RAMA ROBERT BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF TENNESSEE GAS TRANSMISSION COMPANY FOR A TEMPORARY ORDER ESTABLISHING 80 ACRE WELL SPACING AND PRORATION UNITS IN THE KEMNITZ AREA EMBRACING SECTIONS 23, 24, 25, 26, 35 AND 36, TWP. 16 S., RGE. 33 E., AND SECTIONS 16, 17, 18, 19, 20, 21, 28, 29, 30, 31, 32 AND 33, TWP. 16 S., RGE. 34 E., N.M.P.M., LEA COUNTY, NEW MEXICO, FOR THE PRODUCTION OF OIL AND GAS FROM THE LOWER WOLFCAMP FORMATION AND FOR THE ESTABLISHMENT OF AN 80 ACRE ALLOWABLE WITH PROPORTIONAL DEPTH FACTOR.

CASE NO. 125

AMENDMENT TO APPLICATION

Comes the undersigned, Tennessee Gas Transmission Company, and amends its original application filed heretin as follows:

In the second paragraph of Section 7 of the original application, applicant stated that it would be in the interest of the protection of correlative rights including those of royalty owners, and the prevention of waste to establish 80-acre well spacing and proration units consisting of east and west 80-acre legal subdivisions in each section as indicated by the plat attached to the original application as Exhibit "A". By reference to east and west 80-acre legal subdivisions in each section, it was intended that the $N^{\frac{1}{2}}$ and $S^{\frac{1}{2}}$ of each quarter section be designated as the 80-acre well spacing and proration units, and said application is hereby amended accordingly.

Respectfully submitted,

TENNESSEE GAS TRANSMISSION COMPANY

Harence E. Hinkle
A member of the firm of Hervey, Dow & Hinkle, Roswell, New Mexico, Attorneys for Applicant.

0

1320

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF TENNESSEE GAS TRANSMISSION COMPANY FOR A TEMPORARY ORDER ESTABLISHING 80 ACRE WELL SPACING AND PRORATION UNITS IN THE KEMNITZ AREA EMBRACING SECTIONS 23, 24, 25, 26, 35 AND 36 IN TWP. 16 S., RGE. 33 E., AND SECTIONS 16, 17, 18, 19, 20, 21, 28, 29, 30, 31, 32 AND 33, TWP. 16 S., RGE. 34 E., N.M.P.M., LEA COUNTY, NEW MEXICO, FOR THE PRODUCTION OF OIL AND GAS FROM THE LOWER WOLFCAMP FORMATION AND FOR THE ESTABLISHMENT OF AN 80 ACRE ALLOWABLE WITH PROPORTIONAL DEPTH FACTOR.

6

CASE NO. 1254

APPLICATION

Comes the undersigned, Tennessee Gas Transmission Company, and respectfully shows:

- 1. That applicant is a corporation with offices at Houston, Texas, with a Certificate of Authority to do business in the State of New Mexico.
- 2. That applicant is the owner of oil and gas leases embracing the following described lands of the State of New Mexico, situated in Lea County, New Mexico, to-wit:

Twp. 16 S., Rge. 33 E., N.M.P.M.

Section 25: $N_{\frac{1}{2}}$

Twp. 16 S., Rge. 34 E., N.M.P.M.

Section 17: W

20: W

21: W

28: NW !

30: A1

32: N=

3. That applicant drilled the discovery well in the area hereinafter described and herein referred to as the "Kemnitz" area, said discovery well being located in approximately the center of the

 $NE_{4}^{1}NE_{4}^{1}$ of Section 30, Twp. 16 S., Rge. 34 E., N.M.P.M., and having been completed as a well capable of producing oil and gas in paying quantities from the lower Wolfcamp formation which was found at the interval between 10,266 feet and 10,895 feet. That because of the discovery well being located on the Kemnitz lease, applicant believes it would be appropriate to officially designate the area covered by this application as the Kemnitz field or pool.

4. That since the completion of the initial discovery well there have been four additional wells completed which are producing oil and gas from the lower Wolfcamp formation at depths ranging from 10,600 feet to 10,800 feet, the location of said wells being as follows:

Tennessee Gas Transmission Company No. 1 "B" located in the approximate center of the NE $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 25, Twp. 16 S., Rge. 33 E.

Ohio Oil Company "SA" No. 1 located in the approximate center of the $SW_{\frac{1}{4}}^{\frac{1}{4}}NE_{\frac{1}{4}}^{\frac{1}{4}}$ of Section 20, Twp. 16 S., Rge. 34 E.

Sinclair Seaman Unit No. 2 located in the approximate center of the $NW_{\frac{1}{4}}^{\frac{1}{4}}NW_{\frac{1}{4}}^{\frac{1}{4}}$ of Section 19, Twp. 16 S., Rge. 34 E.

Sinclair Seaman Unit No. 3 located in the approximate center of the $NE^{\frac{1}{4}}SE^{\frac{1}{4}}$ Section 24, Twp. 16 S., Rge. 33 E.

In addition to the above producing wells, there are six wells which are being drilled at the present time, located as follows:

Ohio Oil Company State "SB" No. 1 located in the approximate center of the $SE_{\frac{1}{4}}^{\frac{1}{4}}SW_{\frac{1}{4}}^{\frac{1}{4}}$ of Section 16, Twp. 16 S., Rge. 34 E.

Sinclair State Lea 381 No. 1 located in the approximate center of the $SE\frac{1}{4}SE\frac{1}{4}$ of Section 19, Twp. 16 S., Rge. 34 E.

Tennessee Gas Transmission Company State "A" No. 1 located in the approximate center of the $SW_{\mu}^{I}SW_{\mu}^{I}$ of Section 20, Twp. 16 S., Rge. 34 E.

Shell State "WC" No. 1 located in the approximate center of the $NW_{\frac{1}{4}}^{\frac{1}{4}}NW_{\frac{1}{4}}^{\frac{1}{4}}$ of Section 29, Twp. 16 S., Rge. 34 E.

Tennessee Gas Transmission Company State "AA" Kemnitz "A" No. 2 located in the approximate center of the $NE_{\frac{1}{4}}^{\frac{1}{4}}NW_{\frac{1}{4}}^{\frac{1}{4}}$ of Section 30, Twp. 16 S., Rge. 34-E.

Tennessee Gas Transmission Company State "AA" Kemnitz "A" No. 3 located in the approximate center of the $SW_{\frac{1}{4}}NE_{\frac{1}{4}}^{\frac{1}{4}}$ of Section 30, Twp. 16 S., Rge. 34 E.

All of the above wells are being drilled for the production of oil and gas from the lower Wolfcamp formation.

5. That there is attached hereto and made a part hereof, and for purposes of identification marked Exhibit "A", a plat showing the location of the above producing and drilling wells, and showing the outlines of the Kemnitz area for which applicant desires to establish 80 acre well spacing and proration units, and which consists of the following described lands, to-wit:

Twp. 16 S., Rge. 33 E., N.M.P.M.

Section 23: All 24: All 25: All 26: All 35: All 36: All

Twp. 16 S., Rge. 34 E., N.M.P.M.

Section 16: Section 28: All All 17: All 29: All 30: 18: All All 19: 31: All All 32: 20: All All 33: 21: All All

6. That the Kemnitz area as shown by the plat attached hereto as Exhibit "A", is located in central Lea County, approximately fifteen miles west of the town of Lovington, and is three to five miles southwest of the Townsend field or pool which is also producing from the lower Wolfcamp formation.

That the lower Wolfcamp reservoir from which the five wells above referred to are producing is in the nature of a stratigraphic trap formed by a porous and permeable zone in the lower portion of

the Wolfcamp formation. This is also the case with the Townsend pool or producing area above referred to. From all available information it would appear that the characteristics of the two reservoirs are substantially the same in that the oil is of approximately the same gravity, the initial bottom hole pressures are comparable, as well as the gas oil ratios, and it is believed that the per acre foot recovery will be comparable.

That the Townsend pool or area has been developed on standard 40 acre units with the normal 40 acre allowable, and that information obtained from the exploration and development of said area and production tests which have been made all indicate that one well would have effectively, efficiently and economically drained as much as 80 acres, and it is believed that because of the similar characteristics of the lower Wolfcamp reservoir in the Kemnitz area that if said reservoir is developed by the establishment of 80 acre well spacing and proration units that each well will effectively, efficiently and economically drain as much as 80 acres.

7. That the productive limits of the Kemnitz lower Wolfcamp reservoir have not as yet been definitely determined, except possibly to the northwest. There has been a well drilled through the lower Wolfcamp horizon or formation and completed in the upper Pennsylvanian or "Cisco" formation, which is the Seaman Unit No. 1 located in the center of the $SE_{4}^{1}SE_{4}^{1}$ of Section 13, Twp. 16 S., Rge. 33 E., N.M.P.M., and which is a diagonal offset to the Seaman Unit No. 2 located in the $NW_{4}^{1}NW_{4}^{1}$ of Section 19, Twp. 16 S., Rge. 34 E., N.MP.M., which is producing from the lower Wolfcamp reservoir. The first mentioned well located in the $SE_{4}^{1}SE_{4}^{1}$ of Section 13 did not encounter production in paying quantities in the lower Wolfcamp formation and, consequently, it would appear that the northwest productive limits of the lower Wolfcamp reservoir is somewhere between these two wells.

-4-

That applicant believes that it would be in the interest of the protection of correlative rights including those of royalty owners and the prevention of waste to establish 80 acre well spacing and proration units consisting of east and west 80 acre legal subdivisions in each section as indicated on the plat attached hereto as Exhibit "A", and that all wells hereafter drilled in the area be drilled in approximately the center of the $NE_{\frac{1}{4}}^{\frac{1}{4}}$ and $SW_{\frac{1}{4}}^{\frac{1}{4}}$ of each regular 160 acre legal subdivision. This would result in staggered drilling locations except in the case of the Tennessee Gas Transmission Company State "AA" Kemnitz "A" No. 1 well located in the $NE_{4}^{1}NE_{4}^{1}$ of Section 30 and the three offsetting wells located in Sections 19, 20, and 29 which are now being drilled as hereinabove referred to. If this pattern of well locations is followed, the only exceptions to well locations being in the NE_{π}^{1} and SW_{π}^{1} of each 160 acre legal subdivision would be with respect to Sinclair State Lea 381 Well No. 1 located in the $SE^{\frac{1}{4}}SE^{\frac{1}{4}}$ of said Section 19, Shell "WC" State No. 1 located in the $NW_{4}^{1}NW_{4}^{1}$ of said Section 29, Sinclair State Seaman Unit No. 2 located in the $NW_{\frac{1}{4}}^{\frac{1}{4}}NW_{\frac{1}{4}}^{\frac{1}{4}}$ of said Section 19, and Ohio Oil Company State "SB" No. 1 located in the $SE_{+}^{1}SW_{+}^{1}$ of Section 16.

That in establishing such 80 acre well spacing and proration units, an 80 acre allowable with proportional deep well factor as provided by Rule 505 of the Rules of the Oil Conservation Commission should be assigned to each unit and the gas-oil ratio limitation as provided by Rule 506 of the Commission should be applicable thereto.

8. That the approximate cost of drilling and completing wells in the Kemnitz area is approximately \$200,000.00, and where thin sections of the producing reservoir are encountered, wells will not pay out or if drilled would be marginal wells, and unless 80 acre spacing is established it is believed that some portions of the field will not be fully developed and because thereof the greatest ultimate

recovery will not be achieved. Furthermore, a regular well spacing and well location pattern will be conducive to and will facilitate the inauguration of a secondary recovery or pressure maintenance program which will be in the interest of conservation and the prevention of waste, and will be in the interest of obtaining the greatest ultimate recovery of oil and gas from the reservoir.

- 9. That all lands in the proposed area are owned by the State of New Mexico and that it is in the interest of the State that the field or area be developed and operated in such a manner that the greatest ultimate recovery will be obtained without waste, and that 30 acre well spacing and proration units and a pattern of regular well locations will be toward that end and at the same time prevent economic loss by the drilling of excessive wells in that substantially the same amount of oil and gas will be recovered by the drilling of half as many wells as if developed on a 40 acre basis.
- Kemnitz lower Wolfcamp reservoir have not yet been definitely defined, and until all of the characteristics of the reservoir are definitely determined by additional productive history, applicant is only requesting that a temporary order be entered for one year establishing 80 acre well spacing and proration units and regular drilling locations. It is believed that by the end of one year sufficient wells will have been drilled under this pattern to reasonably determine the productive limits of the reservoir and that sufficient tests will have been made to determine all of the characteristics, and if at that time the facts are such that they conclusively show that it is in the interest of conservation and the prevention of waste to continue the development on such a pattern the order could be made permanent.

WHEREFORE, the undersigned applicant respectfully requests that after notice and hearing hereon, as provided by law, that the

Commission enter an order temporarily establishing 80 acre well spacing and proration units for the development and production of oil and gas from the lower Wolfcamp reservoir in the Kemnitz area and for regular well locations and 80 acre allowable, as set forth hereinabove.

Respectfully submitted,

TENNESSEE GAS TRANSMISSION COMPANY

BY:

A member Dow & Hinkle, Roswell, New Mexico,

Attorneys for Applicant.