STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

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

CASE NO. 9872 ORDER NO. R-8170-E

APPLICATION OF OXY USA, INC. FOR TERMINATION OF GAS PRORATIONING IN THE BURTON FLAT-MORROW GAS POOL, EDDY COUNTY, NEW MEXICO

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on February 21, 1990, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this <u>2nd</u> day of April, 1990, the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) The applicant, Oxy USA, Inc., seeks an order terminating gas prorationing in the Burton Flat-Morrow Gas Pool encompassing portions of Townships 20 and 21 South, Ranges 26, 27 and 28 East, NMPM, Eddy County, New Mexico.

(3) The Burton Flat-Morrow Gas Pool was created by Division Order No. R-4486, effective March 1, 1973, for the production of gas from the Morrow formation.

(4) The horizontal limits of said pool have been extended several times by order of the Division.

(5) Gas prorationing was instituted in the Burton Flat-Morrow Gas Pool by Division Order No. R-4706, dated January 18, 1974, issued in Division Case No. 5111, which was later changed to Order No. R-1670-P and was subsequently changed again and is presently governed by Order No. R-8170, as amended.

(6) Gas prorationing in the Burton Flat-Morrow Gas Pool was originally established for the following reasons:

- (a) there was more than one pipeline purchaser purchasing gas produced from pool wells;
- (b) there was more than one producer of gas;
- (c) the total deliverability of the producing wells in the pool exceeded the reasonable market demand for gas from said pool;
- (d) the pool contains several wells with fractional acreage factors; and
- (e) the foregoing conditions created the opportunity for a violation of correlative rights.
- (7) At the time of the hearing on this case, evidence was presented that:
 - (a) there are eleven pipeline transporters taking production from the subject pool;
 - (b) there are 61 wells in the subject pool with some 19 different operators;
 - (c) there are 43 marginal wells in the pool;
 - (d) there are 7 overproduced non-marginal wells and 11 underproduced non-marginal wells in the pool; and
 - (e) the entire pool is underproduced in terms of the pool allowable.

(8) The Burton Flat-Morrow Gas Pool is adjacent or within one mile of six Morrow gas pools, only one of which is prorated.

(9) The applicant presented testimony and evidence which indicates that the market demand now exceeds the pool deliverability.

(10) Since early 1988 and continuing to the present, the allowable assigned to the Pool and to wells in the Pool does not appear to accurately reflect the market demand for gas production from the pool.

(11) The production limitations imposed by the proration system appears to have discouraged and may continue to discourage further developmental drilling, attempted workovers of existing wells or the installation of compression equipment.

(12) At this time there are no wells in the pool which are underproduced because of lack of market for the gas from a well.

(13) Geologic and engineering calculations establish that the higher capacity non-marginal wells in the pool are draining less than 320 acres and therefore the termination of prorationing for the pool should not cause the larger non-marginal wells to impair the correlative rights of marginal wells by producing at higher rates.

(14) The applicant testified that termination of prorationing should result in increased ultimate recovery of production from the pool, thereby preventing waste.

(15) It presently appears that the production of the non-marginal wells is being restricted by the proration system assignment of allowables for those wells and not by lack of market for that production.

(16) The applicant testified that the current Division practice of multiplying the production from the second month previous times a seasonal adjustment factor to determine the current month demand has not properly reflected market demand for gas in this pool because:

- (a) the better wells in the Pool reach the six times overproduced level in two months or less and are therefore curtailed before the allowable is increased to reflect the actual demand;
- (b) the curtailment of the better wells in the Pool reduces the actual production from the Pool by dampening production increases or even reducing pool allowable; and

(c) several non-marginal wells are allocated a portion of the Pool's non-marginal allowable, even though they are incapable of producing that allowable. Evidence showed that 61 percent of the non-marginal wells are underproduced and two of those which have produced at capacity since early 1988 reflect 84 percent of the net underproduction in the Pool. The underproduction accrued by these wells further impedes the ability of the system to increase Pool allowable to reflect actual market demand.

(17) At the hearing held by the Division on October 3, 1989, in the case to consider the setting of the allowables for the prorated gas pools of New Mexico, Oxy appeared and presented evidence in support of a request to raise the pool's allowable because market demand was in excess of the allowable being assigned to the Pool and that production was restricted to less than market demand. Based upon that evidence, the Division administratively increased the allowable assigned to the Pool by 380,000 MCF in October 1989 and by 340,000 MCF in November 1989.

(18) Subsequent to the administrative increase, pool production increased significantly, which provides further evidence that the demand for gas from the Pool is greater than the Pool's allowable.

(19) The increase in allowable has enabled operators to perform some workover and drilling activity, but the month by month establishment of allowables does not provide operators with the assurance that the allowables will remain at a level which will permit payout of major investments within a reasonable time period.

(20) Because there are only six wells in the pool with non-standard proration units, none of which has an acreage factor of less than 0.86 and all but one is marginal, it would appear that there exists no basis for continuing proration for the pool based upon the advantage non-standard spacing units might theoretically have over standard sized spacing units.

(21) There are no spacing units that currently have more than one pool well and therefore having multiple wells on a single spacing unit is not a basis for continuing prorationing for the pool.

(22) The applicant presented signed waivers of objection to the termination of prorationing in the subject pool from 17 of the 19 operators and no objections from the other two operators or from any other interested party.

(23) By way of the signed waivers, the other operators in the pool have stated that they do not need prorationing in this pool to protect their correlative rights.

(24) Out of some 130 potentially interested parties to whom Oxy USA, Inc. sent notice of this application, none appeared at the hearing in opposition to the application.

(25) The evidence at this time indicates that termination of gas prorationing would be in the best interest of conservation and that correlative rights would not be violated; however, since there are multiple producers and more than one gas transporter in the pool and because factors that have influenced the conditions of the gas market are so dynamic and the impact of eliminating prorationing in the Pool is not certain, it is in the best interest of conservation to approve this application for a temporary test period, after which the case should be reopened to determine whether or not correlative rights have been impaired as a result of the inability to find a market, whether investment has been made to recover additional reserves and to review any other matters which tend to show that prorationing should be reinstituted or permanently terminated.

(26) During this test period the Pool should be kept on the proration schedule in order to accumulate production information which might be useful to determine whether proration should be reinstated or terminated and to have such records available should the Pool again be prorated. During the test period wells in this pool should not be subject to allowable limitations on production or to the classification as marginal or non-marginal.

(27) This case should be reopened at an examiner hearing in June 1991, at which time the operators in the subject pool should be prepared to appear and present evidence and testimony relative to the determinations of the permanent termination of gas prorationing for the Burton Flat-Morrow Gas Pool.

(28) The Special Rules and Regulations for the Burton Flat-Morrow Gas Pool, as promulgated by Division Order No. R-8170, as amended, should be suspended during the test period, and the actual operations of said pool should be governed henceforth by the General Rules and Regulations applicable for gas wells in Southeast New Mexico currently completed in the Morrow formation.

(29) If the Division should determine that gas prorationing should be reinstituted at any time during or at the end of the test period, the wells in the Pool should be returned to their status as of the date this Order is effective with respect to classification and accumulated over or underproduction.

(30) In order to encourage operators to drill new wells, workover existing wells, install needed compression and enter into longer term sales agreements, provision should be made for a minimum allowable for all non-marginal wells in the pool should prorationing be reinstituted. Evidence presented in this case showed that the allowable of approximately 750 MCF per day for an acreage factor of 1.0 assigned for November 1989 is sufficient to encourage capital expenditure, and operators are not prevented from meeting long-term contracts because of allowable restrictions.

(31) This order should be effective April 1, 1990, which is the beginning of a Classification period.

IT IS THEREFORE ORDERED THAT:

(1) The application of Oxy USA, Inc., seeking an order terminating gas prorationing in the Burton Flat-Morrow Gas Pool, encompassing portions of Townships 20 and 21 South, Ranges 26, 27 and 28 East, NMPM, Eddy County, New Mexico, is hereby approved for a temporary test period commencing April 1, 1990, and ending at a time determined by the Division.

(2) The Special Rules and Regulations for said pool, as promulgated by Division Order No. R-8170, as amended, are hereby suspended during the test period.

(3) Said pool shall be governed by the General Rules and Regulations applicable for gas wells in Southeast New Mexico currently completed in the Morrow formation.

(4) The Burton Flat-Morrow Gas Pool shall be kept on the Proration Schedule for Southeast New Mexico during the test period for statistical purposes only, and the classification of wells and assignment of allowables as shown therein shall not be applied as limitations of production on the wells in the pool, and no over or underproduction shall be accrued by the wells during the test period.

(5) This case shall be reopened at an Examiner Hearing in June 1991, at which time the operators in the subject pool may appear and present evidence relative to the permanent termination of gas prorationing for the Burton Flat-Morrow Gas Pool.

(6) If the Division should determine at any time during the test period that the Pool should again be prorated, each well completed therein as of the effective date of this order shall be assigned its classification and over or underproduction status as of the effective date of this order.

(7) If gas prorationing is reinstated in this pool, each non-marginal well therein shall be assigned a minimum allowable of 750 MCF per day.

(8) This order shall be effective April 1, 1990.

(9) 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 hereinabove designated.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION WILLIAM J. LEMAX Director

SEAL

STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION COMMISSION

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

CASE NO. 9018 (Reopened) Order No. R-8170-E

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9:00 am. on May 24, 1990, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this <u>9th</u> day of July, 1990, 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 THAT:

(1) Due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) Case 9018 was reopened pursuant to Orders R-8170-A and D which amended Rules 10(a), 11(a), and 11(b), and Order R-8170-C which rescinded the amendments of Rule 10(a) and 11(a) and also promulgated Rule 11(h) pertaining to the general rules for prorated gas pools as promulgated by Order R-8170.

(3) The amendment of Rule 11(b) in Order R-8170-A provided that gas wells in Northwest New Mexico could become 12 times overproduced before being required to curtail or shut-in.

(4) Order R-8170-D provided that the amendments to Rules 10(a), 11(a) and 11(b) would expire on June 1, 1990 unless further amended or extended after hearing to be held in March, 1990.

(5) This case was docketed for a hearing scheduled for March 15, 1990 at which time the case was continued to the May 24, 1990 Commission Hearing. Page 2 Case No. 9018 (Reopened) Order No. R-8170-E

(6) The Commission sought evidence to determine if the amendment was preventing waste, protecting correlative rights, and providing operators the flexibility to better meet gas market demand.

(7) Testimony and exhibits were received from Meridian Oil Company and Unocal Corporation, both gas producers in Northwest New Mexico. Statements were read into the record from Amoco Production Company, Columbus Energy and Gas Company of New Mexico, all of which supported continuance of Rule 11(b) as amended by Order R-8170-A.

(8) No producer, operator, interest owner or customer, objected to the 12 times over limit for gas wells in Northwest New Mexico.

(9) The evidence introduced was inconclusive in addressing the correlative rights issue by comparing the 6 times overproduced limit with the 12 times overproduced limit.

(10) There was producer testimony indicating that New Mexico's historical gas market is still unstable and that in order to properly manage their gas supply, operators in Northwest New Mexico need the flexibility of being able to produce their gas wells up to the limit of twelve times their allowable before being subjected to shut-in.

(11) The evidence shows that Meridian has been able to significantly reduce both the number of overproduced wells and the volume of shut-in gas over the past 17 months thus confirming their contention that the added flexibility of Rule 11(b) as amended by Order R-8170-A and D has helped them manage their gas supply in a responsible manner.

(12) An engineering consultant working for the Oil Conservation Division testified that allowing wells in NW New Mexico to overproduce 12 times before being shut-in has increased imbalances in prorated fields but these imbalances were not shown to cause waste or impair correlative rights.

(13) Because of continual changes in New Mexico's gas market and proposed changes in New Mexico's Gas Proration Rules, it would be premature to change the amended Rule 11(b) at this time without a showing that waste is occurring or correlative rights are being violated. Page 3 Case No. 9018 (Reopened) Order No. R-8170-E

(14) The effects of the amended Rule 11(b) should be considered by the Commission at a hearing to be held in March, 1992, and said amended Rule 11(b) should be extended to June 1, 1992.

IT IS THEREFORE ORDERED THAT:

(1) Rule 11(b), as amended temporarily by Order R-8170-A and D which allows operators in Northwest New Mexico to produce their gas wells in prorated pools up to a limit of twelve (12) times their allowable before being subject to curtailment or shut-in, is hereby extended until June 1, 1992 after which, unless further extended or revised after notice and hearing, it shall revert to the rule as promulgated in Order R-8170 which allows for a six (6) times overproduced limit.

(2) This case shall be reopened in March 1992 to take evidence on the following:

- (a) whether larger overproduction limits in Northwest New Mexico established by rule 11(b) as amended by Order R-8170-A and D is preventing waste, and protecting correlative rights, while providing operator flexibility in supplying natural gas to meet interstate and intrastate market demand.
- (b) The interaction between the changing gas markets, revised proration rules, and Rule 11(b) as amended by Order R-8170 A and D.
- (c) Any transition mechanism which should be adopted if the Commission determines that a return to the 6 times overproduced limit is appropriate.

(3) Jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

₽age 4 Case No. 9018 (Reopened) Order No. R-8170-E

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

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

WILLIAM R. HUMPHRIES, Member

Bill Weiss

WILLIAM W. WEISS, Member

 $\overline{}$ (.(Culti. đ . . . WILLIAM J. LEMAY, Chairman and Secretary

SEAL

dr/

5