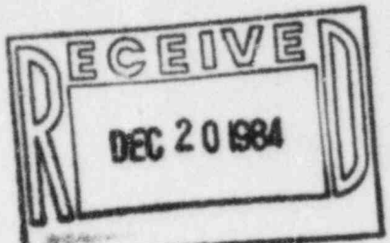
The Light company Houston Lighting & Power P.O. Box 1700 Houston, Texas 77001 (713) 228-9211

December 14, 1984
ST-HL-AE-1153
File Number: G12.32



Mr. Robert D. Martin
Regional Administrator, Region IV
Nuclear Regulatory Commission
611 Ryan Plaza Dr., Suite 1000
Arlington, Texas 76012

Dear Mr. Martin:

South Texas Project
Units 2 & 2
Docket Nos. STN 50-498, STN 50-499
Revised Final Report Concerning Welds In
The Essential Cooling Water System

On March 12, 1980, Houston Lighting & Power Company (HL&P), pursuant to 10CFR 50.55(e), notified your office of an item concerning rejectable indications in the radiographs of circumferential welds in the Essential Cooling Water (ECW) System piping. By letter dated October 23, 1981, HL&P submitted the final report concerning this item which stated that corrective action to be implemented was, among other things, a re-examination and repair or replacement, as required, of all ECW piping welds.

As a result of an Engineering evaluation of data collected during the re-examination process, we have determined that, for a limited number of inaccessible welds, repair or replacement of the weld is not necessary. Attachment 1 to this letter provides a revised final report regarding this item.

If there are any questions, please contact Mr. Michael E. Powell at (713) 993-1328.

Very truly yours,

G. W. Oprea, Jr.
Executive Vice President

LJK:wm

Attachment: Revised Final Report Concerning Welds In The Essential Cooling Water System.

WI/LNRC/s

IE-27
1/1

cc:

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Brazoria, TX 77422

Docketing & Service Section
Office of the Secretary
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Revised 12/12/84

W2/NRC1/k

Attachment
ST-HL-AE-1153
File Number: G12.32

South Texas Project
Units 1 & 2
Revised Final Report Concerning
Welds In The Essential Cooling Water System

I. Summary

No change from the Final Report dated October 23, 1981.

II. Description of the incident

No change from the Final Report dated October 23, 1981.

III. Corrective Action

As previously identified a re-review of the RT film was conducted of the ECW piping welds. This re-review included an examination by a NDE Level III of all RT film previously reviewed and accepted by NDE Level II interpreters. The film was also reviewed by an independent welding task force under the NRC Order to Show Cause Item 3(a). The film reevaluation resulted in the identification of various generic problems such as poor film quality, rejectable indications, improper surface conditions and the use of incorrect radiographic techniques.

All accessible ECW welds made prior to April 30, 1980 have been subjected to a 100% visual, liquid penetrant and radiographic examination. Welds identified as being rejectable have been replaced or repaired as required. In some cases, sections of piping have been removed to facilitate inspection and repair of welds within the section. Welds cut out to remove piping sections were not reexamined prior to cut out, however all welds within the removed section have been examined and repaired as required. The new end welds have been examined upon replacement of the section in accordance with the ASME Code.

Data collected during the reexamination was utilized to perform an engineering evaluation of the inacessible welds. An evaluation was first made of a sample of reexamination radiographs to determine the probable worst case defects and their effect on an elastic-plastic fracture mechanics basis and limit load basis. This evaluation showed that defects considerably larger than those identified in the sample could be tolerated without compromising system structural integrity. Subsequently, reexamination of all accessible welds was completed and all data was compared with the worst case defect assumed in the engineering evaluation. The assumed worst case defect bounded all defects found during the reexamination process.

It was also verified that the available data on the inaccessible welds did not contain any indications that exceed the ASME Code acceptance criteria. Based on this and the engineering evaluation of the reexamination data for the accessible welds, it has been concluded that the 12 inaccessible welds near the Unit 1 Diesel Generator Building and under the Essential Cooling Water Pond embankment are acceptable.

WI/LNRC/s

South Texas Project
Units 1 & 2
Revised Final Report Concerning
Welds In The Essential Cooling Water System

Based on this evaluation the limited number of inaccessible welds (12) near the Unit 1 Diesel Generator Building and the Essential Cooling Pond embankment have been accepted for use as is.

Recurrence control

No change from the Final Report dated October 23, 1981.

Safety Evaluation

No change from the Final Report dated October 23, 1981.