TEXAS UTILITIES GENERATING COMPANY
2001 BRYAN TOWER · DALLAS, TEXAS 75201

R. J. GARY
EXECUTIVE VICE PRESIDENT
AND GENERAL MANAGER

December 10, 1980
TXX-3243

Mr. W. C. Seidle, Chief
Reactor Construction & Engineering
Support Branch
U. S. Nuclear Regulatory Commission
Office of Inspection & Enforcement
611 Ryan Plaza Dr., Suite 1000
Arlington, Texas 76012

Docket Nos. 50-445
50-446

COMANCHE PEAK STEAM ELECTRIC STATION
INSTALLATION OF DRILLED-IN EXPANSION ANCHORS
FILE NO: 10110

Dear Mr. Seidle:

This letter transmits our formal report in accordance with 10 CFR 50.55(e) concerning a procedural deficiency discovered in the installation of drilled-in expansion anchors. This matter was reported verbally to Mr. R. G. Taylor on November 7, 1979. This letter supersedes and voids our previous transmittal letter TXX-3125 dated April 21, 1980.

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

If we can provide any additional information, please advise.

Very truly yours,

R. J. Gary

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

Director, Inspection & Enforcement - (15 copies)
c/o Distribution Services Branch, DDC, ADM.
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

INSTALLATION OF DRILLED-IN EXPANSION ANCHORS

Description of Deficiency

Richmond screw anchors, Hilti-kwik bolts and embedded plates are used as the principal anchoring medium between concrete surfaces and piping component supports, cable raceway supports, etc. at Comanche Peak. Installation requirements for the Hilti-kwik bolts were established in mid-1978 based on the results of a field test program and other empirical and theoretical information available. However, the initial installation requirements for spacing between the Hilti-kwik bolts and the embedded anchors did not properly account for the potential failure modes between the various anchor types, assuming full load development on the concrete anchors. A contributing factor to this problem was the lack of a formal detailed engineering specification for installation of the Hilti-kwik bolts.

Safety Implications

The integrity of the completed installations is presently indeterminate and thus the capability of the various supports to perform their design function cannot be assured under maximum loading conditions.

Corrective Actions

Corrective actions for the stated deficiency have or will include the following:

1. The governing installation procedure (35-1195-CEI-20) was revised in October 1979 and now properly reflects minimum spacing requirements between the various anchor types. This installation procedure has been reviewed by the Architect/Engineer. Quality control activities include verification of the minimum spacing requirements.

2. A survey of all building areas has been performed under the auspices of the Comanche Peak civil engineering group for the purpose of identifying supports not conforming to the spacing criteria. The results of this survey are currently being evaluated for any required re-work with an estimated completion date of July 1, 1981.