TEXAS UTILITIES GENERATING COMPANY

SKYWAY TOWER * 400 NORTH OLIVE STREET, L.B. 81 * DALLAS, TEXAS 75201

L. F. FIKAR

August 13, 1984 TXX-4259

Mr. Richard L. Bangart Director, Region IV Comanche Peak Task Force U.S. NRC Office of Inspection and Enforcement 611 Ryan Plaza Dr., Suite 1000 Arlington, TX 76012



COMANCHE PEAK STEAM ELECTRIC STATION PLUG WELDS IN UNIT 2 SPREAD ROOM ADDITIONAL RESPONSE FILE NO: 903.9

Dear Mr. Bangart:

By letter dated April 30, 1984 from R.L. Bangart to M.D. Spence, the Nuclear Regulatory Commission ("NRC") Staff requested responses to questions relating to an inspection by L.D. Gilbert (NRC Staff) of approximately 87 supports in the Comanche Peak Steam Electric Station ("CPSES") (56 supports in the Unit 2 cable spreading room and 31 supports in the yard tunnel). During the inspection, Mr. Gilbert discovered indications of weld repair of misdrilled holes on three cable tray supports in the Unit 2 cable spreading room. In a letter dated May 29, 1984 from B.R. Clements to Mr. Bangart, Texas Utilities Generating Company ("TUGCO") provided its response. In the response TUGCO indicated that it was unable at that time to locate documentation which indicates that welding of misdrilled holes on the three cable tray supports had been properly inspected in accordance with applicable procedures. To determine the extent of repair of misdrilled holes in the Unit 2 cable spreading room for which such documentation could not be located, TUGCO committed to perform a "visual inspection, using methods similar to those described by Mr. Gilbert in the Addendum to NRC Staff testimony dated April 24, 1984, of a statistically representative sample of the cable tray hangers in the Unit 2 cable spreading room."

By letter of July 23, 1984 from Mr. Bangart to Mr. Spence, the NRC Staff requested that TUGCO provide (1) "the detailed sampling plan and the procedure(s) which describes your inspection techniques for assessing the

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extent of unauthorized weld repairs", (2) a completion date for the final report of the inspection, and (3) actions taken by TUGCO to prevent recurrence of unauthorized weld repairs. TUGCO's response is contained in the attached report.

Very truly yours,

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L.F. Fikar

LFF/brd

cc: T. Ippolito R. Martin D. Hunnicutt

APPENDIX A

Sampling and Inspection Methodology

To conduct the sampling, the Unit 2 cable spreading room is divided into five roughly equal areas with one Quality Control ("QC") Inspector assigned to each area. Each QC Inspector is directed to inspect 60 cable tray supports in the assigned area assuring that the supports selected represent a random sample from all locations (including all elevations) within the area. A Quality Engineering Supervisor monitors the inspection to assure that the supports are selected on a random basis and represent the spectrum of supports at all locations within the room. The supports inspected are recorded.

Prior to conducting the inspection, discussions are held with each of the five QC Inspectors regarding the appropriate method of inspection, <u>e.g.</u>, a detailed examination of all exposed surfaces of each support by holding a light at an oblique angle to all surfaces in order to locate repaired misdrilled holes. Using this technique, changes in the mill finish of a cable tray support (which would be present if any welding occurred) would be clearly visible.

The Inspectors are directed to mark each suspected area and record its location. Upon completion of the initial field inspection, a quick documentation search is conducted to determine if QC inspections have been conducted on the suspected areas. For those suspected areas for which appropriate documentation is not readily available, the paint is removed to determine if the irregularity in the mill finish is due to a repair of a misdrilled hole. If there remains a questions, the surface of both sides of ths suspected area is acid etched to determine conclusively whether a repaired misdrilled hole exists.

After a final determination that supports exist on which repairs of misdrilled holes have been performed, a search of appropriate documentation is made to determine if required QC inspections of the weld repairs of such holes are documented. For any cable tray supports which contain repaired misdrilled holes for which appropriate documentation does not exist, an NCR is prepared and resolved in accordance with appropriate procedures.

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ATTACHMENT

PLUG WELDS

1. Detailed Sampling Plan and Inspection Techiques

The sampling plan consists of inspections of 300 of the approximatley 2220 cable tray supports in the Unit 2 cable spreading room. This sample size provides assurance at a 95 percent confidence level with a 0.025 error band that the results will be reflective of all cable tray supports in the Unit 2 cable spreading room. The detailed sampling and inspection methodology used in the inspection is attached hereto.

2. Completion of Inspection Report

In accordance with a request from the NRC Staff, completion of the inspection report has been delayed pending Staff comment on the inspection procedures set forth in paragraph 1, above. TUGCO should be able to provide the inspection report two weeks after the Staff completes its review of and comments on the approach specified above. (If major modifications in the approach noted above are required due to Staff comments, final completion of the report may require an additional 1-2 weeks.)

3. Action to Prevent Recurrence

In that the problem, if any, which must be corrected will not be fully known until after final completion of the inspection report noted in paragraph 2, above, TUGCO cannot fully respond to this question at this time. At this point, from a design standpoint the problem does not appear to be whether the weld repair of misdrilled holes was properly authorized. Design Change Authorization ("DCA") 5347 (in effect before cable tray supports in the Unit 2 cable spreading room were erected) authorizes repair of misdrilled holes on cable tray supports in the cable spreading room. Further, DCA 5347 provides instructions regarding which unused holes in cable tray supports need to be repaired. Indeed, pursuant to this DCA, based on the size and location of the misdrilled holes identified by the Staff in their inspection, none of the holes were required to be repaired in the first instance. (It should be noted that a subsequent QC inspection of the weld repair on these misdrilled holes showed no rejectable indications.)

At this juncture, it appears that the problem identified by the Staff may be limited to QC Inspectors not always recording that they inspected weld repair of misdrilled holes. While QC Inspectors have always been required to inspect all welds on each support (including weld repair of misdrilled holes), in the past they were not required to note specifically on the inspection documentation that some of the welds they inspected on a cable tray support were repairs of misdrilled holes. While some Inspectors did specifically list these repairs, others may not have.

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On November 10, 1980, Revision 2 to QI-QP-11.10-2 was issued which required all QC Inspectors to document specifically all inspections of weld repair of misdrilled holes. Applicable forms were modified at this time adding a specific section dealing with misdrilled holes. QC Inspectors were instructed regarding use of the new forms. In sum, while it appears that the problem, if any, raised by this issue may have been corrected, it is premature to make a judgment until after final completion of the inspection report. Finally, to be absolutely certain that all QC Inspectors are clearly aware of the need to document such inspections, the need to document these inspections will be reinforced in meetings with QC Inspectors and welding supervisors.