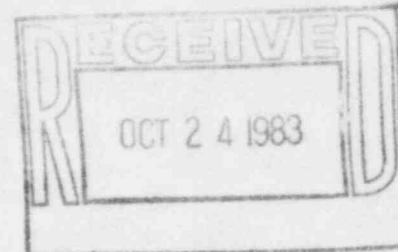


LOUISIANA

POWER & LIGHT/Waterford 3 SES/P.O. Box B/Killona, Louisiana 70066

October 17, 1983

W3K83-1552
Q-3-A35.07.76



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

REFERENCE: LP&L letter W3183-0306 dated September 15, 1983

Dear Mr. Collins:

SUBJECT: Waterford SES Unit No. 3
Docket No. 50-382
Significant Construction Deficiency No. 76
"Damage to Pressurizer Heaters During Hot Functional Testing
Final Report

In accordance with the requirements of 10CFR50.55(e), we are hereby providing two copies of the Final Report of Significant Construction Deficiency No. 76, "Damage to Pressurizer Heaters During Hot Functional Testing.

If you have any questions, please advise.

Very truly yours,

T. F. Gerrets
T. F. Gerrets
Quality Assurance Manager

TFG:CNH:VBR

cc: Director
Office of Inspection & Enforcement
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555
(15 copies)

8311150378 831017
PDR ADDCK 05000382
S PDR

IV Official File Copy

IE-27

Mr. John T. Collins
October 17, 1983
W3K83-1552
Page 2

cc: Director
Office of Management
Information and Program Control
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Mr. E. L. Blake
Shaw, Pittman, Potts, & Trowbridge
1800 M Street, N.W.
Washington, D.C. 20036

Mr. W. M. Stevenson
Monroe & Lemann
1424 Whitney Building
New Orleans, Louisiana 70130

Records Center
Institute of Nuclear Power Operations
1100 Circle 75 Parkway, Suite 1500
Atlanta, Georgia 30339

Final Report of
Significant Construction Deficiency No. 76

"Damage to Pressurizer Heaters During Hot Functional Testing"

Introduction

This report is submitted pursuant to 10CFR50.55(e). It describes damage which occurred to the pressurizer heaters during pre-core hot functional testing. This problem is considered to be not reportable under the requirements of 10CFR50.55(e) (1) (iii).

Description of Problem

On March 10, 1983, Pre-core Hot Functional Testing was in progress with the plant conditions stable at a primary system test plateau of 460°F and 1100 psi for testing and equipment surveillance. Channel "X" was selected for pressurizer Level Control while leaking instrument tubing connections on the Channel "Y" system were being repaired by I&C technicians. Throughout the afternoon, unrecognized by Control Room personnel, the Channel "X" Level Control System erroneously indicated a pressurizer level of approximately 40% while Channel "Y" ranged from 31% down to 2.8%. Channel "Y" repairs had been completed by I&C technicians but this information was unknown to Control Room personnel.

A low-low pressurizer level signal deenergizes all heaters to protect the heaters should they become uncovered. Channel "X" was selected for this function and due to the anomalous Channel "X" level indication, the pressurizer heaters were maintained energized while uncovered resulting in known damage to 21 heaters and suspected damage to the remaining 9 heaters.

Subsequent to the pressurizer heater damage, it was determined that the Channel "X" pressurizer level measurement and control system was inoperable due to leaks at instrument tubing connections and that Channel "Y" was providing valid level indication.

Safety Implications

The pressurizer heaters are not safety-related; therefore, the damage to the heaters has no safety significance.

Corrective Action

The need for proper approvals and communications with the Nuclear Operations Supervisor prior to and at the completion of maintenance activities was emphasized to Hot Functional Test Coordinators, Test Directors, and Plant Staff Maintenance personnel. The personnel were also instructed in the use of Startup Administrative Procedure (SAP-08), "Condition Identification and Corrective Action."

All pressurizer heaters have been replaced, electrically tested and the welds nondestructively tested. The heaters will receive an in-service leak test during post-core hot functional testing.