

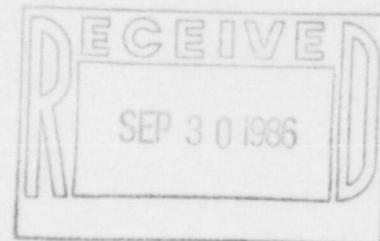
**TEXAS UTILITIES GENERATING COMPANY**

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

September 26, 1986

WILLIAM G. COUNSIL  
EXECUTIVE VICE PRESIDENT

Mr. Eric H. Johnson, Director  
Division of Reactor Safety and Projects  
U. S. Nuclear Regulatory Commission  
611 Ryan Plaza Drive, Suite 1000  
Arlington, TX 76012



SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)  
DOCKET NOS. 50-445 AND 50-446  
SEISMIC QUALIFICATION OF HVAC SUPPORTS  
SDAR: CP-85-54 (INTERIM REPORT)

Dear Mr. Johnson:

On December 20, 1985, we verbally notified your Mr. R. Hall of a deficiency involving discrepancies in supplier provided HVAC support documents which could invalidate the seismic qualification of the supports. We have submitted interim reports logged TXX-4668, TXX-4718, and TXX-4863 dated January 20, 1986, February 28, 1986, and June 18, 1986, respectively. We are reporting this deficiency under the provisions of 10CFR50.55(e) and the required information is attached. Our evaluation of this issue is continuing and we anticipate submitting our next report by November 20, 1986.

Very truly yours,

A handwritten signature in cursive script that reads "W. G. Council".

W. G. Council

JCH/amb  
Attachment

c - NRC Region IV (0 + 1 copy)

Director, Inspection and Enforcement (15 copies)  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

8610090132 860926  
PDR ADOCK 05000445  
S PDR

86-1101

IE-27

1/1

ATTACHMENT  
SEISMIC QUALIFICATION OF HVAC SUPPORTS

DESCRIPTION

During a program review of documentation by Site Engineering, discrepancies were found in Unit 1 and Common HVAC duct support documents provided by the supplier (Bahnsen). The discrepancies involved inconsistencies between as-built support drawings, actual installed conditions, and the seismic qualification calculations. The validity of the seismic qualification report could not be determined, pending further investigations.

In order to resolve this issue, a program of as-built verification inspections and engineering evaluations of selected Seismic Category I duct supports was initiated. Duct layout and support configuration inspections were conducted to obtain the actual as-built information needed to perform engineering evaluations of the supports. The engineering evaluations were performed to determine the qualification status of the installed duct supports and to identify potentially safety significant concerns.

Field verifications (as-built walkdowns) to obtain duct layout, duct support, and duct-to-support attachment details commenced in April 1986. Due to deviations in the as-built verification program for the duct supports as detected by TUGCO QC surveillance activities, that portion of the as-built program was suspended in July 1986. This suspension of activities did not affect the field verification of duct layout and duct-to-support attachment details.

The as-built verification effort (based on the duct support sample in Unit 1 and Common which had been completed prior to the work suspension as well as the verified duct-to-support attachment details) has indicated numerous construction deviations from the intended design and/or the absence of design information for attachment details.

Initial engineering evaluations of the limited sample have indicated that although the specific design criteria may not be met as a result of the differences between as-built and as-designed conditions, the supports would not fail. Thus, no deficiencies have been identified to date which, had they remained uncorrected, could have adversely affected the safe operation of the HVAC supports.

However, these results to date are inconclusive because (a) the sample of supports upon which these results are based is too limited and (b) more detailed engineering evaluations may show that the original design criteria are met even with the construction deviations.

Because of the differences identified to date between as-built and as-designed HVAC supports, we have determined that a one hundred percent (100%) as-built effort is appropriate. This effort will be undertaken including a comprehensive design verification effort. Further engineering evaluations of the sample conducted to date have been superseded by the revised program described as "Corrective Action."

The scope of field verification, construction deviations from intended design, technical evaluation, and resulting rework, if any, is of a magnitude such that this issue is being reported under the provisions of 10CFR50.55(e).

ATTACHMENT  
SEISMIC QUALIFICATION OF HVAC SUPPORTS

SUMMARY OF EVENTS:

Date Discovered: December 20, 1985, per engineering documentation review

Date NRC Notified as Potentially Reportable: December 20, 1985

Interim Reports to the NRC: January 20, 1986, February 28, 1986, and  
June 18, 1986

Date Reported: September 26, 1986

SAFETY IMPLICATIONS:

No definitive conclusions can be drawn on the safety of the HVAC supports in the event the differences between as-built and as-designed conditions had remained undetected. The limited engineering evaluation to date indicates no adverse effect on safe operation of the HVAC supports. The corrective actions discussed below will ensure that the HVAC system will operate safely.

CORRECTIVE ACTION:

The following corrective measures are being implemented to resolve this issue:

1. The project organization and responsibilities for Unit 1 and Common HVAC activities have been realigned. Engineering and QC activities previously performed by Bahnson have been assumed by Ebasco and TUGCO, respectively.
2. The field verification effort has been expanded to encompass all Unit 1 and Common Seismic Category I duct supports.
3. Engineering evaluations will be performed to ensure compliance with FSAR commitments.
4. Construction rework will be performed, as deemed necessary, by the engineering evaluations of field verified information to assure compliance with FSAR criteria for the affected supports.
5. To assure Unit 2 installations comply with prescribed requirements, Unit 2 HVAC supports will be field verified. The as-built effort will be conducted by Bahnson, with QC verification by TUGCO. Ebasco has been given responsibility for the adequacy of the as-built verification effort and design.

The revised project organization is scheduled to be formally established by September 29, 1986. The revised field verification, engineering evaluation, and rework (if required) program is currently scheduled for completion by May 1, 1987, for Unit 1 and September 1, 1987, for Unit 2.

In light of the extended schedule for completion of these activities, progress reports will be periodically submitted. Our next report will be submitted November 20, 1986.