

COMANCHE PEAK STEAM ELECTRIC STATION

REACTOR CONTAINMENT BUILDING

UNIT ONE

PREOPERATIONAL

INTEGRATED LEAK RATE TEST

ADDENDUM

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TEXAS UTILITIES GENERATING COMPANY

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ILRT Test Summary
Addendum

During the Comanche Peak Steam Electric Station Unit One preoperational containment Integrated Leak Rate Test (ILRT), two electrical penetrations, E-49 and E-68 were isolated due to excessive leakage. A special test program was developed to investigate the reason for the leaking penetrations. The program has been completed, the reason for the leakage identified, and the penetrations have been successfully repaired.

The special test program consisted of a two phase plan. Phase I tested a spare electrical penetration and Phase II repaired the two leaking penetrations based on the Phase I results.

A spare electrical penetration assembly (EPA), identical to the ones in penetrations E-49 and E-68, was selected from the warehouse. The EPA was local leak rate tested (Type B) first and its leakage rate was minimal. A special test chamber was then attached to the EPA, see attached figure, so that the EPA could be pressurized in the same manner as it was during the ILRT (Type A test). When pressurized, the EPA's leakage rate was in excess of the measuring capability of the leak rate monitor. The leakage was coming out from the nitrogen charge tube indicating leakage around the module Q-seals.

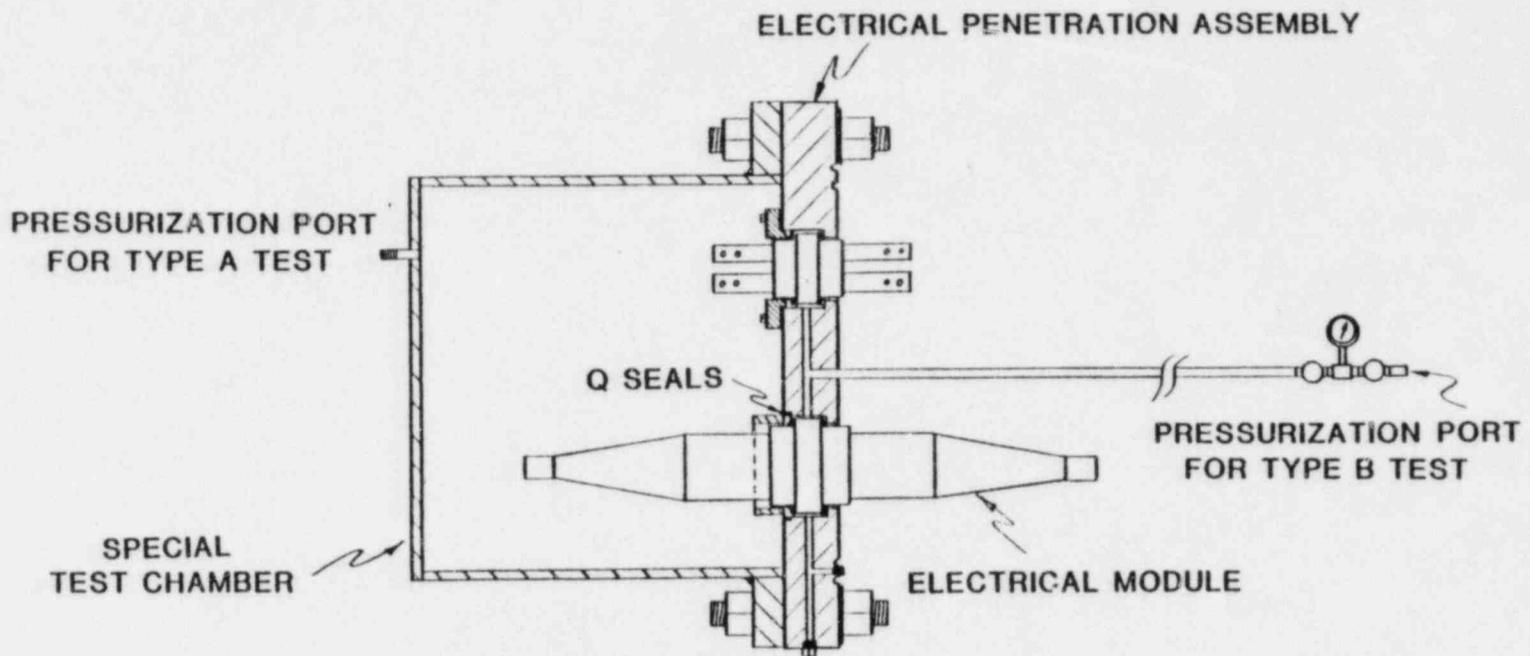
The EPA was removed from the test chamber and disassembled for inspection. No defects were found and the Q-seals around the modules were determined acceptable for reuse. The unit was reassembled and upon inspection the Q-seal retaining rings were found to be seated to a greater depth than before disassembly. The EPA was attached to the test chamber and again leak tested. Both the Type A and Type B tests were completed satisfactorily. This concluded the Phase I testing.

The test results from the special test program indicated that improper assembly of the EPA was the most likely cause of the leakage. Based on this, it was decided to proceed to Phase II of the program.

The EPA's in penetrations E-49 and E-68 were determined and unbolted from their respective containment penetration header plates. Each one was Type A tested using the special test chamber and found to be leaking excessively. Both were subsequently disassembled and inspected and no defects were found. The Q-seals were determined to be acceptable for reuse. Upon reassembly, the Q-seal retaining rings were again found to be seated to a greater depth than before disassembly. A Type A test was performed on each EPA using the special test chamber and each one's leakage rate was satisfactory, less than 2 SCCM. After reassembly into their respective penetrations, a Type B test was conducted and each EPA showed less than 2 SCCM leakage.

This concluded the special test program and shows that improper assembly was the cause of leakage in penetrations E-49 and E-68. Since a simulated Type A test was successfully conducted on each penetration after reassembly, no further Type A testing is warranted.

Appendix D to the ILRT report can now be completed by adding the 2 SCCM leakage to penetrations E-49 and E-68. Adding the total penalty leakage from Appendix D, 616 SCCM or $4.0 \text{ E-}06\%/day$ to the UCL value of $0.05936\%/day$ does not change the value of the UCL as already reported. Therefore, there are no changes to the leakage rate for CPSES Unit One ILRT preoperational test and this then finalizes the ILRT report.



SPECIAL TEST CONFIGURATION