TEXAS UTILITIES SERVICES INC.
2001 BRYAN TOWER · DALLAS, TEXAS 75201

TXX-2930 December 21, 1978

Mr. R. Naventi
Licensing Project Manager
Light Water Reactors Branch No. 4
Division of Project Management
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

COMANCHE PEAK STEAM ELECTRIC STATION
GEOLOGIC INFORMATION
DOCKET NOS. 50-445 & 50-446
FILE NO. 10010

Dear Mr. Naventi:

As requested by Mr. Harold Lefevre of the Seismology-Geology Branch at our meeting of October 24, 1978, please find enclosed the following:

1. A photomosaic with a transparent overlay indicating the Paluxy-Glen Rose contact and the marder bed within the Glen Rose formation. The transparent overlay also shows the locations of all wells within a 5-mile radius of the plant site.

2. A large scale, colored, geologic map of the site area with well locations. Also with this geologic map is a transparent overlay which shows the contours of the Paluxy/Glen Rose contact, and contours of the marker bed within the Glen Rose formation.

3. A plate showing the locations of geologic cross-sections A-A', B-B', C-C', and D-D'.

4. A drawing showing the geologic column through cross-section C-C'.

5. A drawing showing the geologic cross-section through D-D'.

6. A set of well logs showing wells logs through the upper cretaceous strata. The following well logs are included:

Well Name	Well I.D. Number
Hooper No. 2	-

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C. L. Campbell No. 1	-
D. McIntosh No. 1	-
Squaw Creek Cattle Co. No. 1	2
Otis Rollins No. 1	-
Wiggins No. 1	-
M. M. Bunt No. 1	-
Comanche Peak No. 1 Water Well	-
Texas Utility No. 1 Water Well	-

7. A structural map of the CPSES area from the Geomap Company.

8. A definition of depletion drive in a gas reservoir prepared by Mr. Forest A. Garb, President of H. J. Gruy and Associates, Inc.

9. A false-color aerial photograph of the CPSES site.

If you have any questions about this matter, please contact this office.

Sincerely,

C. K. Feist

C. K. Feist

CKF:tls
Enclosure
cc: H. C. Schmidt
C. D. Oliver
Walt Miller

H. J. GRUY AND ASSOCIATES, INC.
PETROLEUM CONSULTANTS
2501 CEDAR SPRINGS ROAD
DALLAS, TEXAS 75201

November 30, 1978

Mr. C. K. Fiest
Texas Utilities Fuel Company
2001 Bryan Tower
Dallas, Texas 75201

Dear Mr. Fiest:

Depletion drive in a gas reservoir is defined as that producing mechanism which exhibits a decline in reservoir pressure essentially proportional to the gas volumes produced. The pressure decline is not exactly proportional to produced volumes because natural gas deviates from the performance of an ideal gas. This deviation is treated in calculations through the use of a gas deviation factor (commonly identified by the symbol "Z") which may be measured in the laboratory or calculated from the gas composition. Accurately stated, a depletion drive gas reservoir will exhibit reservoir pressures (P) divided by gas deviation factors (P/Z) which decline proportional to the gas volumes produced from the reservoir. This mechanism occurs in constant volume reservoirs which do not have natural water influx or injection of outside energy.

Gas reservoirs having negligible water influx are usually classified as depletion drive reservoirs. One can therefore consider a depletion drive gas reservoir as a constant volume tank or container.

Stratigraphic trap reservoirs quite often produce under depletion drive because they are usually isolated from the presence of large acquifers due to the geological and depositional conditions.

A reservoir producing under depletion drive mechanism normally will exhibit negligible water production.

Yours very truly,

H. J. GRUY AND ASSOCIATES, INC.

Forrest A. Garb

Forrest A. Garb
President

FAG:jl

REGISTERED ENGINEER

No. 16160

STATE OF TEXAS