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

J.R. WELLS
DIRECTOR
QUALITY ASSURANCE

June 11, 1985
TXX-4492

Mr. D.R. Hunter, Chief
Reactor Project Branch 2
U.S. Nuclear Regulatory Commission
Office of Inspection & Enforcement
611 Ryan Plaza Drive, Suite 1000
Arlington, TX 76012

Docket Nos.: 50-445
50-446

COMANCHE PEAK STEAM ELECTRIC STATION
EMBEDDED ANGLES
QA FILE: CP-85-18, SDAR-179
FILE NO.: 10110

Dear Mr. Hunter:

In accordance with 10CFR50.55(e), we are submitting the enclosed written report of actions taken to correct a deficiency regarding the project construction and inspection programs that do not specify criteria for the placement of concrete anchors in the proximity of embedded angles.

Supporting documentation is available at the CPSES site for your Inspector's review.

Very truly yours,

JRW:tlg

Attachment

cc: NRC Region IV - (0 + 1 copy)

Director, Inspection & Enforcement (15 copies)
U.S. Nuclear Regulatory Commission
Washington, DC 20555

85-466

IE-27

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ATTACHMENT

EMBEDDED ANGLES

Description

The construction procedure for the installation of concrete anchors provides specific criteria for the placement of the anchors in the proximity of embedded plates. Specifically, the anchor must be placed no closer to the edge of the plate than five (5) times the diameter of the anchor. The construction procedure is unclear, however, in the application of this criteria in the placement of concrete anchors in the proximity of embedded angles. The separation of concrete anchors is required to assure the structural integrity of adjacent shear cones. An engineering procedure to control evaluations of closer spacing is currently implemented at the jobsite.

Evaluation by site engineering has concluded the spacing criteria is significant for embedded angles in two (2) applications. Embedded angles which frame openings for removable block walls and watertight doors induce loading into the welded studs (anchors) which must be considered for affect on adjacent concrete anchors. The lack of proper spacing between concrete anchors and embedded angles in these two (2) critical applications has resulted in indeterminate conditions. The concern is applicable to Units 1 and 2.

Safety Implications

In the event the condition had remained undetected, failure of the concrete anchors or the embedded angles could result in impairment of an essential support system.

Corrective Action

The construction procedure (CEI-20) which prescribes the installation process for concrete anchors will be revised to include the following:

> Where embedded angles are used for framing watertight door or removable block wall openings, the minimum clearance from center line of Hilti anchor to the opening edge is 5" + 5 times the Hilti anchor diameter. A sketch will be included.

An inspection will be performed by site Quality Control to identify all existing applications in question. Separation violations identified in this inspection will be documented by a nonconformance report and dispositioned after an engineering evaluation.