Entered July 16, 1982

STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

CASE NO. 7515 Order No. R-7021

APPLICATION OF FOUR CORNERS GAS PRODUCERS ASSOCIATION FOR DESIGNATION OF A TIGHT FORMATION, SAN JUAN COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on March 16, 1982, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this <u>l6th</u> day of July, 1982, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

- (1) That due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Four Corners Gas Producers Association, requests that the Division in accordance with Section 107 of the Natural Gas Policy Act and 18 CoF.Ro. §271.703 recommends to the Federal Energy Regulatory Commission that the Dakota formation underlying certain lands situated in San Juan County, New Mexico, as described on Exhibit "A" attached to this order, be designated as a tight formation in said Federal Energy Regulatory Commission's regulations.
- (3) That the area proposed for tight formation designation lies within the horizontal limits of the Basin-Dakota Pool, which is a very large area previously defined and described by the Oil Conservation Division in San Juan County, New Mexico.
- (4) That within the Basin-Dakota Pool are large areas of extensive development and large areas of very limited development.

-2-Case No. 7515 Order No. R-7021

- (5) That the Dakota formation has been approved for infill drilling which permits the subject area to be developed with one Dakota well on each quarter section or 160-acre tract.
- (6) That the area for which a tight formation designation is herein sought is one of very limited development comprised of approximately 516 320-acre proration units of which 105 are developed by a single well; 36 of which are producing wells and 69 are nonproducers.
- (7) That no proration unit within the proposed area contains an infill well.
- (8) That the area proposed for tight formation designation is a largely undeveloped exploratory area.
- (9) That the Dakota formation underlies all of the described lands; that the upper Dakota sand consists of barrier beach deposits about 40 to 60 feet thick, composed of fine grained, quartz-rich sandstones characterized by an increase in grain size upward and low angle crossbedding. The next highest unit is transitional between fluvial and marine sedimentation containing dark carbonaceous shales, thin mudstones, siltstones and sandstones. The basal Dakota consists of carbonaceous shales, thin coal seams, siltstones, and thin channel sandstone.
- (10) That the top of the Dakota formation is found at an average depth of 5952 feet below the surface of the area set out in Finding No. (2) above and Exhibit "A", and has approximately 250 to 300 feet of gross thickness.
- (11) That the type section for the Dakota formation for the proposed tight formation designation is found at a depth of from approximately 5982 feet to 6270 feet on the log from the Compass Exploration, Inc. City of Farmington Well No. 1 located in Unit B of Section 4, Township 29 North, Range 13 West, San Juan County, New Mexico.
- (12) That the technical evidence presented in this case demonstrated that the predominant percentage of wells which may be completed in the Dakota formation within the proposed tight formation area may reasonably be presumed to exhibit permeability, gas productivity, or crude oil productivity not in excess of the following parameters:
 - (a) average in situ gas permeability throughout the pay section of 0.1 millidarcy; and

-3-Case No. 7515 Order No. R-7021

- (b) stabilized production rates, without stimulation, against atmospheric pressure, as found in the table set out in 18 C.F.R. §271.703(c)(2)(B) of the regulations; and
- (c) production of more than five barrels of crude oil per day.
- (13) That within the proposed area there is a recognized aquifer being the Ojo Alamo, found at a maximum depth of 1088 feet or approximately 4800 feet above the Dakota formation.
- (14) That existing State of New Mexico and Federal Regulations relating to casing and cementing of wells will assure that development of the Dakota formation will not adversely affect any overlying aquifers.
- (15) That the area described on Exhibit "A" to this order should be recommended to the Federal Energy Regulatory Commission for designation as a tight formation.

IT IS THEREFORE ORDERED:

- (1) That it be and hereby is recommended to the Federal Energy Regulatory Commission pursuant to Section 107 of the Natural Gas Policy Act of 1978, and 18 C.F.R. §271.703 of the regulations that the Dakota formation underlying those lands in San Suan County, New Mexico, described on Exhibit "A" to this order, be designated as a tight formation.
- (2) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year herein-above designated.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

DOE D. RAMEY

/Director

S E A L fd/

EXHIBIT A

TOWNSHIP 26 NORTH, RANGE 12 WEST, NMPM Sections 1 through 36: All

TOWNSHIP 26 NORTH, RANGE 13 WEST, NMPM Sections 1 through 36: All

TOWNSHIP 27 NORTH, RANGE 12 WEST, NMPM Section 8: S/2 Section 9: S/2 Sections 16 through 36: All

TOWNSHIP 27 NORTH, RANGE 13 WEST, NMPM Section 3: W/2
Sections 4 through 9: All

Section 10: W/2

Sections 14 through 36: All

TOWNSHIP 28 NORTH, RANGE 13 WEST, NMPM Sections 7 through 9: All Sections 16 through 21: All Sections 28 through 33: All Section 34: W/2

TOWNSHIP 29 NORTH, RANGE 13 WEST, NMPM Sections 4 through 9: All Sections 16 through 19: All Section 20: W/2 Section 29: W/2

Sections 30 and 31: All Section 32: W/2

TOWNSHIP 29 NORTH, RANGE 14 WEST, NMPM
Section 1: All
Section 2: W/2 and SE/4
Sections 3 through 18: All
Section 19: NE/4
Sections 20 through 27: All
Section 28: N/2 and SE/4
Section 34: N/2
Sections 35 and 36: All

TOWNSHIP 29 NORTH, RANGE 15 WEST, NMPM

Sections 1 through 6: All Section 7: N/2
Section 8: N/2
Section 9: N/2
Section 10: N/2 and SE/4
Sections 11 and 12: All Section 13: N/2
Section 14: N/2

TOWNSHIP 30 NORTH, RANGE 14 WEST, NMPM Sections 1 through 12: All Sections 15 through 23: All Sections 26 through 34: All

TOWNSHIP 30 NORTH, RANGE 15 WEST, NMPM Sections 1 through 36: All

Containing a total of 165,120 acres, more or less.