



Houston
Lighting
& Power
Company

Electric Tower
P.O. Box 1700
Houston, Texas 77001

September 29, 1978

ST-HL-AE-292
SPN: C-0510

Mr. W. G. Hubacek
U. S. Nuclear Regulatory Commission
Office of Inspection and Enforcement
Region IV
611 Ryan Plaza Drive, Suite 1000
Arlington, TX 76012

RE: RESPONSE TO NRC INSPECTION FINDINGS
SOUTH TEXAS PROJECT, UNITS 1 & 2
DOCKET NO. 50-498/77-06, ST-HL-AE-201,
DATED MAY 23, 1977

SUBJECT: UTILIZATION OF LEVEL I QC INSPECTORS FOR
CONCRETE PREPLACEMENT AND PLACEMENT INSPECTION
SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION

Dear Mr. Hubacek:

The purpose of this letter is to inform you of our plans relative to utilization of Level I QC Inspectors for concrete preplacement and placement inspection activities.

We have re-evaluated our position as stated in our response to your audit of April 26-29, 1977 (Docket No. 50-498/77-06). In October, 1977, we made an inquiry to the Joint ACI-ASME Committee on Concrete Pressure Components for Nuclear Service (SC-3C) for clarification of the Code intent. A copy of our inquiry is attached. To date, we have not received clarification from this committee.

We plan to begin using Level I QC Inspectors for quantitative inspections in accordance with the team concept as referenced in Appendix VII - 4100 of ACI 359 - ASME Section III, Division 2, "Proposed Standard Code for Concrete Reactor Vessels and Containments." These inspectors will receive training including written examinations. Level I QC Inspectors who have met the qualification requirements set forth in Appendix VII - 3311 and passed the examinations will perform inspections and tests per Table VII-4100-1. Level II QC Inspectors will continue to evaluate inspection and test results. It is our intention to develop this program as soon as possible, and to begin utilizing these Level I Inspectors as soon as they complete training.

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Level I QC Inspectors will work under the direction of a certified Level II QC Inspector, with no more than three Level I Inspectors assigned to each Level II Inspector. The following are examples of quantitative inspections to be performed by Level I QC Inspectors:

Reinforcing Steel Inspection - checking for correct number, size, and spacing of bars; checking lap length, development length and concrete cover; and checking security of bars and projection of dowels.

Embed Inspection - checking for correct number, type, and location of embeds; checking for bent studs, clearance between embeds and rebar, and security of embeds; and checking type, location, and security of waterstop.

Formwork Inspection - checking for cleanliness, mortar tightness, structural support, dimensions, and location of forms; checking type and spacing of form ties; checking for proper application of form release agents; and checking location and size of chamfer strips.

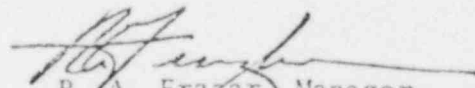
Construction Joint Inspections - checking preparation, surface moisture condition, location, and cleanliness of concrete construction joints.

Tendon Sheathing Inspection - checking joint preparation and physical and weather protection.

Concrete Placing - checking setup of hoppers and tremies, placing of screeds, backup placement equipment, weather protection provisions, mix design, rate of placement, vertical drop and lift thickness; and checking the temperature of embedded items and forms.

We trust that you will find this position satisfactory. Should you require any further clarification or information, please advise.

Very truly yours,


R. A. Frazar, Manager
Quality Assurance Department

RAF:jw
Attachment

cc: Messrs. E. A. Turner
H. L. Key