STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OLL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:



CASE NO. 6533 Order No. R-1670-V

APPLICATION OF EL PASO NATURAL
GAS COMPANY FOR THE AMENDMENT OF
ORDER NOS. R-1670 and k-1670-C,
BASIN-DAKOTA POOL, SAN JUAN AND
RIO ARRIBA COUNTIES, NEW MEXICO,
TO PERMIT THE OPTIONAL DRILLING
AND PRODUCTION OF A SECOND WELL ON
PRORATION UNITS IN SAID POOL, TO
ESTABLISH WELL LOCATION REQUIREMENT

UNOCAL EXHIBIT NO. 17

BEFORE EXAMINER STOGNER

OIL CONSERVATION DIVISION

ESTABLISH WELL LOCATION REQUIREMENTS, AND TO PROVIDE THAT THE DELIVERABILITIES OF BOTH WELLS ON THE UNIT WOULD BE ADDITIVE FOR ALLOWABLE PURPOSES.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This conservation for hearing at 9:00 a.m. on April 30, 1979, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 22nd day of May, 1979, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, and being fully advised in the premises,

FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the "Dakota Producing Interval" in San Juan and Rio Arriba Counties, New Mexico, was created and defined by Commission Order Nos. R-1287, dated November 21, 1958, and R-1287-A, dated March 2, 1959.
- (3) That the Basin-Dakota Gas Pool, located in San Juan and Rio Arriba Counties, New Mexico, was created by Commission Order No. R-1670-C, dated November 4, 1960.

- (4) That the Basin-Dakota Gas Pool is governed by special rules and regulations, promulgated by the Commission in Order Nos. R-1670 and R-1670-C, as amended, which provide for 320-acre proration units and for the assignment of allowable to each proration unit in the pool based on the amount of acreage in the unit and the deliverability of the unit well.
- an order amending said Order Nos. R-1670 and R-1670-C, as amended, to permit the optional drilling of an additional well on each 320-acre proration unit in the Basin-Dakota Gas Pool; to determine the deliverability of each proration unit upon which an additional well is drilled by adding the deliverabilities of the two wells; to permit the production of the allowable assigned to a proration unit containing two wells from both wells in any proportion; to consider both wells on a proration unit as one well for purposes of balancing underproduction or overproduction; to report the production of each well on the unit as well as the total unit production; and to compare the unit production against the unit allowable for determining whether a unit should be classified marginal or non-marginal.
- (6) That the Basin-Dakota Gas Pool has been developed for approximately 18 years on 320-acre proration units.
- (7) That to change the unit size now in said pool would disturb the equities under many of the existing proration units.
- (8) That the provisions set forth in Order No. R-1670-C, as amended, relative to acreage dedication and vertical and horizontal limits shall continue to be applicable.
- (9) That the proration unit size in the Basin-Dakota Gas Pool should continue to be 320 acres.
- (10) That Section 70-2-11, New Mexico Statutes Annotated, 1978, empowers the Commission to prevent waste of hydrocarbons and to protect the correlative rights of the owners of each interest in said hydrocarbons.
- (11) That Section 70-2-6, New Mexico Statutes Annotated, 1978, confers jurisdiction on the Commission over all matters relating to the conservation of oil and gas.
- (12) That "waste" is defined by Section 70-2-3, New Mexico Statutes Annotated, 1978.
- (13) That the producing formation of the Basin-Dakota Gas Pool is comprised of various sands of low permeability and porosity which are not being efficiently and effectively drained by

existing wells in the various proration units in the pool, and which can be more efficiently and effectively drained by the drilling of additional wells pursuant to the rule changes proposed by the applicant.

- (14) That the infill drilling of a second well on an established proration unit in the Basin-Dakota Gas Pool is necessary to effectively and efficiently drain a portion of the reservoir covered by the proration unit which cannot be effectively and efficiently drained by any existing wells within the proration unit.
- (15) That infill drilling will substantially increase recoverable reserves from each proration unit in the Basin-Dakota Gas Pool.
- (16) That infill drilling will result in greater ultimate recovery of the reserves under each of the various proration units in the pool.
- (17) That infill drilling in the Basin-Dakota Gas Pool will result in more effici at use of reservoir energy and will tend to ensure greater ultimate recovery of gas from the pool, thereby preventing waste.
- (18) That implementation of infill drilling in the Basin-Dakota Gas Pool will afford each operator the opportunity to produce, without waste, his just and equitable share of the gas from the Pool, and his correlative rights, as defined by Section 70-2-33, New Mexico Statutes Annotated, 1978, will not be impaired.
- (19) That both wells on a proration unit should be produced so long as it is economically feasible to do so.
 - (20) That the application should be approved.

IT IS THEREFORE ORDERED:

(1) That Rule 2 of the Special Rules for the Basin-Da.ota Gas Pool, as promulgated by Order Nos. R-1670 and R-1670-C, as amended, is hereby amended to read in its entirety as follows:

"RULE 2(A)

 $(x_1,x_2,\dots,x_n) = \frac{1}{\sqrt{2\pi}} \frac{1}{\sqrt{2\pi}$

in the Halle III

The initial well drilled on a proration unit shall be located not closer than 790 feet to any outer boundary of the quarter

section on which the well is located, and not closer than 130 feet to any quarter-quarter section line or subdivision inner boundary.

The initial well to be drilled on a proration unit may be drilled in either quarter section in the proration unit.

Any gas well location approved to be drilled in accordance with the location rules in effect prior to May 22, 1979, will be considered as a standard location.

In the event any such well is completed as an oil well at a location nearer than 330 feet to a governmental quarter-quarter section line, said well shall not be produced unless and until such time as the unorthodox oil well location has been approved by the Division after notice and hearing.

"RULE 2(B)

The second well drilled on a proration unit shall be located in the quarter section of the unit not containing a well, and shall be locate? with respect to the unit boundaries as escribed in Rule 2(A) above.

No Dakota infill well shall be drilled nearer than 920 feet to an existing Dakota well on the same proration unit.

The plats (OCD Form C-102) accompanying the Application for Permit to Drill (OCD Form C-101 or Federal Form 9-331-C) for the second well on a proration unit shall have outlined thereon the boundaries of the unit and shall show the location of the first well on the unit as well as the proposed new well.

"RULE 2(C)

In the event a second well is drilled on any proration unit, each well shall be produced for so long as it is economically feasible to do so." (2) That Rule 3 of the Special Rules of the Basin-Dakota Gas Pool as promulgated by Order Nos. R-1670 and R-1670-C, as amended, is hereby amended to read in its entirety as follows:

"RULE 3

The Director of the Division shall have authority to grant an exception to the footage requirements of Rules 2(A) and 2(B), without notice and hearing where an application therefor has been filed in due form and the Director determines that such exception is necessitated by topographical conditions and good cause exists for granting such exception.

Applicants shall furnish all offset operators a copy of the application to the Division and applicant shall include with his application a list of names and addresses of all such operators, together with a written statement that proper notice has been given said operators by registered or certified mail. The Director of the Division shall wait at least 20 days before approving any such unorthodox location, and may approve such unorthodox location only in the absence of objection from any offset operator. In the event such an operator objects to the unorthodox location, the Division shall consider the matter only after proper notice and hearing."

(3) That the Special Rules for the Basin-Dakota Gas Pool as promulgated by Order Nos. R-1670 and R-1670-C, as amended, are hereby amended by the addition of the following Special Rule 9:

RULE 9(A)

one in the second of the seco

The product obtained by multiplying each proration unit's acreage factor by the calculated deliverability (expressed as MCF per day) for the well(s) on the unit shall be known as the AD Factor for the unit. The acreage factor shall be

determined to the second decimal place by dividing the acreage within the proration unit by 320, provided however, that a unit containing from 316 acres to 324 acres shall be considered a standard unit. The AD Factor shall be computed to the nearest whole number.

RULE 9 (B)

The monthly allowable to be assigned to each marginal proration unit shall be equal to its latest available monthly production.

RULE 9(C)

The pool allowable remaining each month after deducting the total allowable assigned to marginal proration units shall be allocated among the non-marginal units entitled to an allowable in the following manner:

- (1) Forty percent (40%) of the pool allowable remaining to be allocated to non-marginal units shall be allocated among such units in the proportion that each unit's "AD Factor" bears to the total "AD Factor" for all non-marginal units in the pool.
- (2) Sixty percent (60%) of the pool allowable remaining to be allocated to non-marginal units shall be allocated among such units in the proportion that each unit's acreage factor bears to the total acreage factor for all non-marginal units in the pool.

RULE 9(D)

The current deliverability tests, taken in accordance with the "Gas Well Testing Rules and Procedures - San Juan Basin, New Mexico," shall be used in calculating allowables for the proration units in the pool for the 12-month period beginning April 1 of the following year.

RULE 9(E)

When calculating the allowable for a proration unit containing two wells in accordance with Rule 9 of these rules, the deliverability of both wells shall be added in calculating the AD Factor and the unit allowable may be produced from both wells.

(4) That said Special Rules for the Basin-Dakota Gas Pool, as promulgated by Order Nos. R-1670 and R-1670-C, as amended, are hereby amended by the addition of the following Special Rules 10(C) and 10(D):

RULE 10(C)

The calculated deliverability at the "deliverability pressure" shall be determined in accordance with the provisions of the current "Gas Well Testing Rules and Procedures - San Juan Basin, New Mexico."

No well shall be eligible for reclassification to "Exempt Marginal" status unless it is located on a marginal proration unit.

RULE 10(D)

Within ninety (90) days after gas from the second well on the unit is first delivered to a gas transportation facility, both wells on the unit shall have been tested in accordance with "Gas Well Test-ing Rules and Procedures - San Juan Basin, New Mexico" and the results of the tests filed with the Division's Aztec office and with the gas transportation facility to which the well is connected. If a test for the current test period has previously been filed for the first well on the unit, a second test of said well will not be required. Both tests will be treated as Initial Tests for purposes of assigning allowables to the unit. This rule shall apply to newly completed wells.

(5) That said Special Rules for the Basin-Dakota Gas Pool, as promulgated by Order Nos. R-1670 and R-1670-C, as amended, are hereby amended by the addition of the following Special Rule 12:

RULE 12

The full production of gas from each well, including drilling gas, shall be charged against the proration unit's allowable regardless of the disposition of the gas; provided, however, that gas used in maintaining the producing ability of the well shall not be charged against the allowable.

(6) That said Special Rules for the Basin-Dakota Gas Pool, as promulgated by Order Nos. R-1670 and R-1670-C, as amended, are hereby amended by the addition of the following Special Rule 14:

RULE 14(A)

Underproduction: Any non-marginal proration unit which has an underproduced status as of the end of a gas proration period shall be allowed to carry such underproduction forward into the next gas proration period and may produce such underproduction in addition to the allowable assigned during such succeeding period. Any allowable carried forward into a gas proration period and remaining unproduced at the end of such gas proration period shall be cancelled.

RULE 14(B)

Production during any ore month of a gas proration period in excess of the allowable assigned to a proration unit for such month shall be applied against the underproduction carried into such period in determining the amount of allowable, if any, to be cancelled.

(7) That said Special Rules for the Basin-Dakota Gas Pool, as promulgated by Order Nos. R-1670 and R-1670-C, as amended,

-9-Case No. 6533 Order No. R-1670-V

are hereby amended by the addition of the following Special Rule 15:

RULE 15(A)

Overproduction: Any proration unit which has an overproduced status as of the end of a gas proration period shall carry such overproduction forward into the next gas proration period. Said overproduction shall be made up during the succeeding gas proration period. Any unit which has not made up the overproduction carried into a gas proration period by the end of said period shall not be produced until such overproduction is made up.

RULE 15(B)

If, during any month, it is discovered that a proration unit is overproduced in an amount exceeding six times its average monthly allowable for the preceding twelve months (or, in the case of a newly connected proration unit, six times its average monthly allowable for the months available), it shall not be produced that month nor each succeeding month until it is overproduced in an amount six times or less its average monthly allowable, as determined hereinabove.

RULE 15(C)

Allowable assigned to a proration unit during any one month of a gas proration period in excess of the production for the same month shall be applied against the overproduction chargeable to such unit in determining the amount of overproduction which must be made up pursuant to the provisions of Rule 15(A) or 15(B) above.

RULE 15(D)

The Director of the Division shall have authority to permit a proration unit which is subject to shut-in, pursuant to

-10-Case No. 6533 Order No. R-1670-V

Rules 15(A) or 15(B) above, to produce up to 500 MCF of gas per month upon proper showing to the Director that complete shut-in would cause undue hardship, provided however, such permission shall be rescinded for any proration unit produced in excess of the monthly rate authorized by the Director.

RULE 15(E)

The Division may allow overproduction to be made up at a lesser rate than permitted under Rules 15(A), 15(B), or 15(D) above, upon a showing at public hearing that the same is necessary to avoid material damage to the unit well(s).

<u>RULE 15(F)</u>

Any allowable accruing to a proration unit at the end of a gas proration period due to the cancellation of underage in the pool and the redistibution thereof shall be applied against the unit's overproduction.

RULE 15(G)

The Director of the Division shall have authority to grant a pool-wide moratorium of up to three months on the shutting in of gas wells in a pool during periods of high-demand emergency upon proper showing that such emergency exists, and that a significant number of the wells in the pool are subject to shut-in pursuant to the provisions of Rules 15(A) or 15(B) above. No moratorium beyond the aforementioned three months shall be granted except after notice and hearing.

(8) That said Special Rules for the Basin-Dakota Gas Pool, as promulgated by Order Nos. R-1670 and R-1670-C, as amended, are hereby amended by the addition of the following Section E:

> -

E. CLASSIFICATION OF UNITS

RULE 16 (A)

The proration period (as defined in Rule 13) shall be divided into four classification periods of three months each, commencing on April 1, July 1, October 1, and January 1. After the production data is available for the last month of each classification period, any unit which had an underproduced status at the beginning of the proration period shall be classified marginal if its highest single month's production during the classification period is less than its average monthly allowable during said classification period; provided however, that the operator of any unit so classified, or other interested party, shall have 15 days after receipt of notification of marginal classification in which to submit satisfactory evidence to the Division that the unit is not of marginal character and should not be so classified.

RULE 16(B)

The Director may reclassify a marginal or non-marginal proration unit at any time the unit's production data, deliverability data, or other evidence as to the unit's producing ability justifies such reclassification.

RULE 17

A proration unit which is classified as marginal shall not be permitted to accumulate underproduction, and any underproduction accrued to the unit prior to its classification as marginal shall be cancelled.

RULE 18

If, at the end of a proration period, a marginal proration unit has produced more than the total allowable for the

period assigned to a non-marginal unit of like deliverability and acreage, the marginal unit shall be reclassified non-marginal and its allowable and net status adjusted accordingly. (If the unit has been classified as marginal for one proration period only, or a portion of one proration period only, any underproduction cancelled as the result of such classification shall be reinstated upon reclassification back to non-marginal status. All uncompensated-for overproduction accruing to the unit while marginal shall be chargeable upon reclassification to non-marginal.)

RULE 19

A proration unit containing a well which has been reworked or recompleted shall be classified non-marginal as of the date of reconnection of the well to a pipeline until such time as production data, deliverability data, or other evidence as to the unit's producing ability indicates that the unit should be classified marginal.

RULE 20

All proration units not classified marginal shall be assified non-marginal.

- (9) That said Special Rules for the Basin-Dakota Gas Pool, as promulgated by Order Nos. R-1670 and R-1670-C, as amended, are hereby amended by the addition of the following Special Rule 21(A):
 - F. REPORTING OF PRODUCTION

RULE 21 (A)

The monthly gas production from each well shall be metered separately and the gas production therefrom shall be reported to the Division on Form C-115 in accordance with Rule 1115 of the Division's Rules and Regulations, so as

-13-Case No. 6533 Order No. R-1670-V

to reach the Division on or before the 24th day of the month next succeeding the month in which the gas reported was produced. The operator shall show on such report what disposition has been made of the gas produced. The sum of the production from both wells on the proration unit shall also be reported for multiple-well units.

(10) That said Special Rules for the Basin-Dakota Gas Pool, as promulgated by Order Nos. R-1670 and R-1670-C, as amended, are hereby amended by the addition of the following Special Rules 22 and 23.

G. GENERAL

RULE 22

No gas, either dry gas or casinghead gas, produced from the Basin-Dakota Gas Pool, except that gas used for "drilling-in" purposes, shall be flared or vented unless specifically authorized by order of the Division after notice and hearing.

RULE 23

Failure to comply with the provisions of this order or the rules contained herein shall result in the cancellation of allowable assigned to the affected proration unit. No further allowable shall be assigned to the affected unit until all rules and regulations are complied with. The Division Director shall notify the operator of the unit and the purchaser, in writing, of the date of allowable cancellation and the reason therefor.

- (11) That the effective date of this order shall be July 1, 1979.
- (12) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

-14-Case No. 6533 Order No. R-1670-V

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

ALEX_J. ARMIJO, Member

EMERY C. ARNOLD, Member

JOE D. RAMEY, Member & Secretary

S E A L

fd/