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October 21, 1992

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OCT 21 1992  
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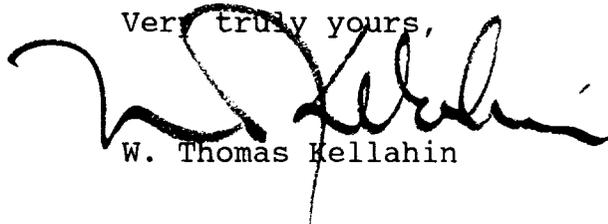
FEDERAL EXPRESS

RE: Marathon Oil Company's and Orxy  
Energy Company's Application for  
Rehearing of Case No. 10526  
Commission Order R-9734

Gentlemen:

On behalf of Marathon Oil Company and Oryx Energy  
Company, please find enclosed our Application of  
Rehearing of the referenced case. This case was heard  
by the Commission on August 27, 1992 and was decided by  
Order No. R-9734 entered October 1, 1992

Very truly yours,



W. Thomas Kellahin

WTK/jcl

Enclosure

cc: With Enclosure  
Robert Stovall, Esq.  
William F. Carr, Esq.  
Thomas C. Lowry, Esq.  
Charles Gray

lrr1021.092

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  
FOR THE PURPOSE OF CONSIDERING:

CASE: NO. 10526  
ORDER NO. R-9734

GAS ALLOWABLES FOR THE PRORATED GAS  
POOLS IN NEW MEXICO FOR OCTOBER, 1992  
THROUGH MARCH, 1993.

APPLICATION OF  
MARATHON OIL COMPANY  
AND ORYX ENERGY COMPANY  
FOR REHEARING BEFORE THE COMMISSION

RECEIVED  
OCT 21 1992  
OIL CONSERVATION DIV.  
SANTA FE

Comes now MARATHON OIL COMPANY ("Marathon") and ORYX ENERGY COMPANY ("Oryx"), by and through their attorneys, Kellahin and Kellahin, and pursuant to the provisions of Section 70-2-25 NMSA (1978) and apply to the New Mexico Oil Conservation Commission ("Commission" or "OCC") for a Rehearing of the above-captioned case and Order No. R-9734 (attached hereto as Exhibit "A") in so far as it applies to the Indian Basin (Upper Penn) Gas Pool and in support thereof state:

INTRODUCTION

New Mexico's Market Demand Prorationing System is based on the relatively simple concept of allocating

surplus gas production capacity on a reasonable basis because production in excess of market demand has been classified as waste under the New Mexico Oil & Gas Act.<sup>1</sup> It is only when the total producing capacity of a prorated pool exceeds the total consumptive demand by buyers for that gas that the Commission imposes production restrictions to curtail production and allocate that demand equitably among the proration units in the pool.

While the mechanics of doing so are complex, the two step process involving two different and distinct types of regulatory hearings is easy to describe: First, the Commission calls a pool rule hearing ("A Drainage-Correlative Rights Case") in which the Commission considers evidence of reservoir science and determines how each proration unit will be allocated its share of recoverable gas so as to prevent drainage and protect correlative rights. See, Order R-1670-F in Case 3237 for such a hearing for the Indian Basin Pool, attached hereto as Exhibit "B".

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<sup>1</sup>N.M.Stat. Ann. Sec. 70-2-1 et. seq. (1978)

Then, once a pool is prorated, that pool participates in the second type of case which is the allowable hearing ("A Prevention of Waste-Allowable Case") at which the sole matter at issue is to have the Commission determine total market demand for that pool's production. Finally, an appropriate calculation is made based upon the allocation formula adopted for the pool rule hearing and the volumes of actual production needed to satisfy market demand determined from the second hearing and those volumes are allocated to each proration unit and its well in the pool.

Thus, at the allowable hearing, if the Commission finds that there is a surplus of gas production capacity then it allocates total market demand to individual producing proration units in the form of production allowables which are LESS THAN the capacity of the non-marginal wells to produce. Only during a proration period of Excess Gas Deliverability is prorationing necessary and therefore production allowables set which will result in production rates less than capacity for non-marginal wells.

Under the prorationing scheme in New Mexico, allowables must be set based only on market demand for production from prorated pools in Southeast New Mexico regardless of the capacity of the wells to produce.<sup>2</sup>

The sole purpose of the Hearing called in Case 10526 was to prevent waste by determining the "market demand" which is the buyers' demand for gas consumption from each of the prorated gas pools for the upcoming October, 1992 through March, 1993 allocation period ("winter proration period") and to allocate that demand back to the prorated pools.

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**POINT I: THE COMMISSION SET ALLOWABLES FOR THE INDIAN BASIN (UPPER PENN) GAS POOL BASED UPON CRITERIA OTHER THAN MARKET DEMAND FOR POOL PRODUCTION IN VIOLATION OF SECTION 70-2-3(E) NMSA-1978**

A review of Finding Paragraph No. (21) of Order R-9734 reflects that the Commission has confused its duty in the subject Prevention of Waste-Allowable type of case to determine market demand with its obligation in the

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<sup>2</sup> N.M.Stat. Ann. Sec. 70-2-3(E) (1978).

Drainage-Correlative Rights type of case to establish an allocation formula which will prevent drainage and protect correlative rights. These are two separate and distinct functions of the Commission and have historically been dealt with by the Commission as two separate cases with separate hearings and orders for each.

The allowable type of case is addressed within the context of the subject allowable hearing. But the Drainage-Correlative Rights type of case has already been heard and resolved in Order R-1670-F (attached hereto as Exhibit "B") which, in accordance with Section 70-2-17 NMSA (1978), established the special pool rules for this pool including setting the equitable allocation of allowable production for each of the spacing and proration units and their respective wells within this pool to prevent drainage and to afford each owner its just and equitable share of recoverable gas.

It is NOT the purpose of the subject allowable case to use the prorationing system as a device to set the maximum efficient rate ("MER") of production from a pool or to control perceived drainage between spacing units or

to try to apportion shares of recoverable gas reserves under each proration unit.

The Division's expert witness, Mr. VanRyan recognized the difference and told the Commission so:

[Chairman LeMay] Q. We've concentrated on market demand. For purposes of prorationing, is correlative rights also another issue in prorating pools, to protect correlative rights?

[VanRyan] A. Yes, protecting correlative rights is one of our other statutory items. Normally those are addressed in the pool rules whereby we set up the means of prorationing. As in the northwest, where we decide to use acreage factors plus deliverability factors to determine the proration up there, those take into account protection of correlative rights. Likewise, in the southeast part of the state, it has been determined that acreage factor alone is sufficient.

Hearing Transcript at p. 53, lines 6-19.

Despite Mr. VanRyan's accurate distinction between the two types of cases, somehow the Commission missed or ignored the difference. It has gotten mixed up in two separate and distinct "correlative rights" definitions and presumed it can disregard the volume of gas necessary to satisfy market demand for production from this pool on the unfounded assumption that at least one high capacity

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well must be curtailed or the Commission somehow is not  
doing its duty.

The "correlative rights" at issue in a market demand allowable case is to make sure that the entire market demand for that pool's production is not satisfied by just a few wells. In doing so, the correlative rights of the owners in wells who want to produce gas and might be excluded or impaired from sharing in that limited market are protected.

The Commission has abandoned the statutory definition of "Market Demand Prorationing" which the Commission Chairman no longer believes works,<sup>3</sup> and substituted therefor "Correlative Rights Prorationing" which is based upon historic past production and limits allowables to hypothetical and arbitrary levels to prevent imagined drainage. (See Finding Paragraph (21) Order R-9734)

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<sup>3</sup> See, "Gas Proration - What It Did, What It Does Now, What It Is Supposed To Do, And What It Is Perceived To Do" by William J. LeMay, in The New Mexico Oil Conservation Division Gas Marketing Bureau's Newsletter (July, 1992), attached hereto as Exhibit "C."

The misunderstanding of the Commission's obligation in this allowable case has caused it to set allowables for the subject pool upon criteria other than market demand for pool production in violation of Section 70-2-3(E) NMSA-1978

The Commission should not be reluctant to allow the proration system to achieve "capacity allowable" at times when market demand exceeds the pool's deliverability. In fact, that is exactly what should happen. That would result in an economic incentive to all pool operators to increase pool production and take advantage of any unused underproduction. It would provide a reward to those operators who borne the risk, expended money and effort to improve production from the pool. It would afford an opportunity for the non-marginal wells to help produce gas to satisfy the market demand rather than be shut-in or artificially curtailed. Ultimately it would benefit everyone by keeping New Mexico's share of the gas market supplied with New Mexico gas rather than gas from Canada, Texas, Oklahoma or somewhere else.

Conversely, to continue to restrict production on the improper basis that imagined drainage must be

prevented, in spite of clear evidence that market demand exceeds pool deliverability, will discourage producers in the pool from developing reserves by maximizing production from their wells. In a water drive reservoir such as the Indian Basin Upper Penn Pool this will lead to waste by reducing ultimate recovery from the reservoir. (See Hearing Transcript, pp. 245-247.) In addition, these unfounded and unpredictable restrictions on production create uncertainty in the marketing of New Mexico gas.

Market Demand Prorationing requires the Commission to prorate surplus gas production capacity on a the basis of forecasting future market demand for that gas. It has done something else in this case, in violation of statute, and a rehearing is required.

**POINT II: THE COMMISSION ADOPTED AN ALLOWABLE OF 3,027,791 MCF/MONTH FOR THE INDIAN BASIN (UPPER PENN) GAS POOL FOR THE OCTOBER, 1992 THROUGH MARCH, 1993 ALLOCATION PERIOD WHICH IS NOT SUPPORTED BY SUBSTANTIAL EVIDENCE**

At the subject Commission hearing, the Division was first to testify and presented two witnesses: Mr. Ronald H. Merrett, the Division's Gas Marketing Director, and Mr. Larry VanRyan, the Division's proration engineer. Mr. Merrett expressed no opinions on the volume of gas necessary to satisfy market demand for any individual pool. The Hearing Transcript of this matter at page 16, lines 7-10 reads:

Q: Do you have any opinions with regards to the market demand for any individual prorated pools in New Mexico?

A. No.

In addition, Mr. Merrett could not express an opinion on whether the total deliverability for any individual prorated pool exceeds the reasonable market demand for that pool's production for the subject proration period. (See, Hearing Transcript, pp. 21-25.)

Mr. VanRyan presented the Division's preliminary allowable schedule, including F1 factor, which had not

yet been adjusted to reflect the anticipated market demand for the subject allocation period. In doing so, Mr. VanRyan repeatedly made it clear that the Division's schedule was just a "guideline" based upon a tabulation of historical production from the last corresponding proration period. (See, Hearing Transcript, pp. 26-27.) The following is taken from the Hearing Transcript at page 32, commencing with line 20 where Mr. Stovall questions Mr. VanRyan responds to Mr. Stovall's question about what is the purpose of the line 3 adjustment in the Division Hearing Exhibit 1 (southeast New Mexico) and Exhibit 2 (northwest New Mexico):

[VanRyan] A: ...a good part of what this hearing is about, is to look at what people have as far as information about nominations for gas production....

...then I would see those adjustments as being derived from this hearing,....

And from the Hearing Transcript at page 44, lines 12-23:

[Stovall] Q. Are you prepared to express an opinion as to whether the prorated pools are being denied access to the opportunity to produce, as a result of proration, being unable to compete for market, in your opinion?

[VanRyan] A. I don't think they're unable to compete. The price is the same, and the only restriction may be that we don't allow them to produce unrestricted. I don't think that pulls them out of the market necessarily. We're here to determine what market demand is, and that's what we're trying to find out.

And from the Hearing Transcript at page 48, commencing on line 24:

[Kellahin] Q. When we look at historical past production, then that's not the equivalent of market demand for that pool?

[VanRyan] A. It's all we have for market demand at that period of time, yes.

[Kellahin] Q. So, to forecast market demand for this next proration period, you're seeking operator's nominations to go into Line 2 of the spreadsheet by which then the Commission can make the adjustments in Line 3 of the spreadsheet and get us allowables, then, that have now finally incorporated the nominations and market demand?

[VanRyan] A. yes.

Chevron U.S.A. Inc. ("Chevron"), the operator of two non-marginal wells, was the first to testify concerning the Indian Basin (Upper Penn) Gas Pool. But Chevron ignored the market demand criteria as the basis for setting pool allowables. Instead, Chevron recommended an allowable level which would permit it to produce its non-

marginal wells at capacity while restricting those of Marathon and Oryx. (See, Hearing Transcript, p. 217, lines 3-19.) While asserting that the allowable should restrict Marathon and Oryx's high capacity wells, it is interesting to note that Chevron's proposal is at the approximate producing capacity of its best well. (See, Hearing Transcript, p. 194, lines 9-20.)

Chevron presented an engineering witness, Mr. Mark Corley, who testified that there would be a market for the gas that would be produced under the Marathon's proposed allowable (See, Hearing Transcript, p. 190, line 21 to page 191 line 2).

Mr. Corley further testified that Chevron's opposition to Marathon was not based on a differences in market demand, but rather on Chevron's concern for drainage and correlative rights. (See, Hearing Transcript, p. 192, lines 2-17 and pp. 200-201.)

It is essential to remember that Chevron concurred with Marathon's opinion of market demand (See, Hearing Transcript, p. 190, line 21 to p. 191, line 2) and only opposed Marathon's allowable level because it did not have any wells that could produce at that rate (See,

Hearing Transcript, p. 217, lines 7-13).

Marathon's expert witness, Ron Folsie, then testified that its proposed F1 Factor of 197,600 would allow Marathon to benefit from successful workover operations on its wells and would provide the necessary economic incentive for additional workovers to make other Marathon wells more effective in satisfying the buyer's demand for additional gas from this pool. (See, Hearing Transcript, pp. 205, 214-218, and Marathon's Hearing Exhibits 2, 7, 8, and 9.)

Contrary to the Commission's Finding in Paragraph 21 of Order R-9734, Mr. Folsie testified that he saw no opportunity to impair correlative rights or cause drainage among wells if the allowables were set at Marathon's requested level. (Hearing Transcript, p. 205 lines 2-6.)

Contrary to the Commission's Finding in Paragraph (19-b), it was the uncontested testimony of Mr. Folsie on behalf of Marathon that certain high capacity wells would still be restricted if the Commission adopted the Marathon Allowables. In fact at least five non-marginal wells will be curtailed to less than their capacity under

the Marathon Allowable proposal. (See, Hearing Transcript, pp. 217-218, p. 258 and Marathon Hearing Exhibit #7.)

Oryx presented two expert witness, Mr. Tom Adams and Mr. Rick Hall, both petroleum engineers. Mr. Adams, a reservoir engineering expert, provided a technical analysis of the Indian Basin (Upper Penn) Pool (See, Hearing Transcript, pp. 244-250) in which he:

(a) provided a reservoir description;

(b) described the competitive advantage that Chevron enjoyed by being in the highest structural position with reservoir rock properties similar to other operators;

(c) stated that the reservoir is not rate sensitive and ultimate recovery is improved at higher rates; and

(d) concluded that unless Marathon and Oryx produce their wells at high capacity, their share of the recoverable gas will migrate up structure and be captured by Chevron. Mr. Hall, an operational engineering expert, testified that Oryx had changed its position from opposing Marathon's request for higher allowables at the February, 1992 allowable hearing and now supported Marathon. Oryx had recognized the tremendous opportunity

for additional gas production in the pool demonstrated by Marathon's success, and joined Marathon in improving the performance of its wells and seeking higher allowables in order to meet buyer demand for additional gas from this pool. (See, Hearing Transcript, pp. 252-263.)

Mr. Hall confirmed that at least two of the Oryx wells would be restricted to less than their productive capacity if the Marathon Allowable proposal was adopted by the Commission. (See, Hearing Transcript p. 258, lines 6-12 and Oryx Exhibit #3.)

The Commission rejected the opinion of market demand presented by Marathon and Oryx and adopted the Division's F1 factor for the pool which had not been adjusted to reflect an adequate allowable to meet the market demand. The Commission's decision as set forth in Commission Order R-9734 is not supported by substantial evidence and a rehearing must be granted.<sup>4</sup>

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<sup>4</sup> See Oil Conservation Commission Order R-9734, attached hereto as Exhibit "B."

**POINT III:           SUBSTANTIAL   EVIDENCE   REQUIRED   THE  
COMMISSION TO ADOPT A POOL ALLOWABLE OF  
3,133,350 MCF/MONTH IN ORDER FOR THE  
INDIAN BASIN (UPPER PENN) GAS POOL TO  
SATISFY REASONABLE MARKET DEMAND FOR  
PRODUCTION FROM THAT POOL**

Mr. VanRyan, testifying for the Division admitted that the preliminary Division F1 factors had not yet been adjusted to reflect current market demand. He stated that the purpose of the Commission allowable hearing was to obtain the recommendations from the operators and from that evidence the Commission would adopt an adjustment factor so that the pool's allowable would be able to meet market demand. (See Transcript page 48, line 24 to page 49, line 12).

"Substantial evidence" supporting administrative agency action is relevant evidence in the whole record that a reasonable mind might accept as adequate to support the findings and conclusion of the agency.

"Substantial evidence" in administrative agency review requires whole record review, not a review limited to those findings most favorable to the agency's order. (See, Duke City Lumber v. N.M. Employment Sec. Dept., 101

N.M. 291 (1984) and Trujillo v. Employment Sec. Dept.,  
105 N.M. 467, (Ct.App. 1987).

After the Division testimony, the following  
substantial evidence was provided:

(1) The reasonable market demand for  
production from this pool required a monthly allowable of  
not less than 3,133,350 MCF/month, the "Marathon  
Allowable," which results in an adjusted F1 factor of  
197,600 MCF/month. (See, Hearing Transcript, p. 257,  
lines 7-13 and p 261, lines 12-24.)

(2) Adoption of the Marathon Allowable will  
result in at least five wells being restricted to less  
than their respective capacity to produce gas. (See,  
Hearing Transcript, pp. 217, 258, Marathon Exhibit 7 and  
Oryx Exhibit 3.)

(3) The Marathon Allowable will be an  
incentive for additional work to improve production from  
the pool. (See, Hearing Transcript, p. 250, lines 1-12,  
and p. 256, lines 6-19, and p. 258, line 21 to p. 259,  
line 6.)

(4) The Marathon Allowable will not cause any  
gathering, processing or taking problems in the pool.

(See, Hearing Transcript, p.621 line 25 to p. 262, line 5.)

(5) Oryx supported the Marathon Allowable because additional allowable would provide a reasonable opportunity for the higher capacity wells to produce their fair share of the recoverable gas underlying their respective proration units before that production was watered out by the migration of water. (See, Hearing Transcript, pp. 245-246.)

(6) Oryx opposed the Chevron allowable request because lower allowables would impair the correlative rights of owners of the wells located down structure from the Chevron wells and deny to those owners the opportunity to recover their share of the gas before their wells are watered out. (See, Hearing Transcript, p. 246, lines 2-10.)

(7) Chevron confirmed that it can market all of the gas it could produce from this pool. (See, Hearing Transcript, p. 186, line 23 to p. 187, line 4 and p. 190, line 21 to p. 191, line 1.)

(8) Chevron testified that its wells were positioned in the pool to be in the most favorable

structural position farthest removed from the water encroachment that would ultimately water out the producing wells. (See, Hearing Transcript, p. 189, line 17 to p. 190, line 7 and p. 204, lines 13-17.)

(9) Chevron indicated there would be a market for the gas that would be produced under the Marathon allowable. (See, Hearing Transcript, p. 200, lines 4-15.)

(10) Chevron supported setting allowables, not on market demand, but rather on the producing capability of all the wells in the pool. (See, Hearing Transcript, p. 178, lines 5-9.)

(11) Chevron's criteria for determining its allowable proposal was to see how it would be affected by the performance of other wells in the pool and then set allowables at levels to protect itself from competition by other operators in the pool. (See, Hearing Transcript, p. 191, lines 2-21.)

(12) Chevron's opposition to the Marathon allowable nomination is not based on differences in perceived market demand volumes, but rather on Chevron's attempt to set allowables so that there will be production restrictions imposed on those wells with

higher capacities to produce than the Chevron wells.  
(See, Hearing Transcript, p. 217, lines 7-13 and p. 191,  
lines 2-14.)

(13) The adoption of the Division preliminary  
F1 factor results in allowables being set so that both of  
the Chevron non-marginal wells are allowed to produce at  
capacity. (See, Hearing Transcript, p. 194, lines 9-20  
and p. 217, lines 7-13.)

(14) Chevron admitted under cross examination  
that a non-marginal daily gas rate of 5,700 (F1 Factor  
of 171,000) would be "very adequate" for Chevron. (See,  
Hearing Transcript, p. 195, lines 18-24.)

(15) The lower allowables sought by Chevron  
would allow it to maintain a competitive advantage in the  
reservoir because of its structural position that it  
would not enjoy if the allowables were at the level  
sought by Marathon and Oryx. (See, Hearing Transcript,  
p. 217, lines 7-13 and p. 238, line 14 to p. 240, line  
2.)

(16) The Marathon Allowable would not impair  
correlative rights or cause drainage among wells in the  
pool. (See, Hearing Transcript, p. 205, lines 2-6.)

(17) The Marathon allowable will not impair the abilities of the other operators in the pool to market their gas. (See, Hearing Transcript, p. 217, lines 20-23.)

(18) If the Chevron's proposed F1 factor of 173,328 MCF/month is adopted, then at least five non-marginal wells in the pool, all operated by operators other than Chevron, will be curtailed resulting in loss of market share for the pool. (See, Hearing Transcript p. 260 and Marathon Exhibits 7 and 9.)

Despite this substantial evidence, the Commission adopted the preliminary guidelines of the Division which was based entirely on the average production from October 1991 through March 1992. In doing so the Commission set allowables for the subject allocation period at significantly less than the volume of gas needed in order to satisfy market demand for gas produced from this pool. Because of the Commission's action, gas producers in other states or in Canada will now satisfy this market demand.

The Commission thinks it must prorate so that at least the wells with the highest capacity to produce will

be restricted. In fact under the Marathon allowable request certain non-marginal wells would continue to be curtailed.

How is it that the Commission was able to determine that uncompensated drainage would occur at Marathon's F1 factor of 197,600 mcf rate but would not occur at its 178,372 mcf rate? What engineering study did the Commission rely upon in order to reach this conclusion?

The Commission has ignored the "substantial evidence" of market demand presented in this case and a rehearing must be granted.

**POINT IV: COMMISSION ORDER R-9734 (Finding Paragraph 21) ADOPTS THE DIVISION'S PROPOSED "F1 FACTOR" AND THEREBY ERRONEOUSLY SETS ALLOWABLES FOR INDIAN BASIN (UPPER PENN) GAS POOL WHICH ARE ARBITRARY AND CAPRICIOUS**

The Commission states in Finding (21) of Order R-9734 that:

(21) The Indian Basin-Upper Penn Pool was given an F1 factor of 184,875 for the Oct. '91-March '92 allocation period and the pool was underproduced at the end of this period. Additional allowable would allow the higher capacity wells to drain more gas from marginal proration units, thus violating the correlative rights of marginal gas interest owners. The F1 factor for this field should remain at the recommended level of 178,372.

In adopting this finding, the Commission ignores the testimony of the Division's own expert, relies on speculation, and abandons its statutory obligation to adopt an adjustment factor for this pool which would result in setting allowables to meet market demand.

In leaving the adjustment factor line blank (Line Three (3) of Exhibit A to Order R-9734), the Commission fails in what it was supposed to do. By that inaction, the Commission erroneously sets allowables for the Indian Basin (Upper Penn) Gas Pool at substantially less than market demand. In doing so the Commission has violated the correlative rights of Marathon and Oryx by denying to them the opportunity to produce their share of recoverable gas to satisfy a demand made upon them from their buyers.

One can only guess at how the Commission was able to ignore the absence of market demand evidence in the Division's own testimony, resolve the Marathon, Oryx and Chevron testimony and leap to the conclusion that the Division's preliminary F1 factor will allow sufficient production to meet the market demand for production from this pool when neither the testimony of the Division, Chevron, Oryx nor Marathon supports the Division F1 factor as accurately reflecting market demand for the subject proration period. A rehearing must be granted.

The Commission erroneously justifies its findings in part on the fact that the historical past production underproduced the allowables set for the prior year. The Commission's reliance on that irrelevant fact leads to an erroneous conclusion. The pool was underproduced not because of a lack of market demand, but because the OCC assigned allowables to non-marginal wells which lacked the physical ability to produce the gas. The Commission failed to adequately explore why the pool was underproduced. It is diametrically opposite to the substantial and uncontested evidence in this case for the

Commission to conclude that the pool was underproduced because of a lack of market demand.

The Commission summarizes only select portions of the Marathon evidence, the Oryx evidence and the Chevron evidence, omits essential evidence, misstated the Marathon evidence and adopts the Division preliminary F1 factor. The Commission has failed to make findings which support the Commission adoption of the Division's preliminary F1 factor which was calculated without any adjustments made for market demand. Under New Mexico law, this action is arbitrary and capricious.

WHEREFORE, MARATHON OIL COMPANY and ORYX ENERGY COMPANY respectfully request the Commission grant a Rehearing in the above-styled cause and that after Rehearing, the Commission modify that portion of Order R-9734 dealing with the Indian Basin (Upper Penn) Gas Pool to increase the average monthly pool allowable from 3,027,791 MCF/month to 3,133,350 MCF/month for the October, 1992 through March, 1993 proration period.

Application for Rehearing  
Marathon Oil Company/Oryx Energy Company  
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Respectfully submitted,

KELLAHIN and KELLAHIN



BY

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EXHIBIT "A"  
Eight (8) Pages

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 FOR THE PURPOSE OF  
CONSIDERING:

CASE NO. 10526  
Order No. R-9734

GAS ALLOWABLES FOR THE PRORATED GAS  
POOLS IN NEW MEXICO FOR OCTOBER, 1992  
THROUGH MARCH, 1993.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9:00 a.m. on August 27, 1992, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 1st day of October, 1992, the Commission, a quorum being present and having considered the testimony, 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) This hearing was called for the purpose of accepting nominations and other evidence and information to assist in determining October, 1992, through March, 1993 gas allowables for the prorated gas pools in New Mexico. Thirteen of the prorated gas pools are in Lea, Eddy and Chaves Counties in Southeast New Mexico, and the other four prorated gas pools are in San Juan, Rio Arriba and Sandoval Counties in Northwest New Mexico.
- (3) Amendments to the Gas Proration Rules approved by Commission Order No. R-8170-H in December, 1990 provide for allowables to be established for 6-month allocation periods beginning in April and October of each year. The October, 1992 through March, 1993 allocation period will be the fourth under the amended rules.

EXHIBIT "A"  
Eight (8) Pages

(4) Average monthly allowables for October 92 - March 1993 for each pool should be based on monthly average individual pool sales for October 91 - March 92, with administrative adjustments where appropriate.

(5) Oil Conservation Division (OCD) personnel prepared Market Demand and Allowable Determination Schedules for the prorated gas pools in New Mexico. These schedules contained production information from the period October 1991 - March 1992, without adjustments. Producers, purchasers and transporters of gas were asked to review these preliminary allowables and to participate in the August 27, 1992 hearing by providing information which would assist in arriving at the final allowable assignments.

(6) The Director of the Office of Interstates Natural Gas Markets submitted a graph showing New Mexico's natural gas production for the years 1989, 1990, 1991 and 1992 through June. Production has been increasing each of these years but 1992 has shown an exceptionally large increase in production and is not reflecting the normal seasonal trend established in prior years.

(7) Meridian Oil Inc. presented exhibits and testimony showing an increase in market demand and production for the Basin-Dakota, Blanco Mesaverde and the South Blanco Pictured Cliffs pools. The following information was presented:

- (a) Production for the April through July period for 1992 compared to the same period for 1991 was up 41% for Basin-Dakota, up 17% for Blanco-Mesaverde and up 39% for South Blanco Pictured Cliffs.
- (b) Reasons for the increased production are: 1) increased pipeline capacity out of the San Juan Basin resulting in lower line pressures, and; 2) increases and firming of natural gas prices.

(8) Meridian requested the following adjustments for pools in Northwest New Mexico:

- (a) Basin Dakota-2,000,000 Mcf/mo.
- (b) Blanco Mesaverde-3,000,000 Mcf/mo.
- (c) South Blanco Pictured Cliffs-150,000 Mcf/mo.

(9) Amoco presented testimony that the increased pipeline capacity out of the San Juan Basin had resulted in production increases and that the increases would continue through the proration period October 1992 to March 1993.

(10) Amoco requested the following adjustments for pools in Northwest New Mexico:

- (a) Basin-Dakota-2,000,000 Mcf/mo.
- (b) Blanco-Mesaverde-3,000,000 Mcf/mo.
- (c) South-Blanco Pictured Cliffs-150,000 Mcf/mo.
- (d) Tapacito-Pictured Cliffs-100,000 Mcf/mo.

(11) Phillips Petroleum presented exhibits and testimony in support of higher allowables for the Basin-Dakota Pool showing that:

- (a) Volumes produced during the October 1991 through March 1992 period were low because of low natural gas prices and transportation constraints, and;
- (b) Higher gas prices and increased pipeline capacity will result in increased production during the October 1992 through March 1993 period.

(12) Phillips requested an adjustment of 1,805,273 Mcf/mo. for the Basin-Dakota pool.

(13) Allowables for the four prorated pools in the San Juan Basin should be increased above the production levels of October '91 through March '92. Increased pipeline capacity and higher natural gas prices will result in an increase in market demand for New Mexico produced gas and the ability of San Juan Basin producers to satisfy that demand.

(14) Meridian Oil Inc. presented testimony and exhibits requesting an increased allowable for the Justis-Glorieta Pool because:

- (a) There is a market for increased production from this field.
- (b) Additional gas will be recovered from the pool if allowables are increased sufficiently to economically justify infill drilling and other workovers.
- (c) The gas gathering system can handle additional volumes of gas without having adverse affects on any other wells within the pool.

(d) All of the operators of wells in this pool were notified of Meridian's position and no one expressed any opposition.

(15) Allowables for the Justis-Glorieta Pool are too low and should be increased.

(16) Marathon Oil Company requested an F1 factor of 42,000 for the Blinebry Pool.

(17) The Blinebry Pool F1 factor for the Oct. '91 through April '92 allocation period was 38,125 for a pool allowable of 566,989 Mcf/mo. Average pool sales for the same period was only 454,535 Mcf/mo. indicating that the pool allowable was not produced. Additional allowable in excess of an F1 factor of 38,125 is not justified at this time.

(18) Chevron supported the Oil Conservation Division's preliminary F1 factor of 173,328 for the Indian-Basin Upper Penn Pool. Their justification was as follows:

- (a) This F1 factor is high enough to allow for workovers and other investments in the pool.
- (b) High capacity wells, if allowed to produce at too high a rate, could drain more than their fair share of gas from the pool.
- (c) MW Petroleum had addressed a letter to the Commission in favor of the 173,328 F1 factor. MW Petroleum operates four wells and has an interest in fourteen other wells in the pool.

(19) Marathon Oil Company requested an F1 factor of 197,600 for the Indian-Basin Upper Penn. Their request was based on the following:

- (a) An F1 factor of 197,600 would allow Marathon to benefit from successful workover operations on its wells performed during the past two years and additional work it plans for the upcoming year.
- (b) The higher F1 factor will allow Marathon to produce their wells at capacity and not be overproduced.
- (c) Marathon has a market for all the gas they can produce.

(20) Oryx requested an F1 factor of 197,600 for the Indian-Basin Upper Penn Pool. They supported this request with the following information:

- (a) Oryx has conducted a successful workover program on four of its wells. The requested increase in allowable is reasonable because operators have enhanced their wells' performance through capital expenditures and the requested allowable increase would justify additional workover expenditures in the future.
- (b) Oryx's wells could produce 851,200 Mcf/mo. for the Oct. '92 - March '93 allocation period.
- (c) Oryx has the market for the additional gas production.

(21) The Indian Basin-Upper Penn Pool was given an F1 factor of 184,875 for the Oct. '91 - March '92 allocation period and the pool was underproduced at the end of this period. Additional allowable would allow the higher capacity wells to drain more gas from marginal proration units, thus violating the correlative rights of marginal gas interest owners. The F1 factor for this field should remain at the recommended level of 178,372.

IT IS THEREFORE ORDERED THAT:

(1) Exhibit "A" attached to and incorporated herein is hereby adopted for the purpose of making allowable assignments for the prorated gas pools in Southeast New Mexico for the months Oct. '92 - March '93.

(2) Exhibit "B", attached to and incorporated herein is hereby adopted for the purpose of making allowable assignments for the prorated gas pools in Northwest New Mexico for the months Oct. '92 - March '93.

(3) The Oil Conservation Division is hereby directed to prepare proration schedules for the Oct. '92 - March '93 allocation period in accordance with this order and other Division Rules, Regulations and Orders. Copies of this order shall be included in each proration schedule.

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

Case No. 10526  
Order No. R-9734  
Page 6

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

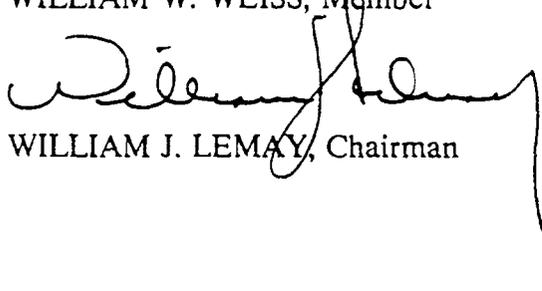
STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION



GARY CARLSON, Member



WILLIAM W. WEISS, Member



WILLIAM J. LEMAY, Chairman

S E A L

dr/

EXHIBIT "A" COMMISSION ORDER NO. R--9734  
 MARKET DEMAND AND ALLOWABLE DETERMINATION SCHEDULE  
 PROPOSED GAS POOLS - SOUTHEAST NEW MEXICO  
 FOR OCT92 THRU MAR93

|  | ATOKA PENN | BLINEBRY | BUFFALO VALLEY PENN | CARLSBAD HORROR | CATCLAM DRAM HORROR | EUFONT INDIAN BASIN HORROR SO | INDIAN BASIN UPPER PENN | JALHAT    | JUSTIS GL | TURB    |         |
|--|------------|----------|---------------------|-----------------|---------------------|-------------------------------|-------------------------|-----------|-----------|---------|---------|
| ( 1 ) AVERAGE MONTHLY POOL SALES<br>OCT91-MAR92<br>ALL VOLUME ARE IN MCF.    | 100,603    | 454,535  | 276,371             | 230,677         | 355,760             | 2,596,563                     | 81,249                  | 3,027,791 | 1,143,588 | 55,754  | 252,532 |
| ( 2 ) TOTAL NOMINATIONS<br>AVG MONTH VOL.                                    |            |          |                     |                 |                     |                               |                         |           |           | 81,000  |         |
| ( 3 ) ADJUSTMENTS.   |            | 36,681   |                     |                 |                     |                               |                         |           |           |         |         |
| ( 4 ) MONTHLY POOL ALLOWABLE<br>OCT92-MAR93<br>(LINE 1 + LINE 3.)            | 100,603    | 491,216  | 276,371             | 230,677         | 355,760             | 2,596,563                     | 81,249                  | 3,027,791 | 1,143,588 | 136,754 | 252,532 |
| ( 5 ) MONTHLY MARGINAL POOL ALLOWABLE<br>OCT91-MAR92                         | 81,189     | 233,872  | 276,371             | 196,007         | 230,505             | 2,225,600                     | 81,249                  | 2,048,526 | 1,062,804 | 27,523  | 184,565 |
| ( 6 ) MONTHLY NON-MARGINAL POOL ALLOWABLES<br>OCT92-MAR93<br>LINE 4 - LINE 5 | 19,414     | 257,344  |                     | 34,670          | 125,255             | 370,963                       |                         | 979,265   | 80,784    | 109,231 | 67,967  |
| ( 7 ) NUMBER OF NON-MARGINAL ACREAGE FACTORS                                 | 1.00       | 6.75     |                     | 1.00            | 1.00                | 15.00                         |                         | 5.49      | 3.25      | 6.00    | 7.00    |
| ( 8 ) MONTHLY ACREAGE ALLOCATE FACTOR<br>OCT92-MAR93<br>(LN 6 / LN 7)        | 19,414     | 38,125   | *30,000             | 34,670          | 125,255             | 24,730                        | *36,000                 | 178,372   | 24,856    | 18,205  | 9,710   |

F1 FACTORS FOR OTHER POOLS  
 BURTON FLAT STRAWN F1 = 10,000  
 HONKMENT MCKEE ELLEN F1 = 25,000  
 \*AS OF 3-31-92, THESE POOLS DO NOT HAVE ANY WELLS IN A NON-MARGINAL STATUS. THESE F1 FACTORS ARE ASSIGNED TO MONITOR THE WELLS IN THE POOLS.

EXHIBIT X. COMMISSION ORDER NO. R--9734  
 MARKET DEMAND AND ALLOWABLE DETERMINATION SCHEDULE  
 PRORATED GAS POOLS - NORTH EST NEW MEXICO  
 FOR OCT92 THRU MAR93

B

BASIN BLANCO BLANCO TAPACITO  
 DAKOTA MESA VERDE P.C. SOUTH

( 1 ) AVERAGE MONTHLY 7,145,484 12,265,486 1,061,345 228,640  
 POOL SALES  
 OCT91-MAR92  
 ALL VOLUME ARE IN MCF.

( 2 ) TOTAL  
 NOMINATIONS  
 AVG MONTH VOL.

( 3 ) ADJUSTMENTS. 2,000,000 3,000,000 150,000 100,000

( 4 ) MONTHLY POOL 9,145,484 15,265,486 1,211,345 328,640  
 ALLOWABLE  
 OCT92-MAR93  
 (LINE 1 + LINE 3.)

( 5 ) MONTHLY MARGINAL 5,050,757 6,686,273 682,476 135,217  
 POOL ALLOWABLE  
 OCT91-MAR92

( 6 ) MONTHLY 4,094,727 8,579,218 528,869 193,423  
 NON-MARGINAL  
 POOL ALLOWABLES  
 OCT92-MAR93  
 LINE 4 - LINE 5

( 7 ) NUMBER OF 229.86 468.11 303.30 83.10  
 NON-MARGINAL  
 ACREAGE FACTORS

( 8 ) NUMBER OF 119,193 289,803 14,340 5,710  
 NON-MARGINAL  
 ACREAGE TIMES  
 DELIVERABILITY  
 FACTORS

( 9 ) MONTHLY ACREAGE 10,688 4,582 436 582  
 ALLOCATE FACTOR  
 OCT92-MAR93

(10) MONTHLY ACREAGE 13.74 22.20 27.66 25.41  
 TIMES  
 DELIVERABILITY  
 ALLOCATE FACTOR  
 OCT92-MAR93

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

CASE No. 3237  
Order No. R-1670-F

IN THE MATTER OF THE HEARING CALLED  
BY THE OIL CONSERVATION COMMISSION  
OF NEW MEXICO ON MOTION OF THE OIL  
CONSERVATION COMMISSION TO CONSIDER  
INSTITUTING GAS PRORATIONING IN THE  
INDIAN BASIN-UPPER PENNSYLVANIAN AND  
INDIAN BASIN-MORROW GAS POOLS, EDDY  
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on April 14, 1965, at Hobbs, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 6th day of May, 1965, 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 by Order No. R-2440, dated February 28, 1963, the Commission created the Indian Basin-Upper Pennsylvanian Gas Pool and promulgated Special Rules and Regulations governing said pool.

(3) That by Order No. R-2441, dated February 28, 1963, the Commission created the Indian Basin-Morrow Gas Pool and promulgated Special Rules and Regulations governing said pool.

(4) That 18 wells are presently completed as producing wells in the Indian Basin-Upper Pennsylvanian Gas Pool and that 8 wells are presently completed as producing wells in the Indian Basin-Morrow Gas Pool.

(5) That no gas has been transported from the subject pools due to the lack of gas transportation facilities.

(6) That a market demand presently exists for gas from the subject pools and that two gas purchasers plan the construction of gas transportation facilities and the marketing of gas from the subject pools in the near future.

(7) That the wells presently completed in the subject pools are capable of producing in excess of the reasonable market demand for gas from the pools and are capable of producing in excess of the capacity of the gas transportation facilities to be constructed.

(8) That the total allowable natural gas production from gas wells producing from the subject pools should be restricted to reasonable market demand and the capacity of gas transportation facilities in order to prevent waste.

(9) That due to the lack of reservoir information, it is presently impracticable to attempt to compute recoverable tract reserves or recoverable pool reserves in the subject pools.

(10) That considering the available reservoir information, a 100% surface acreage formula is presently the most reasonable basis for allocating the allowable production among the wells delivering to a gas transportation facility in the subject pools.

(11) That the adoption of a 100% surface acreage formula for allocating the allowable production in the subject pools will, insofar as is presently practicable, prevent drainage between producing tracts which is not equalized by counter-drainage.

(12) That the adoption of a 100% surface acreage formula for allocating the allowable production in the subject pools will, insofar as is presently practicable, afford to the owner of each property in the subject pools the opportunity to produce his just and equitable share of the gas in the pools and to use his just and equitable share of the reservoir energy.

(13) That although no action by the Commission is presently necessary to protect the correlative rights of owners of gas wells that are completed in the subject pools and not connected to a gas transportation facility, appropriate action may be necessary in the future.

-3-

CASE No. 3237

Order No. R-1670-F

IT IS THEREFORE ORDERED:

(1) That the Indian Basin-Upper Pennsylvanian Gas Pool in Eddy County, New Mexico, and the Indian Basin-Morrow Gas Pool in Eddy County, New Mexico, shall be prorated, effective July 1, 1965, the beginning of the next six-month proration period for prorated gas pools in Southeast New Mexico.

(2) That the allowable production in each of the subject pools shall be allocated as follows:

The pool allowable remaining each month after deducting the total allowable assigned to marginal wells shall be allocated among the non-marginal wells entitled to an allowable in the proportion that each well's acreage factor bears to the total of the acreage factors for all non-marginal wells in the pool.

(3) That each of the subject pools shall be governed by the General Rules and Regulations for the Prorated Gas Pools of Southeastern New Mexico promulgated by Order No. R-1670, as amended, insofar as said General Rules and Regulations are not inconsistent with this order or Orders Nos. R-2440 and R-2441.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

JACK M. CAMPBELL, Chairman

GUYTON B. HAYS, Member

S E A L

A. L. PORTER, Jr., Member & Secretary

esr/

GAS PRORATION - WHAT IT DID, WHAT IT DOES NOW, WHAT IT IS  
SUPPOSED TO DO, AND WHAT IT IS PERCEIVED TO DO

By

William J. LeMay, Director  
New Mexico Oil Conservation Division

**When pipelines defined gas markets**, proration worked, along with "ratable takes", to supply those gas markets with gas produced and used in proportion to gas reserves underlying each producer's developed acreage. Gas allowables were established in certain designated fields, usually fields where there was more than one pipeline taking gas. Pipelines nominated gas supplies and proration authorities assigned allowables to satisfy that demand. Proration also had the effect of allocating available pipeline capacity (but don't tell FERC). **What it does now** is attempt to supply some natural gas to markets in proportion to gas reserves underlying each owner's developed acreage. It gives gas owners the opportunity to protect their correlative rights. It can also have the effect of allocating scarce pipeline capacity. **What it is supposed to do** is to prevent waste and protect correlative rights. **What it is perceived to do** in most consuming states is to restrict the available supply of gas so as to raise prices.

**"Market Demand Proration" — I'm not sure what that means anymore.** The IOCC in their 1964 Conservation study stated: "Purchasers do not always purchase all crude oil (gas) that is offered by producers. Each purchaser buys only the amount that he needs. In a real sense, because of a finite market, production is thereby limited to market demand even if there is no administrative agency to do so." Without statewide market demand regulatory authority, gas allocation is accomplished by buyers or sellers. Historically pipelines not only defined the market, they were the market. Market demand was a reflection of gas markets which were specific end users connected by pipeline to specific gas fields. Today that specific association is lost in the concepts of "open access" and "non-associated affiliate transactions". I would define market demand today as the sum total of all demand for natural gas in North America, limited only by the physical ability of pipes to transport gas from producing areas to consuming areas.

Implicit in state authority to "protect correlative rights" under market demand concepts is "ratable take". In a near perfect world, gas purchasers would purchase their gas supplies ratably from all gas producers sharing a common source of supply. When pipelines were the sole purchaser this could be enforced. This is not happening today and cannot happen because of basic practical considerations. Joe's Electric is not going to purchase its gas ratably from producers in any gas field.

"The purpose of regulation is to prevent physical waste in a reasonable, effective way, and any effect on prices and economic waste is incidental. Courts have so held and the principal is now

considered to be well established.<sup>1</sup>" The physical waste issue becomes a factor when discussing casinghead gas and hardship gas which should be afforded preferential access to market at market clearing prices. To deny casinghead gas a market would require either shutting in oil wells or venting or flaring gas as oil is produced. Hardship gas wells require continual flow or reservoir damage occurs resulting in physical loss of gas reserves. Preventing waste and protecting equity interests is what gas proration is all about.

So where does that leave us? I think we have an obligation to protect correlative rights and can do so by prorating individual fields. I do not think we can create equity between fields, or statewide, or nationwide, for that matter. If nationwide market sharing and equity between producing states is the purpose of gas proration, New Mexico will demand a much larger share of the U.S. gas market with our 20 to 1 Reserves/Production Ratio compared to Texas at 9 to 1, Oklahoma at 8 to 1 or Louisiana at 7 to 1.

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<sup>1</sup>Interstate Oil Compact Commission, "A Study of Conservation of Oil and Gas", 1964; page 92.