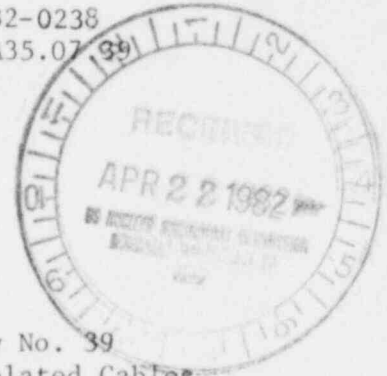
142 DELARONDE STREET
P. O. BOX 6008 • NEW ORLEANS, LOUISIANA 70174 • (504) 366-2345



April 16, 1982

G. D. McLendon
Senior Vice President

W3K-82-0238
Q-3-A35.07 39



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
Final Report of Significant Construction Deficiency No. 39
Fire Damage in RCB to Main Steam Line and Safety Related Cables

Reference: LP&L Letter W3K-82-0125 dated 3/2/82 to USNRC

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. 39, "Fire Damage in RCB to Main Steam Line and Safety Related Cables."

If you have any questions, please advise.

Very truly yours,

Thomas F. Griggs for
G. D. McLendon

GDMcL/LLB/grf

Attachments

- 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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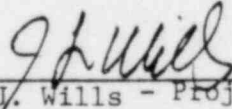
LOUISIANA POWER & LIGHT COMPANY

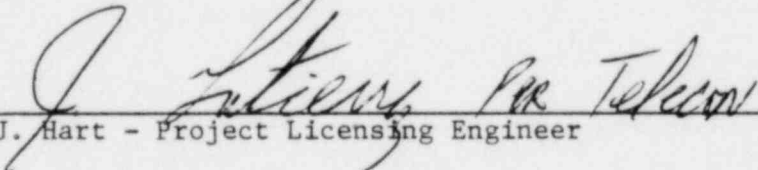
WATERFORD SES UNIT NO. 3

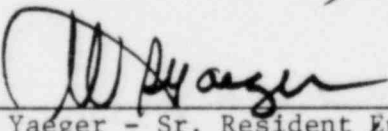
Final Report of
Significant Construction Deficiency No. 39

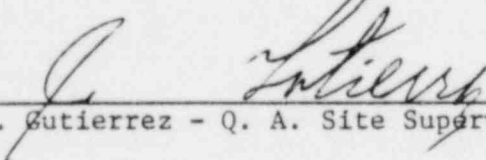
Fire Damage in RCB to Main Steam Line and Safety Related Cables

Reviewed by  4/14/82
R. J. Mathiser - Site Manager Date

Reviewed by  4/14/82
J. Wills - Project Superintendent Date

Reviewed by  Per Telecom 4-14-82
J. Hart - Project Licensing Engineer Date

Reviewed by  4-14-82
W. Yaeger - Sr. Resident Engineer Date

Reviewed by  4-14-82
J. Gutierrez - Q. A. Site Supervisor Date

April 14, 1982

FINAL REPORT
SIGNIFICANT CONSTRUCTION DEFICIENCY NO. 39
FIRE DAMAGE IN RCB TO MAIN STEAM LINE AND SAFETY RELATED CABLES

Introduction

This report is submitted pursuant to 10CFR50.55(e). It describes a fire which occurred in Louisiana Power & Light Company's Waterford SES Unit No. 3 Reactor Containment Building (RCB) in the main steam line penetration area on elevation +46.00'. The fire affected electrical cables, main steam line, and associated pipe supports and restraints which were exposed to flames of an undetermined temperature for a period of approximately one hour and ten minutes. This problem is considered reportable under the requirements of 10CFR50.55(e). This problem has not been identified to the Nuclear Regulatory Commission pursuant to 10CFR21.

Description

On October 11, 1981, at 5:23 a.m., a fire was discovered in the RCB, elevation +46.00', in the main steam line penetration area at azimuth 243°. Investigations to determine the cause of the fire have not positively established the cause. The items found to be on fire were twenty-two (22) 6" x 8" x 3' oak timbers which were being used as dunnage for the main steam line. The local fire department was called at 5:25 a.m. and arrived on site at 5:50 a.m. In the meantime, site personnel attempted to extinguish the flames with the use of available extinguishers and by removing the burning timbers from the immediate area of the main steam line. The items sustaining obvious damage include some safety- and non-safety-related electrical cables. Ebasco has coordinated tests to determine whether or not metallurgical damage occurred to the main steam line and its associated supports, restraints, and accessories.

Safety Implications

The following is a safety evaluation for the electrical cable:

If the cable insulation has been degraded, there is the possibility that during an accident, the cables will fail to carry signals for safety grade instrumentation and/or control. Thus, several safety systems could become degraded and not be able to carry out their safety function. Therefore, if these cables were not replaced, the safety of the plant would be affected.

The following is the safety evaluation of the line:

Based on the report of Ebasco's Materials Applications Group, the line and associated components are essentially undamaged (outside of the exterior coatings), and the safety of the plant would not be affected. However, some of the components require coatings for corrosion protection; thus, subsequent corrosion could weaken these items and prevent them from carrying out their safety function. Therefore, if the components are left uncorrected (i.e., recoated), the safety of the plant could be affected.

Corrective Action

Immediately following the fire, the above mentioned area was secured and placed off limits to all personnel with the exception of Security and Safety personnel pending an investigation. On October 16, 1981, Ebasco Quality Assurance personnel were permitted to enter the area. On that date, Nonconformance Report No. W3-3093 was initiated.

- a) In order to prevent recurrence of similar incidents to the extent feasible, all wood being used throughout the plant island has been replaced with approved fire retardant material.
- b) Mechanical: Ebasco Materials Applications personnel have evaluated the information provided by Ebasco Site Engineering and Quality Assurance, and the conclusions drawn are that:
 - 1) The heat produced by the subject fire did not produce any detrimental effects on the mechanical properties of the portions of the Nuclear Safety Class 2 Main Steam Piping Spools, Pipe Hanger Assembly MSRR-18, or Pipe Restraint FR1 exposed to the fire.
 - 2) The hardness test data obtained from the components evaluated did not indicate the presence of any unacceptable hard areas which would be associated with the presence of a martensitic structure caused by heating to temperatures above the transformation temperature and rapid cooling.
 - 3) The components exposed to the subject fire are acceptable for their intended service following cleaning to remove soot deposits, scale, and blistered paint and restoration of the surfaces in accordance with the respective design specification requirements.
- c) Civil: Ebasco Civil Construction directed the painting contractor to perform the following work as related to the damaged items or areas:
 - 1) Restraint P4L-E1-W1: The restraint required removal of surface discoloration and reapplication of Ameron-Amercoat 90 except for an area approximately from El. +46 to El. +49 on northwestern vertical member of restraint. A large area of exposed metal and the several isolated spots of exposed metal required surface preparation by sandblasting and reapplication of Ameron-Dimetcote EZ primer with Ameron-Amercoat 90 top coat. (Structural steel was treated in one of the above methods depending on extent of damage.)
 - 2) Support MSRR-18: Removed strut and clamp portions of support to Sline (painting contractor) blast yard for sand blast surface preparation and reapplication of Ameron-Dimetcoat EZ primer.
 - 3) Main Steam Line: Prepared entire surface where there was damage to coating by sand blasting and reapplied Ameron-Dimetcote EZ primer.

This work was completed April 13, 1982.

- d) Electrical: As noted on the Nonconformance Report, Ebasco Engineering has investigated, evaluated, and dispositioned all electrical components involved. Pullout and repull documents have been issued as applicable for cables and tests. A partial disposition identified and designated the areas of assignment. Ebasco Engineering defined the cable trays, cables, and conduit involved. All documents such as related pullslips, meggering, and inspection have been completed. Repair work necessary to restore electrical integrity has been completed.

Based on the corrective action measures taken, the main steam line and the safety-related cables identified in this report are considered satisfactory for their intended use.