CASE 3237: Hearing on motion of the OCC to consider instituting gas prorationing in INDIAN BASIN.

SE MO.

APPlication, Transcripts, SMAIL Exhibits Etc. Order entered in Case 3237 (R-1670-F) mailed to the following:

John H. Trigg (Jack Mundell) Jim Knauff & John Anderson (USGS) Terrell Couch Ross Malone George Hunker James Sperling J. K. Smith Phil Tomlinson John P. Carnes C. D. Williams Richard Morris Ben Howell Shofner Smith (Phillips) A. R. Ballou F. P. Burns Eugene E. Nearburg Kirk Newman Ellis EWind Gordon Lewellan Oran Hazeltine Jack Ramsey A. M. Wiederkehr John Russell Longton Curringham Land Lower Class. Maryon for Stalph Lower Gand Easton.
E. W. Mestod Bill Kastler

El Paso Natural Gas Company El Paso, Texas

VICE PRESIDENT

April 23, 1965

Mr. A. L. Porter, Secretary New Mexico Oil Conservation Commission Post Office Box 2088 Santa Fe, New Mexico 87501

Dear Pete:

I enclose statement of El Paso Natural Gas Company to be filed in Case No. 3237, pursuant to permission granted by the Commission on the date of the hearing.

My best personal regards....

Yours simcerely,

BRH: 1bh

Enclosure

Enter Mailer

El Paso Matural Gas Company El Paso, Texas

April 23, 1965

New Mexico Oil Conservation Commission P. O. Box 2088 Santa Fe, New Mexico 87501

Attention: Mr. A L. Porter, Secretary

Gentlemen:

Pursuant to permission granted at the hearing in Hobbs in Case No. 3237 relating to the proration of the Indian Basin Gas Pools in Eddy County, New Mexico, El Paso Natural Gas Company files this written memorandum.

El Paso owns no acreage in the area and is not a purchaser of gas. However, the proposal to grant allowables to unconnected wells is one which could, if extended to other pools, cause material detriment to El Paso as a producer and as a purchaser.

The statutory provisions found in Section 65-3-13(c) were enacted by the legislature after study by New Mexico Oil & Gas Association and reconciliation of various viewpoints concerning proration of gas. Several members of the Association, including El Paso, have consistently pointed out the dangers of any proration rule or formula which would prevent marketing the full market demand from a gas pool. Granting allowables to unconnected wells could have this effect.

The Statute is crystal clear and denies authority for allocating allowables to unconnected wells:

(1) The Commission "... shall determine reasonable market demand and make allocations of production during each such /proration/ period, upon notice and hearing, at least thirty days prior to the beginning of each proration period." This "market demand" statute bases the entire framework of proration upon determination of the market demand and allocation of that demand. Gas that is expected to be marketed at some indeterminate, indefinite period in

New Mexico Oil Conservation Commission Page 2 April 23, 1965

the future is not market demand applicable to current production.

- (2) The Commission is directed to "...allocate the allowable production among the gas wells in the pool delivering to a gas transportation facility upon a reasonable basis and recognizing correlative rights...." The use of the word "delivering" carries a current or present meaning and cannot be tortured into meaning "expected to deliver in the future." A well that has no connection to a gas transportation facility cannot be "delivering" within the plain and unambiguous language of the statute.
- The only provision for an unconnected well follows immediately after the foregoing instruction wherein the Commission is directed to "... include in the proration schedule of such pool any well which it finds is being unreasonably discriminated against through denial of access to a gas transportation facility which is reasonably capable of handling the type of gas produced by such well." language recognizes the possibility that a producing well might have no connection and because of distance from a pipeline or other economic reason, there would be no unreasonable discrimination in refusing a well connection. The provisions of Section 65-3-15(d) applying to common purchasers reinforce the intent of the statute by imposing the common purchase obligation only as to "...gas lawfully produced from gas wells with which its gas transportation facilities are connected in the pool and other gas produced within a pool and tendered at a point on its gas transportation facilities." (Emphasis supplied.) The record in this case has no iota of evidence of discrimination against any producer, much less of unreasonable discrimination. To grant current allowable to an unconnected well does violence to the plain meaning of the statute and to the legislative history of this Statute.

A brief look at "correlative rights" is appropriate. Statutes, regulations and court decisions of producing states uniformly define the correlative right of the owner of a tract within a pool as the opportunity to produce his fair share of oil or gas in place. The tract owner by his own action may forego this opportunity by failing to drill his tract or reduce his opportunity by electing to contract upon terms less advantageous than those accepted by his neighbor. In either event he had the opportunity.

The Commission staff proposes that balancing

New Mexico Oil Concervation Commission Page 3 April 23, 1965

rules found in other southeastern gas pools be made applicable to these pools but that balancing be suspended until after connection of the second pipeline. If the Commission intends to require balancing these pools, then the allocation of allowables to unconnected wells will result either (1) in depriying Southern Union of a portion of its market demand or (2) a completely useless gesture. Under New Mexico gas proration, allowables for a pool will finally be determined by the actual production from that pool. When there are two purchasers from the same pool and one purchaser has a larger market demand per well than the other, wells connected to the larger purchaser build up overproduction and wells connected to the smaller purchaser build up underproduction until cancellation of the underproduction and redistribution. Therefore, if Natural Gas Pipeline's market demand will be greater per well than Southern Union's, the underproduction accumulated prior to connection will, upon balancing the pool's allowable to its production, reduce Southern Union's allowables and prevent Southern Union from obtaining its market demand. If the market demand of Natural Gas Pipeline will be less per well than Southern Union's, Natural Gas Pipeline can never catch up and the grant of allowables to unconnected wells is futile. The truth of these conclusions has been demonstrated in the experience of production from the Jalmat and Eumont Pools when the market demand of the two purchasers was not identical. If the market demand of each purchaser is the same per well, then the balancing formula will curtail Southern Union's allowables and prevent purchase of its market demand. The curtailment of market demand by proration has the effect of transferring demand to other pools. If there is no need for curtailment of Southern Union's market demand, then no purpose is achieved by allocating allowables to the unconnected wells.

El Paso would reiterate that the proposal violates the expressed provisions of the Statute, is not necessary to protect the opportunity of owners to produce their fair share, could prevent the first purchaser in time from obtaining market demand in later years, and would violate the established practice of granting allowables only upon connection of the well now applicable to all other prorated gas pools. In the absence of proof of "unreasonable discrimination" there is no legal or equitable basis for granting an allowable to an unconnected well.

Yours very truly,

EL PASO NATURAL GAS COMFANY

BRH: 1bh



PHILLIPS PETROLEUM COMPANY BARTLESVILLE, OKLAHOMA 74004

EXPLORATION AND PRODUCTION DEPARTMENT

April 23, 1965

Case 3237 - Indian Basin Gas Pools, Eddy County, New Mexico - Allocation of Gas Allowables

New Mexico Gil Genservation Commission P. O. Box 2088 Santa Fe, New Mexico 87501

Attention Mr. A. L. Porter, Jr.

Gentlemen:

At the conclusion of the hearing on April 14, 1965, in the above-designated case, the Commission gave operators ten days in which to file statements.

This is to respectfully invite the Commission's attention to the letter to the Commission from Phillips Petroleum Company dated April 6, 1965, and to kindly request that said letter and the recommendations made therein be regarded as the statement of Phillips Petroleum Company filed in response to the above-mentioned authorization to file statements.

Yours very truly,

Shorper Smith
Production Director

OPN:bb

Mary J



PHILLIPS PETROLEUM COMPANY

BARTLESVILLE, OKLAHOMA 74004

EXPLORATION AND PRODUCTION DEPARTMENT

April 6, 1965

Indian Basin Gas Pools, Eddy County, New Mexico -Case 3237

New Mexico Oil Conservation Commission P. O. Box 2088 Santa Fe, New Mexico 87501

Attention Mr. A. L. Porter, Jr.

Gentlemen:

Reference is made to Commission called hearing April 14, 1965, (Case 3237) to consider gas prorationing in the Indian Basin-Upper Penn. and Indian Basin-Morrow Gas Pools, Eddy County, New Mexico.

It will be proposed that gas production be limited to reasonable market demand and to the capacity of gas transportation facilities etc. Consideration will also be given to the methods of dealing with gas wells not connected to a gas transportation facility.

As an interested operator, Phillips Petroleum Company recommends that the New Mexico Oil Conservation Commission grant allowables to gas wells in these fields by application of an allocation formula based 100 per cent on acreage and that said allowables be issued in accordance with Commission Statewide Rule 601 which reads in part, "the Commission shall include in the proration schedule of such pool any gas well which it finds is being unreasonably discriminated against through denial of access to a gas transportation facility which is reasonably capable of handling the type of gas produced by such well".

In the case of the Indian Basin Pools discrimination has not caused or contributed to the difference in dates that various wells in the Indian Basin Gas Pools will be connected to a gas market. The connection of some wells will be delayed pending the approval and certification of the sales contract by the Federal Power Commission. The producers entered into these contracts by arms length negotiations on the basis of a competitive gas market and were aware of the FPC requirements when the contracts were executed.

New Mexico Oil Conservation Commission In re: Indian Basin Gas Pools, Eddy County, New Mexico April 6, 1965
Page 2

Although Phillips Petroleum Company does not plan to have a representative at this hearing, it is kindly requested that the foregoing be entered as a part of the record of the hearing to be held April 14, 1965.

Yours very truly,

PHILLIPS PETROLEUM COMPANY

Shofper Smith Production Director

JRB:bb

LAND COMMISSIONER E. B. JOHNNY WALKER

MEMBER

GOVERNOR JACK M. CAMPBELL CHAIRMAN

State of New Mexico

(Bil Conserbation Commission



A. L. PORTER, JR. SECRETARY - DIRECTOR

STATE GEOLOGIST

P. G. BRAWER DD ARTESIA, NEW MEXICO

April 16, 1965

A. L. Porter, Jr., Director Oil Conservation Commission P. O. Box 2088 Santa Fe, New Mexico

ease No. 3237 Indian Basin Gas Pools

Dear Pete:

You may recall, that after the coffee break Thursday morning. Elvis stated that there was a dry hole located in the SW/4 SW/4 Section 20-21-24, which had not been shown on my Exhibits 1,2 and 3. This well apparently is the DeKalb well with a reported total depth of 9320 feet shown next to last on Exhibit 7. As I had no records with me and as Bill Gressett thought that Elvis was correct, I did not question Elvis at that time. However, a thorough search of our well files, scout reports, maps, and a check with the U.S.G.S. reveals that the only well in Section 20-21-24 is the DeKalb Agricultural Associates, Inc., Shafer No. 1, 330 S & W, completed as a dry hole at a total depth of 801 feet in December, 1962. Therefore, I feel that the exhibits are correct as presented.

Very truly yours,

R. L. Stamets

Esse mark - en





Manager, Southwest Division

PRODUCTION DEPARTMENT SUN OIL COMPANY SOUTHLAND CENTER, P.O. BOX 2880, DALLAS, TEXAS 75221 April 23, 1965

> RE: Indian Basin Gas Pool, Eddy County, New Mexico: Case 3237

New Mexico Oil Conservation Commission P. O. Box 2088 Senta Fe, New Mexico 87501

Attention: Mr. A. L. Porter, Jr.

Gentlemen:

Sun Oil Company is the owner of a completed, but unconnected well, in the Indian Basin Area with a gas sales contract to Natural Gas Pipe Line Company. Representatives of Sun Oil Company were present at the April 14, 1965 hearing concerning the subject field, and this will be considered as Sun's Statement of Position concerning Commission action in this matter.

Sun Oil Company recommends that allowables be assigned on the basis of 100% productive acres effective as of the time production from the field begins. Sun further recommends that the Commission take no action concerning unconnected wells until such time as injury to correlative rights is indicated.

We shall appreciate your making this statement a portion of the record of the hearing.

Yours very truly,

SUN OIL COMPANY (C. L. Ballow

ARB: mo

A. R. Ballou Oider Wiarlet
A

ATWOOD & MALONE

LAWYERS

JEFF D ATWOOD (1883-1980) ROSS L. MALONE
CHARLES F, MALONE
RUSSELL D. MANN PAUL A. COOTER BOB F. TURNER ROBERT A JOHNSON

P. O. DRAWER 700 TELEPHONE 505 622-6221 SECURITY NATIONAL BANK BUILDING ROSWELL, NEW MEXICO 88201

April 9, 1965

Oil Conservation Commission State Capitol Santa Fe, New Mexico

> Re: Case No. 3237 - Indian Basin Gas Prorationing Hearing

Gentlemen:

We enclose herewith our Entry of Appearance in Case No. 3237 on the Commission docket for April 14, 1965, as co-counsel with J. O. Terrell Couch of Houston, Texas, for Marathon Oil Company.

Very truly yours,

Ross L. Malone

Clasers Week

RLM:d

Enclosure cc: J. O. Terrell Couch, Esquire Division Attorney Marathon Oil Company P. O. Box 3128 Houston, Texas

BEFORE THE OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

IN THE MATTER OF THE)	
HEARING ON MOTION OF)	
THE OIL CONSERVATION)	
COMMISSION TO CONSIDER)	
INSTITUTING GAS PRORATIONING)	No. 3237
IN THE INDIAN BASIN-UPPER)	
PENNSYLVANIAN AND INDIAN)	
BASIN-MORROW GAS POOLS,)	
EDDY COUNTY, NEW MEXICO.	_)	

ENTRY OF APPEARANCE

Atwood & Malone, P. O. Drawer 700, Roswell, New Mexico, a firm of attorneys all of whom are duly licensed to practice law in the State of New Mexico, hereby enters its appearance as co-counsel with J. O. Terrell Couch, Esquire, of Houston, Texas, as counsel for Marathon Oil Company in the above styled and numbered case.

DATED at Roswell, New Mexico, this 9th day of April, 1965.

ATWOOD & MALONE

P. O. Drawer 700

Roswell, New Mexico

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.

-2-CASE No. 3237 Order No. R-1670-F

- (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 counterdrainage.
- (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 Maxico 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,

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

esr/

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BFFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

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

CASE NO. 3337 EXHIBIT 5

> CASE No. 2749 Order No. R-2440 NOMENCLATURE

APPLICATION OF RALPH LOWE TO CREATE A NEW POOL FOR UPPER PENNSYLVANIAN GAS PRODUCTION AND FOR SPECIAL POOL RULES, EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on February 6, 1963, at Santa Fe, New Mexico, before Daniel S. Nutter, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 28th day of February, 1963, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Daniel S. Nutter, 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 applicant, Ralph Lowe, seeks the creation of a new gas pool for Upper Pennsylvanian production and the promulgation of temporary special rules and regulations governing said pool, including a provision for 640-acre spacing units.
- (3) That a new gas pool for Upper Pennsylvanian production should be created and designated the Indian Basin-Upper Pennsylvanian Gas Pool. This pool was discovered by the Ralph Lowe Indian Basin Well No. 1, located in Unit E of Section 23, Township 21 South, Range 23 East, NMPM, Eddy County, New Mexico. The top of the perforations in the Upper Pennsylvanian formation is at 7376 feet.
- (4) That temporary special rules and regulations establishing 640-acre spacing units should be promulgated for the subject

-2-CASE No. 2749 Order No. R-2440

pool in order to prevent the possibility of economic loss resulting from the drilling of unnecessary wells and in order to allow the operators in the subject pool to gather information concerning the reservoir characteristics of the pool.

- (5) That the temporary special rules and regulations should provide for limited well locations in order to assure orderly development of the pool and protect correlative rights.
- (6) That special rules and regulations should be established for a temporary period to expire one year from the date that a pipeline connection is first obtained for a well in the pool; that during this temporary period all operators in the subject pool should gather all available information relative to drainage and recoverable reserves.
- (7) That this case should be reopened at an examiner hearing one year from the date that a pipeline connection is first obtained for a well in the Indian Basin-Upper Pennsylvanian Gas Pool, at which time the operators in the subject pool should appear and show cause why the Indian Basin-Upper Pennsylvanian Gas Pool should not be developed on 160-acre spacing units.
- (8) That the first operator to obtain a pipeline connection for a well in the Indian Basin-Upper Pennsylvanian Gas Pool should notify the Commission in writing of such fact, and that the Commission should thereupon issue a supplemental order designating an example date for reopening this case.

IT IS THEREFORE ORDERED:

(1) That a new pool in Eddy County, New Mexico, classified as a gas pool for Upper Pennsylvanian production is hereby created and designated the Indian Basin-Upper Pennsylvanian Gas Pool, consisting of the following-described area:

TOWNSHIP 21 SOUTH, RANGE 23 EAST, MMPM Section 22: All Section 23: All

(2) That Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Gas Pool are hereby promulgated as follows, effective March 1, 1963.

SPECIAL RULES AND REGULATIONS FOR THE INDIAN BASIN-UPPER PENNSYLVANIAN GES POOL

RULE 1. Each well completed or recompleted in the Indian Basin-Upper Pennsylvanian Cas Pool or in the Upper Pennsylvanian formation within one mile of the Indian Basin-Upper Pennsylvanian

-3-CASE No. 2749 Order No. R-2440

Gas Pool, and not nearer to or within the limits of another designated Upper Pennsylvanian pool, shall be spaced, drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.

- RULE 2. Each well completed or recompleted in the Indian Basin-Upper Pennsylvanian Gas Pool shall be located on a standard unit containing 640 acres, more or less, consisting of a single governmental section.
- RULE 3. The Secretary-Director may grant an exception to the requirements of Rule 2 without notice and hearing when an application has been filed for a non-standard unit and the unorthodox size or shape of the unit is necessitated by a variation in the legal subdivision of the United States Public Lands Survey, or the following facts exist and the following provisions are complied with:
 - (a) The non-standard unit consists of quarterquarter sections or lots that are contiguous by a common bordering side.
 - (b) The non-standard unit lies wholly within a single governmental section and contains less acreage than a standard unit.
 - (c) The applicant presents written consent in the form of waivers from all offset operators and from all operators owning interests in the section in which the non-standard unit is situated and which acreage is not included in said non-standard unit.
 - (d) In lieu of Paragraph (c) of this rule, the applicant may furnish proof of the fact that all of the aforesaid operators were notified by registered or certified mail of his intent to form such non-standard unit. The Secretary-Director may approve the application if no such operator has entered an objection to the formation of such non-standard unit within 30 days after the Secretary-Director has received the application.
- RULE 4. Each well completed or recompleted in the Indian Basin-Upper Pennsylvanian Gas Pool shall be located no nearer than 1650 feet to the outer boundary of the section and no nearer than 330 feet to any governmental quarter-quarter section line.
- RULE 5. The Secretary-Director may grant an exception to the requirements of Rule 4 without notice and hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to another horizon. All operators offsetting the

-4-CASE No. 2749 Order No. R-2440

proposed unorthodox location shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all offset operators or if no offset operator has entered an objective to the unorthodox location within 20 days after the Secretary-Director has received the application.

IT IS FURTHER ORDERED:

- (1) That any well presently drilling to or completed in the Upper Pennsylvanian formation within the Indian Basin-Upper Pennsylvanian Gas Pool or within one mile of the Indian Basin-Upper Pennsylvanian Gas Pool that will not comply with the well location requirements of Rule 4 is hereby granted an exception to the requirements of Rule 4. The operator of any such well shall notify the Artesia District Office in writing of the name and location of the well on or before March 1, 1963.
- (2) That any operator desiring to dedicate 640 acres to a well presently drilling to or completed in the Indian Basin-Upper Pennsylvanian Gas Pool shall file a new Form C-128 with the Commission on or before March 1, 1963.
- (3) That this case shall be reopened at an examiner heaving one year from the date that a pipeline connection is first obtained for a well in the Indian Basin-Upper Pennsylvanian Gas Pool, at which time the operators in the subject pool may appear and show cause with the Indian Basin-Upper Pennsylvanian Gas Pool should not be developed on 160-acre spacing units.
- (4) That the first operator to obtain a pipeline connection for a well in the Indian Basin-Upper Pennsylvanian Gas Pock shall notify the Commission in writing of such fact, and that the Commission will thereupon issue a supplemental order designating an exact date for reopening this case.
- (5) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessarian

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

JACK M. CAMPBELL, Chairman

E. S. WALKER, Member

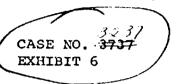
A. L. PORTER, Jr., Member & Secretive.

esr/

SEAL

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

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



CASE No. 2750 Order No. R-2441 NOMENCLATURE

APPLICATION OF RALPH LOWE TO CREATE A NEW POOL FOR MORROW GAS PRODUCTION AND FOR SPECIAL POOL RULES, EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on February 6, 1963, at Santa Fe, New Mexico, before Daniel S. Nutter, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 28th day of February, 1963, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Daniel S. Nutter, 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 applicant, Ralph Lowe, seeks the creation of a new gas pool for Morrow production and the promulgation of temporary special rules and regulations governing said pool, including a provision for 640-acre spacing units.
- (3) That a new gas pool for Morrow production should be created and designated the Indian Basin-Morrow Gas Pool. This pool was discovered by the Ralph Lowe Indian Basin Well No. 1, located in Unit E of Section 23, Township 21 South, Range 23 East, NMPM, Eddy County, New Mexico. The top of the perforations in the Morrow formation is at 9039 feet.
- (4) That temporary special rules and regulations establishing 640-acre spacing units should be promulgated for the subject pool in order to prevent the possibility of economic loss resulting from the drilling of unnecessary wells and in order to allow

-2-CASE No. 2750 Order No. R-2441

the operators in the subject pool to gather information concerning the reservoir characteristics of the pool.

- (5) That the temporary special rules and regulations should provide for limited well locations in order to assure orderly development of the pool and protect correlative rights.
- (6) That special rules and regulations should be established for a temporary period to expire one year from the date that a pipeline connection is first obtained for a well in the pool; that during this temporary period all operators in the subject pool should gather all available information relative to drainage and recoverable reserves.
- (7) That this case should be reopened at an examiner hearing one year from the date that a pipeline connection is first obtained for a well in the Indian Basin-Morrow Gas Pool, at which time the operators in the subject pool should appear and show cause why the Indian Basin-Morrow Gas Pool shoul not be developed on 160-acre spacing units.
- (3) That the first operator to obtain a pipeline connection for a well in the Indian Basin-Morrow Gas Pool should notify the Commission in writing of such fact, and that the Commission should thereupon issue a supplemental order designating an exact date for reopening this case.

IT IS THEREFORE ORDERED:

(1) That a new pool in Eddy County, New Mexico, classified as a gas pool for Morrow production is hereby created and designated the Indian Basin-Morrow Gas Pool, consisting of the following-described area:

TOWNSHIP 21 SOUTH, RANGE 23 EAST, NMPM Section 22: All Section 23: All

(2) That Special Rules and Regulations for the Indian Basin-Morrow Gas Pool are hereby promulgated as follows, effective March 1, 1963.

SPECIAL RULES AND REGULATIONS
FOR THE
INDIAN BASIN-MORROW GAS POOL

RULE 1. Each well completed or recompleted in the Indian Basin-Morrow Gas Pool or in the Morrow formation within one mile of the Indian Basin-Morrow Gas Pool, and not nearer to or within the limits of another designated Morrow pool, shall be spaced. drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.

-3-CASE No. 2750 Order No. R-2441

- RULE 2. Each well completed or recompleted in the Indian Basin-Morrow Gas Pool shall be located on a standard unit containing 640 acres, more or less, consisting of a single governmental section.
- PULE 3. The Secretary-Director may grant an exception to the requirements of Rule 2 without notice and hearing when an application has been filed for a non-standard unit and the unorthodox size or shape of the unit is necessitated by a variation in the legal subdivision of the United States Public Lands Survey, or the following facts exist and the following provisions are complied with:
 - (a) The non-standard unit consists of quarterquarter sections or lots that are contiguous by a common bordering side.
 - (b) The non-standard unit lies wholly within a single governmental section and contains less acreage than a standard unit.
 - (c) The applicant presents written consent in the form of waivers from all offset operators and from all operators owning interests in the section in which the non-standard unit is situated and which acreage is not included in said non-standard unit.
 - (d) In lieu of Paragraph (c) of this rule, the applicant may furnish proof of the fact that all of the aforesaid operators were notified by registered or certified mail of his intent to form such non-standard unit. The Secretary-Director may approve the application if no such operator has entered an objection to the formation of such non-standard unit within 30 days after the Secretary-Director has received the application.
- RULE 4. Each well completed or recompleted in the Indian Basin-Morrow Gas Pool shall be located no nearer than 1050 feet to the outer boundary of the section and no nearer than 330 feet to any governmental quarter-quarter section line.
- RULE 5. The Secretary-Director may grant an exception to the requirements of Rule 4 without notice and hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to another horizon. All operators offsetting the proposed unorthodox location shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may

-4-CASE No. 2750 Order No. R-2441

approve the application upon receipt of written waivers from all offset operators or if no offset operator has entered an objection to the unorthodox location within 20 days after the Secretary-Director has received the application.

IT IS FURTHER ORDERED:

- (1) That any well presently drilling to or completed in the Morrow formation within the Indian Basin-Morrow Gas Pool or within one mile of the Indian Basin-Morrow Gas Pool that will not comply with the well location requirements of Rule 4 is hereby granted an exception to the requirements of Rule 4. The operator of any such well shall notify the Artesia District Office in writing in the name and location of the well on or before March 1, 1963.
- (2) That any operator desiring to dedicate 640 acres to a well presently drilling to or completed in the Indian Basin-Morrow Gas Pool shall file a new Form C-128 with the Commission on or before March 1, 1963.
- (3) That this case shall be reopened at an examiner hearing one year from the date that a pipeline connection is first obtained for a well in the Indian Basin-Morrow Gas Pool, at which time the operators in the subject pool may appear and show cause why the Indian Basin-Morrow Cas Pool should not be developed on 160-acre spacing units.
- (4) That the first operator to obtain a pipeline connection for a well in the Indian Basin-Morrow Gas Fool shall notify the Commission in writing of such fact, and that the Commission will thoroughous a supplemental order designating an exact date for reopening this case.
- (5) 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 herein-above designated.

STATE OF NEW MEXICO OLL CONSERVATION COMMISSION

JACK M. CAMPBELL, Chairman

E. S. WAINER, Medier

SEAL

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

esr/

WELLS IN INDIAN BASIN AREA

	Purchas	ser	Elev.	Upper Penn. Comp.Int.	Morrow Comp.Int.
Marathon-N. Indian Basin Unit		#3K-3-21-23	3874	•	
Marathon-N. Indian Basin Unit		#1M 10-21-23	3893	7470-7596	9118-72
Marathon-N. Indian Basin Unit		#2G 11-21-23	3794	7552-63	
Ralph Lowe-Indian Basin		#1K 14-21-23	3824	7464-7548	9457-84
Robt. Enfield-W. Indian Basin		#1N 17-21-23	4077.	7396-7450	•
Robt. Enfield-Bunnel Fed.		#1J 18-21-23	4089		•
J. C. Williams-Std. Fed.	SO	#1G 19-21-23	4064	7044-7296	
Robt. Enfield-W. Indian Hills	SO	#2G 20-21-23	3901		
Sun-Bright Fed		#1G 21-21-23	3883	7232-7530	
Ralph Lowe-Ind. Basin Fed A		#1J 22-21-23	3847	7505 - 7572	9118-9266
Ralph Lowe-Ind, Basin		#1E 23-21-23	3832	7376-7588	9039-9263
Ralph Lowe-Ind. Basin Fed. C		#1F 26-21-23	3856	7366-7416	
Penroc-Indian Basin Fed.	SO	#1G 19-21-24	3779	7388-7533	9226-9470
Ralph Lowe-Indian Hills Unit		#1M 21-21-24	3704	7316-32	
Kerr McGee-Martha Creek		#1J 30-21-24	3722	7334-7444	9152-9426
Redfern-Winston	SO	#1K 31-21-24	3905	736 5 ~7670	9545-9604
Hanagan-Fepee		#1D 32-21-24	3849	T. 7360	
Std. of Texas -Bogle Flats		#1G 3-22-23	4035		
Std. of Texas -Bogle Flats		#2I 4-22-23	4082		
Atlantic-Wait Canyon		#2D 4-22-24	3970	7550=7700	
John Trigg-Fed. I.B		#1D 6-22-24	3932	7430-7554	
John Trigg-Fed. C J		#1F 35-21-23	3961	7360-7476	,
Monsanto-Lowe St.		#1F 36-21-23	3868	7520-45	9296-9555
Curtis Inman-Walt Canyon		#10 3-22-24			TD 10694
Northern Nat-McKittrick Hill		#1AC 23-22-24			TD 11730
Superior-Cone Butte Unit		#1D 19-22-24		•	TD 10503
St. of Tex-Fed. A		#1M 8-21-23			
Sinclair-Marathon-Fed		#1K 24-21-23			
Union of Calif. St.		#1J 18-21-24			
DeKalb-Fed.		#1M 20-21-24	3725	•	TD 9320
Ralph Lowe-Staple		#1K 22-21-24	3690	T 6702	T D 9900
Upper Penn		Ave.		Range	
Gas Gravity		.636		677	Ga
Gas Liquid Ratio	12	25,523	16,265-501,071		Ga
Liquid Gravity		55.10	49.2-59.2		Li
Wellhead Pressure		2304	2356	5-2746	· Wa

ANALYSIS OF ASSIGNING ALLOWABLES TO UNCONNECTED WELLS

INDIAN BASIN AREA

Estimated Pool Production:

Southern Union estimated gas takes:

Entire Area - 20 M²CFD

CASE NO. 3237
Exhibit 5

Indian Basin - Upper Penn. 18 M²CFD

Indian Basin - Morrow

2M2MCFD

Natural Gas Pipeline estimated gas takes:

Entire Area - 100 M2CFD

Indian Basin - Upper Penn. 80 M²CFD

Indian Basin - Morrow

20 M²CFD

1. Upper Pennsylvanian Pool

Includes 640 acre units on which wells have been completed or in process of being completed as of April 1, 1965.

Southern Union Gas Company - 4 units

Natural Gas Fipeline Company 18 units

Assigning estimated Southern Union Gas production to units on basis of 100% acreage:

 $18 \text{ M}^2\text{CFD} = 4.5 \text{ X 4 X 182.5 days} = 3285 \text{ M}^2\text{CF/Fro. Period.}$ 4 units

Unconnected Units:

4.5 M^2 CFD X 18 units X 182.5 days= $\frac{14782}{18067}$ M^2 CF/Pro. Period Pool Allowable

14.782 N.G.P.L. accrued underage = 185 days underproduction in one 6 menth proration 80 M^2 CFD rate of production.

Assuming two years until N.G. P.L. is connected then they will be under produced 740 days or 2.0 years.

Exhibit 8 Page 2

MORROW POOL

Development as of April 1, 1965

Southern Union Gas Company - 2 units

Natural Gas Fipeline - 6 units

365 M²CF/Fro. Period $2 \text{ M}^2 \text{CFD} = 1.0 \text{ X 2 X 182.5} =$

2 units

Unconnected Wells: 1.0 X 6 X 182.5 1095 M²CF/Pro. Unit 1460 M2CF/Pro. Unit

Pool Allowable

1095 N.G.P.L. accrued underage = 55 days underproduction in one proration period.

20 M²CFD N.G.P.L. rate of production.

Assuming two years until connection N.G.P.L. would be under produced 220 days or .6 years.

Exhibit 8 Page 3

UPPER PENNSYLVANIAN POOL

Includes all 640 acre units which Oil Conservation Commission staff believes will be productive based on current geological data.

Productive Units - 43

Southern Union Gas - 5 units

Natural Gas Pipeline - 38 units

 $18 \text{ M}^2\text{CFD} = 3.6 \text{ X} 5 \text{ X} 182.5 = 3285 \text{ M}^2\text{CF/Period}$

5 uni.ts

Unconnected Wells:

3.6 X 38 X 182.5 - F

Pool Allowable

24,966 M²CF/Period 28,251 M²CF/Period

 $\underline{24,966}$ N.G.P.L. accrued underage = 312 days underproduction in one period. 80 M²CFD rate of production

Assuming two years until N.G.P.L. connection, they would be underproduced 1248 days or 3.4 years.

Exhibit 3 Page 4

MORROW POOL

Includes all 640 acre units which Oil Conservation Commission staff believe will be productive based on current geological data.

Productive Units - 10

Southern Union Gas - 2 Units

Natural Gas Pipeline - 8 Units

 $2 \text{ M}^2\text{CFD} = 1.0 \text{ X } 2 \text{ X } 182.5 = 3$

365 M²CF/Period

2 units

Unconnected Wells:

1.0 X 8 X 182.5 =

1460 M²CF/Period

Pool Allowable

1825 M²CF/Period

1460 N.G.P.L. accrued underage * 73 days underproduction in one period.

20 M2CFD rate of production

Assuming two years until N.G.P.L. is connected, they would be underproduced 292 days or .8 years.

ALTERNATIVE PROCEDURES CONCERNING UNCONNECTED WELLS

- 1. Assign underproduction to a well after it is connected if the owner of the well establishes that he has been denied the opportunity to produce his just and equitable share of the gas in the pool.
- 2. Allocate the allowable production to connected wells based on the acreage in a proration unit committed to a connection; e.g., a well with 320 acres committed to Southern Union and 320 acres committed to Natural Gas Pipeline would receive a 320-acre allowable upon connection to Southern Union and a 640-acre allowable upon connection to Natural Gas Pipeline.
- 3. Allow each unconnected well to accrue underproduction based on total pool production <u>divided</u> by the number of unconnected wells.
- 4. Allow each unconnected well on a standard unit to accrue underproduction equivalent to the allowable assigned to a connected well on a standard unit.

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WITNESSETH:

THAT in consideration of the sum of Ten Dollars (\$10.00) paid by Pipeline to Seller, receipt of which is hereby acknowledged, and in consideration of the mutual agreements, covenants and conditions herein contained, the parties hereto agree as follows:

ARTICLE FIRST

SITUATION AND PURPOSE OF THE PARTIES

cated in such areas.

Exhibit No.

S. nta Fe, New M xico

OIL CONSERVATION COMMISSION

BEFORE THE

2. Seller represents that Seller owns or controls certain oil and gas leases, and/or mineral rights or interests therein, that are located in Eddy County, New Mexico, and that Seller has the right to sell the gas (such term to include all hydrocarbons gaseous at atmospheric pressure and at sixty degrees (60°) Fahrenheit) produced therefrom, and that Seller desires to produce, or cause to be produced, gas from certain of said leases, and/or mineral rights or interests therein, (sometimes referred to herein as Seller's leaseholds) and sell and deliver the same to Pipeline, all according to the provisions of this contract. A list of the instruments creating such leaseholds is attached hereto and marked Exhibit "A". Maps showing the location of the lands covered by such leaseholds are attached hereto and marked Exhibit "B" and Exhibit "C", respectively. Seller's leaseholds, as described in Exhibit "A" and as shown on Exhibit "B" and Exhibit "C", the lands covered thereby, and all deposits of gas underlying the same, from the surface of the ground to the base of the Morrow Formation, or to a datum depth of five thousand five hundred eight (5,508) feet below sea level, whichever is the deeper, whether such deposits of gas are presently known or hereafter discovered, are herein referred to as the "gas reserves", and said gas reserves are hereby committed by Seller to the performance of this contract. As used in this Paragraph 2, the term "Morrow Formation" is that geological horizon correlative to that interval of strata, the base of which is identified as occurring at a measured depth of nine thousand three hundred seventy (9,370) feet, as shown on the Schlumberger electric log (run December 15, 1962) of the Ralph Lowe No. 1-A Indian Basin Well, located one thousand six hundred fifty (1,650) feet from the south and east lines of Section 22-21S-23E, Eddy County, New Mexico.

ARTICLE SECOND

PRELIMINARY ACTS OF THE PARTIES

- 1. Pipeline will, on or about December 1, 1964, file with the Federal Power Commission an application for a Certificate of Public Convenience and Necessity for such authorization as may be necessary to receive gas from Seller hereunder (and from other producers in the area outlined on Exhibit "B") and to construct and operate such facilities as Pipeline deems necessary to transport said gas to its market areas. Pipeline will diligently prosecute such application, and subject to the provisions of Paragraph 3 below, if the requisite certificate authorization is issued containing the customary terms and conditions and no other term. or condition which, in Pipeline's opinion exercised in good faith, is unduly burdensome to Pipeline, it will accept such authorization, if all of the producers with which it has contracts for the purchase of gas from gas reserves located in the area outlined on Exhibit "B" accept their respective certificates, the applications for which have been made as set forth in Paragraph 2 below, provided, however, that Pipeline shall have the right to waive the requirement that all of such producers accept their respective certificates if the volume of gas reserves represented by those producers accepting their certificates is sufficient, in Pipeline's judgment, to make its Permian-Delaware Basin extension economically feasible.
- 2. Seller will, at or about the same time with Pipeline, file with the Federal Power Commission and diligently prosecute an application for a Certificate of Public Convenience and Necessity authorizing the sale and delivery of gas to Pipeline as herein contemplated. It is understood that the other producers in the area outlined on Exhibit "B", pursuant to contracts comparable hereto, will similarly file and prosecute applications for Certificates of Public Convenience and Necessity authorizing the sale and delivery

of gas to Pipeline. Subject to the provisions of Paragraph 3 below, if the requisite certificate authorization is issued containing no term or condition unacceptable to Seller, it will accept such authorization.

- 3. Anything to the contrary in this contract notwithstanding, should the above referred to certificate authorizations of Pipeline and Seller be not issued and accepted within twelve (12) months from the date on which the aforesaid applications for such authorizations were filed, either party hereto may, on thirty (30) days' written notice to the other party given prior to the issuance and acceptance of such authorizations, cancel and terminate this contract.
- 4. Upon the acceptance of the requisite authorizations by the parties hereto, then:
 - (a) Pipeline shall promptly begin and diligently pursue the construction of the facilities necessary to receive gas hereunder.
 - (b) Seller shall promptly construct, or cause to be constructed, any surface facilities which may be required to deliver gas to Pipeline in accordance with the terms of this contract.

When all of said facilities are completed, delivery of gas shall be initiated under this contract, provided, however, that if, after the expiration of six (6) months after the acceptance of the requisite authorizations by the parties hereto, the construction of the surface facilities necessary to deliver gas by Seller hereunder shall have been completed and Pipeline shall not have commenced taking the quantities of gas it is ob-

ligated to take hereunder, Pipeline (subject only to the occurrence of an event of force majeure as defined in Article Thirteenth hereof) shall nevertheless be obligated to pay for such quantities of gas at the price applicable to the first three (3) year period as provided in Paragraph 2 of Article Ninth hereof and on the basis provided in subparagraph 1 (a) of Article Fifth, said payments to be made monthly until Pipeline commences the taking of gas under the terms hereof.

ARTICLE THIRD

TERM

Subject to the other provisions hereof, this contract shall be effective as of the date hereof and shall continue for a term of twenty-five (25) years from the date of first delivery of gas hereunder, and thereafter until cancelled by either party hereto by thirty (30) days' written notice given to the other.

ARTICLE FOURTH

SELLER'S RESERVATIONS

Seller's commitment of the gas reserves to the performance of this contract is subject to the following reservations:

(a) Seller shall have the right, prior to any required delivery of gas hereunder, to utilize gas produced from the gas reserves or gas remaining after treatment, as may be required for Seller's use for fuel in drilling, deepening wells, gas-lifting of oil (in such manner as to not substantially diminish the volumes of gas deliverable hereunder), oper-

- ating the oil and gas leases (including compressor, dehydration, and extraction equipment), and to supply gas to Seller's lessors as required by the terms of Seller's oil and gas leases, all with reference to Seller's leaseholds identified in Exhibit "A".
- as engine fuel in the operation of irrigation pumps used in irrigating any of the lands covered by Seller's oil and gas leaseholds identified in Exhibit "A", and to sell gas for the drilling and/or deepening of wells located on acreage within the areas outlined on Exhibits "B" and "C" or in the immediate vicinity thereof, and to use or sell gas for fuel in the operation of the facilities contemplated in Paragraph 1 of Article Eleventh hereof.
- (c) Seller shall have the right, prior to any required delivery hereunder, to emove or cause to be removed from the gas as produced, gasoline and other liquefiable hydrocarbons other than methane (except methane necessarily removed in such process), sulphur, and other non-hydrocarbon substances at all times, and from time to time, and, subject to the quality specifications of Article Seventh hereof, in any degree desired by Seller, provided that, except as may result from the removal of pentanes and heavier hydrocarbons, Seller shall not by the exercise of this right render the gas incapable of meeting the

- specifications for heating value set forth in Article Seventh hereof.
- (d) Seller shall have the right to pool, consolidate or unitize any of Seller's leasehold interests with other properties of Seller and of others, and to alter such consolidated areas or units, in any of which events this contract shall cover Seller's allocated interest in such pool or unit and the gas production attributable thereto to the extent that such interest relates to the property covered hereunder. Pipeline recognizes that Seller has heretofore pooled, consolidated or unitized certain of the leasehold interests shown on Exhibit "A" and agrees that the provisions of this Paragraph are equally applicable to such leasehold interests.
- (e) Subject to the other provisions of this contract, the control, management, and operation of the properties, leases and wells subject hereto shall be and remain the exclusive right of Seller. Seller shall have the right to rework any well delivering gas hereunder and shall have the further right to plug and abandon any well when in Seller's opinion, exercised as a prudent operator, such well is no longer capable of producing gas in paying quantities.

ARTICLE FIFTH

QUANTITY

- 1. Seller shall sell and deliver, and Pipeline shall purchase and receive, subject to the other provisions of this contract, a daily quantity of gas averaged over each accounting period ("contract quantity") as follows:
 - (a) During the first twelve (12) months commencing with the date of first delivery of gas hereunder, or the date of first payment under Paragraph 4 of Article Second hereof, whichever first occurs, Seller's proportionate part, as the same may exist from time to time, of a daily quantity of gas averaged over such twelve (12) months of at least one bundred million (100,000,000) cubic feet to be purchased from Seller and from other producers, with whom Pipeline has contracts within the area outlined on Exhibit "B". Such daily quantity shall be allocated between the respective formations in said area in the following percentages: ninety (90) per cent thereof to the Cisco-Canyon Formation and ten (10) per cent thereof to the Morrow Formation. Subject to Paragraph 3 of Article Fourteenth hereof, such quantity of gas so allocated shall be divided equally, within the respective formation to which it is allocated, among the wells completed therein and delivering gas from time to time to Pipeline. For the purposes of this subparagraph 1 (a) only, the Cisco-Canyon Formation is identified as

the interval of strata correlative with that occurring between the measured depths of seven thousand three hundred fifty-four (7,354) feet and eight thousand (8,000) feet as shown on the Schlumberger electric log (run December 15, 1962) of the Ralph Lowe No. 1-A, Indian Basin Well located in Section 22-21S-23E, Eddy County, New Mexico, and the Morrow Formation is identified as the interval of strata correlative with that occurring between the measured depths of eight thousand nine hundred fifty (8,950) feet and nine thousand three hundred seventy (9,370) feet as shown on the electric log of said well.

(b) For the period commencing with the beginning of the second year following the date of first delivery of gas hereunder, or the date of first payment under Paragraph 4 of Article Second hereof, whichever first occurs, and continuing thereafter, one million (1,000,000) cubic feet of gas for each eight billion (8,000,000,000) cubic feet of recoverable gas in place in Seller's gas reserves as of the date of this contract which will be available for delivery to Pipeline hereunder, as said quantity may from time to time be determined.

For the purposes of this contract, the date of first delivery of gas shall be the date on which any gas is first delivered to Pipeline hereunder or the date on which any gas is first delivered under any of the said contracts with said other producers within the area outlined in Exhibit "B", whichever date shall first occur.

- 2. In the event Seller is unable, under prudent methods of operation or applicable rules and regulations of regulatory bodies having jurisdiction, to deliver, when requested by Pipeline to do so, for a period of thirty (30) consecutive days (excluding days upon which Seller is excused by the occurrence of an event of force majeure) at least one hundred twenty-five per cent (125%) of the then applicable contract quantity, the contract quantity shall be forthwith reduced to a quantity which is eighty per cent (80%) of the average daily quantity of gas that Seller delivered during such thirty (30) day period. Any change in the contract quantity pursuant to this Paragraph 2 shall operate prospectively only.
- 3. In the event the contract quantity has been reduced pursuant to Paragraph 2 of this Article Fifth, and, in Seller's opinion, conditions of production, gathering or delivery have changed, Seller may request Pipeline to afford Seller an opportunity to demonstrate increased deliverability. In the event of such request, Pipeline will afford Seller the opportunity to deliver to Pipeline, for a period of thirty (30) consecutive days, the maximum quantities of gas which Seller's wells and facilities are capable of delivering, but Pipeline shall not be obligated to receive a daily quantity of gas in excess of one hundred twenty-five per cent (125%) of the contract quantity as determined in Paragraph 1 of this Article Fifth. Upon the completion of such thirty (30) day period, the contract quantity shall be fixed at a quantity which is eighty per cent (80%) of the average daily quantity of gas that Seller delivered during such period. In no event,

however, shall the contract quantity be increased to a quantity in excess of that determined pursuant to Paragraph 1 of this Article Fifth without the written consent of Pipeline. Having once commenced a deliverability test under the provisions of this Paragraph 3 of this Article Fifth, Seller shall prosecute such test to the completion thereof, (excluding days upon which Seller is excused by the occurrence of an event of force majeure), and it is expressly understood and agreed that deliverability tests undertaken pursuant to the provisions of this Paragraph 3 of this Article Fifth shall operate to reduce as well as to increase the then applicable contract quantity. Any test requested by Seller under the provisions of this Paragraph 3 to demonstrate increased deliverability shall be undertaken at a time selected by Pipeline, the commencement of which shall not be later than three (3) months from the date of such request. Any change in the contract quantity pursuant to this Paragraph 3 shall operate prospectively only.

4. To meet the exigencies of its operation, Pipeline may vary and receipt of gas hereunder and shall be entitled to receive, on each and every day, the maximum quantity of gas which Seller's wells and facilities, under prudent methods of operation and applicable rules and regulations of regulatory bodies having jurisdiction, are capable of delivering, but Seller shall have no obligation to construct, or cause to be constructed, facilities having a delivery capacity in excess of one hundred twenty-five per cent (125%) of Seller's applicable contract quantity, as the same shall exist from time to time hereunder. Pipeline shall, in any event, receive each day not less than fifty per cent (50%) of the applicable contract quantity as the same shall exist from time to time hereunder.

- 5. If, during any accounting period, Pipeline purchases hereunder a quantity of gas in excess of the contract quantity established by Paragraphs 1, 2, and 3 of this Article Fifth which Pipeline is obligated to purchase in such accounting period ("excess quantity"), such excess quantity may be used by Pipeline during the next succeeding four (4) accounting periods as a credit to reduce the quantity of gas Pipeline would otherwise be obligated to purchase during such subsequent accounting periods, but such credit may not be used to reduce, on any day or days, Pipeline's purchase obligation below its fifty per cent (50%) minimum daily purchase obligation provided for above.
- 6. Should Pipeline, at the end of any accounting period, fail to have taken during such period, the applicable contract quantity of gas Pipeline is obligated to purchase as established in accordance with Paragraphs 1, 2, 3, and 5 of this Article Fifth, Pipeline shall nevertheless pay Seller for the quantity of gas Pipeline failed to take during such period, such payment to be made by Pipeline within sixty (60) days after the end of such accounting period. The price per one thousand (1,000) cubic feet shall be the same as the weighted average price for one thousand (1,000) cubic feet paid by Pipeline for gas actually received from Seller hereunder during the same accounting period.
- 7. If, for any accounting period, Pipeline pays for any quantity of gas not actually received by it (including payment made pursuant to Paragraph 4 of Article Second), Pipeline shall thereafter be entitled to receive such quantity of gas during the term of this contract without further payment; except, Pipeline shall pay the differential in price, if any, between that existing when such payments were made and that applicable at

the time of taking. Such quantity of gas so taken shall be in addition to the contract quantity which Pipeline is otherwise obligated to purchase and receive during any accounting period.

- 8. For the purpose of this contract, "accounting period" shall mean the twelve (12) month period commencing each January 1, during the term of the contract, except the first accounting period shall be the period commencing with the date of first delivery of gas, or the date of first payment under Paragraph 4 of Article Second hereof, whichever first occurs, and continuing through the second succeeding December 31. Settlement for accounting periods of other than twelve (12) month duration shall be on a proportionate basis.

 The term "day" shall mean the twenty-four (24) hour period commencing at 8:00 A. M. Central Standard Time.
- 9. Six (6) months prior to the commencement of the second year following the date of first delivery of gas hereunder, or the date of first payment under Paragraph 4 c. Article Second hereof, whichever first occurs, Pipeline shall conduct a study of Seller's gas reserves to determine the quantity of recoverable gas contained in Seller's gas reserves as of the date of this contract. The quantity of gas which will be available for delivery to Pipeline hereunder shall also be determined. In such study, or any subsequent study, there shall be taken into consideration the probable quantities of gas required to satisfy the reservations of Seller contained in Article Fourth, operating conditions, producing conditions, applicable orders, rules and regulations of regulatory authorities and any other relevant factor which may bear upon the quantity of gas which will be available for delivery to Pipeline hereunder. Pipeline shall notify Seller promptly of the quantity of recoverable gas contained in Seller's gas reserves and

the quantity of gas which will be available for delivery to Pipeline hereunder determined in such study. The initial reserve determination shall be used to establish the contract quantity for the second year following the date of first delivery of gas hereunder, or the date of first payment under Paragraph 4 of Article Second hereof, whichever first occurs. During the first two (2) year period following the completion of the initial reserve determination, either party may request another reserve study to determine the contract quantity, provided such requests shall not be made more frequently than at one (1) year intervals following the completion of the preceding study. After said two (2) year period, reserve studies may be made at the request of either party to determine the contract quantity, provided such requests shall not be made more frequently than at two (2) year intervals following the completion of any previous study. Within fifteen (15) days after such a request, Seller shall make available to Pipeline all of the necessary data to conduct such a study. The conclusions reached by Pipeline in each such study shall be submitted to Seller within sixty (60) days of receipt of said data and, if agreed to by Seller, shall be the basis for establishing the applicable contract quantity which shall become effective on the first day of the month following such agreement.

10. In the event that Seller notifies Pipeline within 15 days of receipt of such data that it does not agree with the results of any such study so made by Pipeline, as provided in this Article Fifth, Seller and Pipeline shall, within 15 days following Seller's notice, commence and conduct a joint study of the dedicated gas reserves for the purpose of coming to agreement on the total quantity of recoverable gas contained in Seller's gas reserves as of the date of this contract and the volume of gas which will be available for delivery to Pipeline hereunder. If the parties fail

to reach agreement within sixty days after the date of the commencement of the joint study, the facts so sought to be ascertained shall be determined by a disinterested appraiser (an individual or engineering firm) who shall be qualified by training and experience to make the determinations. The results thereof shall be binding upon both parties hereto. Such appraiser shall be promptly selected by Seller and Pipeline, or, if they cannot agree within thirty (30) days, by the Judge of the United States District Court, senior in service, in the district in which the gas is being sold, upon application by either Seller or Pipeline. Said appraiser shall make his determinations after first receiving the advice and counsel of persons, qualified by experience and training to assist him in the determinations, not more than two (2) representing Seller and not more than two (2) representing Pipeline. Said appraiser shall make his determinations within sixty (60) days after being so selected. Seller and Pipeline shall equally share the cost of the appraiser's expense incurred in making such determinations. Any determinations reached, pursuant to this Paragraph 10, shall be the basis for establishing the applicable contract quantity, which shall become effective on the first (1st) day of the month following such determination.

ll. Seller shall, from time to time, at Pipeline's request, furnish to Pipeline: (a) factual engineering, geological and production data available to Seller, and, (b) a current listing of all oil and gas leases, and mineral rights or interests therein, covered by this contract, so as to enable Pipeline to make and maintain currently its own recorve and deliverability studies. The information requested under (a) and (b) shall be furnished



within thirty (30) days after any such request.

12. When Pipeline is purchasing gas from Seller and other producers in any of the fields covered by this contract, Pipeline agrees that it will, with reasonable diligence, accept and take gas provided for hereunder in an equitable and ratable proportion of the total gas Pipeline takes from said field or fields, on the basis provided in Paragraphs 1, 2, 3, and 5 of this Article rifth. Except as otherwise provided in this Article Fifth, Pipeline shall not be obligated, and does not undertake to purchase all of the allowable production assigned to Seller's wells by the New Mexico Oil Conservation Commission or any other body, state or federal, having jurisdiction in the premises. In the event that Pipeline, irrespective of its taking of gas in the ratable and equitable proportions contemplated in this Paragraph 12, is required, either directly or indirectly, by valid law, rule, order or regulation (herein referred to as the "proration order") of the New Mexico Oil Conservation Commission or any other body, state or federal, having jurisdiction in the premises, to distribute its purchases between Seller and other producers in one or more fields, or any portions thereof, on a basis other than as provided in Paragraphs 1, 2, 3, and 5 of this Article Fifth, then, and in that event, Seller's contract quantity as otherwise provided for under the provisions of this Article Fifth, shall be adjusted during the period Pipeline shall comply with such law, rule, order or regulation, in the following manner. Pipeline agrees to take, or pay for if available and not taken, an aggregate quantity of gas from Seller and all other producers with whom it has contracts in said field/s or area, which is the sum of the contract quantities under all its contracts covering such field/s or area (determined as provided for in Paragraphs 1, 2, 3,

and 5 of this Article Fifth and comparable provisions of Pipeline's contracts with other producers in such field/s or area), separately determined for each such field or area. Based upon such determination/s, Pipeline's takes from Seller and other producers in such field/s or area with which it has contracts, shall be in such proportions as will permit Pipeline to comply with the proration order, whether this results in Pipeline's purchasing from Seller a greater or a lesser quantity of gas than Pipeline would otherwise purchase if Pipeline were not required to comply with such proration order, and Seller agrees that purchases on such basis shall satisfy and discharge Pipeline's obligation with respect to quantities of gas Pipeline is obligated to purchase and receive hereunder from Seller's gas reserves in the field/s or area subject to such proration order. In the event any such proration order applies to some but not all the gas reserves which are committed to the performance of this contract, Pipeline's takes of gas from the gas reserves subject to such proration order shall be determined separately by use of the method provided above, and a separate contract quantity shall be determined on a basis consistent with Paragraphs 1, 2, 3, and 5 of this Article Fifth for the gas reserves which are not subject to such proration order. In the event any such law, rule, order or regulation provides for the determination of market demand based on either producer or purchaser nominations, the party required to make such nominations shall nominate quantities of gas consistent with the terms of this contract.

13. Seller shall have the right from time to time (and only so long as such condition prevails) to sell and dispose of any gas which in its judgment, exercised in good faith, is necessary to prevent migration or drainage from any lease hereunder, after first offering to Pipeline the

right (to be exercised within ninety (90) days after receipt of written notice of the quantities involved and an explanation of the existence and amount of drainage) to purchase such gas hereunder, in addition to the quantities herein provided.

ARTICLE SIXTH

POINT OF DELIVERY AND DELIVERY PRESSURES

- 1. Seller shall deliver, or cause to be delivered, the gas hereunder to Pipeline at a single point to be designated by Seller to be located within the area outlined on Exhibit "B" hereof. Title to the gas sold hereunder and responsibility for further handling thereof shall pass to Pipeline at such point of delivery.
- 2. Seller shall deliver gas hereunder at a pressure sufficient to allow the gas to enter Pipeline's facilities at the working pressures from time to time maintained therein but not in excess of one thousand (1,000) pounds per square inch gauge.

ARTICLE SEVENTH

QUALITY

- 1. The gas sold hereunder shall meet the following specifications:
 - (a) Be commercially free from dust, gum, gumforming constituents, gasoline, and other solid and/or liquid matter which may become separated from the gas during transportation thereof;

- (b) Contain not more than one-quarter (1/4) grain of hydrogen sulphide per one hundred (100) cubic feet, as determined by the cadmium sulphate quantitative test as presently prescribed by the regulations of the Railroad Commission of Texas;
- (c) Contain not more than twenty (20) grains of total sulphur per one hundred (100) cubic feet;
- (d) Contain not more than seven (7) pounds of water per one million (1,000,000) cubic feet;
- (e) Contain not more than three per cent (3%) by volume of carbon dioxide;
- (f) Contain not more than one per cent (1%) by volume of oxygen;
- (g) Have a gross heating value of at least one thousand (1,000) British thermal units (Btu) per cubic foot saturated with water vapor at a temperature of sixty degrees (60°) Fahrenheit and at an absolute pressure equivalent to thirty inches (30") of mercury at thirty-two degrees (32°) Fahrenheit;
- (h) Have a temperature of not more than one hundred twenty degrees (120°) Fahrenheit when delivered to Pipeline; and
- (i) Have a hydrocarbon dew point not higher than forty degrees (40°) Fahrenheit at a gauge pressure of one thousand (1,000) pounds per square inch.

- 2. Seller shall have the right to be represented and to witness all tests of gas delivered hereunder and to inspect any equipment used in determining the quality of the gas.
- 3. Should the gas tendered by Seller fail at any time to conform to any of the specifications of this article other than the gross heating value requirement of subparagraph 1 (g) of this Article Seventh, Pipeline shall notify Seller of any such failure, and Seller will make a reasonable effort to correct such failure, including the treatment of such gas, so as to deliver gas conforming to the above specifications; provided, that Seller shall not be obligated, in Seller's sole judgment, to engage in unprofitable or uneconomic treating operations. If Seller is unable to deliver gas conforming to the above specifications, Pipeline may accept the delivery of gas and, at its option, treat the gas so that it will conform to the above specifications, and Seller will reimburse Pipeline for any fair and reasonable expense incurred in connection therewith, not to exceed twenty-five per cent (25%) of the price then being paid hereunder. Pipeline may also refuse to accept gas not meeting the above specifications, and, if such refusal persists for ninety (90) consecutive days, Seller may cancel and terminate this contract upon thirty (30) days' written notice to Pipeline.
- 4. Should the gross heating value of the gas tendered hereunder fall below one thousand (1,000) Btu per cubic foot due to circumstances over which Seller has no control, or due to the removal of pentanes or heavier hydrocarbons, Pipeline may refuse to accept such gas, and, if such refusal persists for ninety (90) consecutive days, Seller shall have the right to cancel and terminate this contract upon thirty (30) days' written notice.

ARCYCLE EIGHTH

UNIT OF VOLUME - MEASUREMENT

- 1. Except for the determination of heating value, the unit of volume for measurement of gas delivered hereunder shall be one (1) cubic foot of gas at a base temperature of sixty degrees (60°) Fahrenheit and at an absolute pressure of fourteen and sixty-five hundredths (14.65) pounds per square inch. All fundamental constants, observations, records, and procedures involved in the determination and/or verification of the quantity and other characteristics of gas delivered hereunder shall. unless otherwise specified herein, be in accordance with the standards prescribed in the American Gas Association Gas Measurement Committee Report No. 3, dated April, 1955, as now and from time to time amended or supplemented, except that the combined Reynolds number and expansion factor and the manometer factor shall be assumed to be one (1). All quantities given herein, unless otherwise expressly stated, are in terms of such unit.
- 2. Pipeline shall install, operate and maintain, at its own expense, a measuring station located at the point of delivery. Said measuring station shall be equipped with orifice meters, recording gauges, or other types of meter or meters of standard make and design, commonly acceptable in the industry, so as to accomplish the accurate measurement of gas delivered hereunder.
- 3. Seller may, at its option, install check meters for checking Pipeline's measurement, and same shall be so installed as not to interfere with the operation of Pipeline's facilities.
- 4. The temperature of the gas flowing through the meter or meters shall be determined by the continuous use of a recording thermometer installed by Pipeline so that it will properly record the temperature of

the gas flowing through the meter or meters. The crithmetical average of the hourly temperatures recorded each day shall be used in computing the quantity of gas for that day.

- 5. The specific gravity of the gas flowing through the meter or meters shall be determined by the use of a recording gravitometer furnished and installed by Pipeline so that it will properly record the specific gravity of the gas flowing through the meter or meters. The arithmetical average of the hourly specific gravity recorded each day shall be used in computing the quantity of gas for that day.
- 6. The heating value of the gas shall be determined by a recording calorimeter installed by Pipeline. The arithmetical average of the hourly heating value recorded each day shall be considered as the heating value of the gas delivered during such day.
- 7. Seller shall have access at all reasonable times to measuring equipment and all other instruments used by Pipeline in determining the measurement and quality of gas delivered hereunder, but the reading, calibrating, and adjusting thereof shall be done only by employees, agents or representatives of Pipeline. The charts and records shall be kept on file for a period of three (3) years for the mutual use of the parties hereto. Upon request of Seller, Pipeline shall submit to Seller records and charts from such equipment, subject to return by Seller within thirty (30) days after receipt thereof.
- 8. At least once each month, Pipeline shall calibrate the measuring equipment and make any adjustments should same be necessary. Scller, may at its option, be present for such calibration and adjustment. For

the purpose of measurement and meter calibration, the atmospheric pressure shall be assumed to be thirteen and one-tenth (13.1) pounds per square inch (unless otherwise determined by law), irrespective of variations in natural atmospheric pressure from time to time. Pipeline shall give Seller notice of the time of all tests sufficiently in advance of holding same. Following any test, any measuring equipment found to be inaccurate to any degree shall be adjusted immediately to measure accurately.

- 9. If. upon any test, the measuring equipment in the aggregate is found to be inaccurate by two per cent (%) or more, registration thereof and any payments based upon such registration shall be corrected at the rate of such inaccuracy for any period of inaccuracy which is definitely known or agreed upon; but in case the period is not definitely known or agreed upon, then for a period extending back one-half (1/2) of the time elapsed since the last day of calibration, not exceeding, however, fifteen (15) days.
- or out of repair so that the quantity of gas delivered through such measuring equipment cannot be ascertained or computed from the readings thereof, the quantity of gas so delivered during the period such equipment is out of service or out of repair shall be estimated and agreed upon by the parties hereto upon the basis of the best available data, using the first of the following methods which is feasible:
 - (a) By using the registration of any check measuring equipment of Seller if installed and registering accurately.

- (b) By correcting the error if the percentage of error is ascertainable by calibration, test, or mathematical calculation.
- (c) By estimating the quantity of deliveries by
 the quantity of deliveries during preceding
 periods under similar conditions when the
 measuring equipment was registering accurately.
- ll. The measurement hereunder shall be corrected for deviation from Boyle's Law at the pressures and temperatures under which was is measured hereunder by the use of the American Gas Association deviation tables based upon the specific gravity method, published June, 1955, as amended or supplemented from time to time.

ARTICLE NINTH

OPERATOR, PRICES AND PAYMENTS

- 1. It is understood that the gas purchased by Pipeline under comparable gas sales contracts with other producers within the area outlined on Exhibit "B" and that the gas purchased hereunder will be commingled in the facilities to be constructed, or caused to be constructed, by Seller as provided in Paragraph 1, Article Eleventh hereof, and by such other producers as provided in their gas sales contracts. Seller hereby designates the operator of said facilities ("Operator") as its representative and fully empowers said representative to do or perform, on behalf of Seller, the following:
 - (a) to allocate such commingled gas delivered to Pipeline between Seller and such other producers;

- (b) to witness tests to be made of the gas and measurement equipment;
- (c) to deliver the gas under said gas sales contracts, including Seller's gas hereunder, in a commingled stream at the delivery point;
- (d) to receive notice of changes in the quantity of gas to be delivered to Pipeline; and,
- (e) to render billings for gas delivered and/or to be paid for hereunder.

Operator has been designated to perform the same functions in each of said gas sales contracts as representative of each of such other producers. Fipeline shall in accordance with this contract make requests to Operator from time to time setting forth in each instance the quantity of gas to be delivered at the delivery point by Seller hereunder and the quantities of gas to be delivered by other producers under said gas sales contracts, provided, however, during the first twelve (12) months commencing with the first delivery of gas hereunder, such requests by Pipeline shall be made in terms of a total quantity of gas to be delivered and Operator shall allocate such total quantity between Seller and other producers under said gas sales contracts, in accordance with the provisions of subparagraph 1 (a) of Article Fifth hereof. Such requests for gas to be delivered by Seller, made in accordance with this contract and limited to Soller's obligation to deliver, shall satisfy and discharge Pipeline's obligation to receive gas hereunder during any accounting period to the extent of the sum of such requests during such period, unless any failure to receive the gas so requested is caused by the fault of Pipeline. Seller shall cause

said Operator to do or perform all of the functions outlined in this Paragraph 1. Insofar as Seller is concerned, Pipeline shall be fully protected in relying upon any and all such functions done by Operator as representative of Seller as fully and effectively as though Seller had done or performed same. Operator shall have full authority to represent Seller in all disputes which may arise between Seller and Pipeline relating to such functions.

- 2. Subject to the other provisions hereof, Pipeline shall pay Seller for each one thousand (1.000) cubic feet of gas (measured at a base temperature of sixty degrees (60°) Fahrenheit and at an absolute pressure of fourteen and sixty-five hundredths (14.65) pounds per square inch) delivered hereunder, or for which Pipeline is obligated to pay for hereunder, the following prices:
 - (a) During the first three (3) year period commencing with the date of first delivery of gas hereunder sixteen cents
 (16¢);
 - (b) During the five (5) year period next following the three (3) year period in (a) above seventeen cents (17ϕ) ;
 - (c) During the next five (5) year period eighteen cents (18¢);
 - (d) During the next five (5) year period nineteen and one-half cents $(19\frac{1}{2}\phi)$; and
 - (e) Thereafter, an increase of one cent (l¢) at the start of each successive five (5) year period during the continuance of this contract.

- 3. The applicable price payable hereunder is based upon a heating value of one thousand (1,000) Btu per cubic foot of gas, and any such price shall be proportionately increased or decreased, as the heating value of gas delivered hereunder varies from one thousand (1,000) Btu per cubic foot, by application of a "Btu correction factor" the denominator of which shall be one thousand (1,000) and the numerator of which shall be the volume weighted actual daily average Btu content per cubic foot of gas delivered during the applicable monthly billing period.
- 4. After delivery of gas has commenced, on or before the tenth (10th) day of each month, Pipeline shall furnish Operator a statement showing the daily quantities of commingled gas received by Pipeline during the preceding calendar month, the Btu content thereof, and any adjustments made by Pipeline. Operator shall, on or before the twentieth (20th) day of each month, furnish Pipeline a statement, upon which Pipeline may rely, showing the quantity of commingled gas attributable to Seller and the quantities thereof attributable to other sellers for the preceding calendar month. The sum of such quantities shall equal the total quantity of gas metered by Pipeline. Within ten (10) days thereafter, Pipeline shall pay Seller the amount due for all gas so attributable to Seller.
- 5. Each party hereto shall have the right, at all reasonable times, to examine the books and records of the other party to the extent necessary to verify the accuracy of any statement, charge, computation or demand made under or pursuant to this contract. Any statement shall be final as to both parties, unless questioned within two (2) years after payment has been made of the amount of such statement.

ARTICLE TENTH

TAXES

Pipeline shall reimburse Seller for three-fourths (3/4) of any increase, occurring after the date of this contract, in the total tax per one thousand (1,000) cubic feet paid or payable by Seller in respect to the gas sold under this contract occasioned by any change in the rate of any existing gathering, production or severance tax, or by the imposition upon Seller of any new tax burden similar in nature to said named taxes, or having like effect upon Seller (but not including income, excess profits, capital stock or general property taxes).

ARTICLE ELEVENTH

OPERATION OF GAS RESERVES

- 1. Seller agrees to develop and operate the gas reserves and to install, maintain and operate, or cause to be installed, maintained and operated, a gathering system, dehydrating plant and other equipment and appurtenances, all within the limits required by prudent operations, to the extent necessary to produce and to deliver gas in accordance with the terms and provisions of this contract. Seller's obligation to deliver gas shall be subject to the ability of Seller's wells to produce without waste and in accordance with prudent oil and gas field practice.
- 2. Seller agrees that during the term of this contract it will, as a prudent operator, do and perform all acts and things which are necessary to continue in force, renew and maintain, its ownership of the gas reserves and its exclusive right to produce gas therefrom, provided Seller may abandon any gas leaseholds or other estates or rights covering portions

of the gas reserves, where the same, in its judgment, is or will be nonproductive, and may abandon any producing leasehold which may no longer be operated at a profit; provided, however, that Seller shall first in writing offer, at least ninety (90) days prior to abandonment in any of such cases, to sell, convey and assign to Pipeline the gas rights held by it, if any, in and to the lands together with any wells and appurtenant equipment thereon, at the salvage value of such wells and appurtenant equipment, if any, in place. Should Pipeline elect to accept said offer within thirty (30) days after receiving same, such property shall be transferred to Pipeline accordingly. Seller shall not be liable for failure to so offer to Pipeline such gas rights due to an inadvertent error on the part of Seller. It is agreed, however, that Pipeline's option to acquire any lease or leases, as provided in this paragraph, shall be subject to rights and options respecting acquisition of any leases committed hereunder, heretofore or hereafter granted to third parties under agreements entered into between Seller and such parties for the development of the committed acreage and other acreage in the vicinity thereof.

ARTICLE TWELFTH

REGULATORY BODIES

This contract is subject to all present and future valid laws and lawful orders and regulations of all regulatory bodies now or hereafter having jurisdiction of the parties or either of them, and should either of the parties, by force of any such law, order, or regulation, at any time during the term of this contract, be ordered or required to do any act inconsistent with the provisions of this contract, the contract shall

continue nevertheless, but shall then be deemed modified to conform with the requirements of such law, order or regulation for that period only during which the requirements of such law, order or regulation are applicable.

ARTICLE THIRTEENTH

FORCE MAJEURE

If performance by either party of any of its obligations hereunder (other than obligations to make payments hereunder) is prevented or delayed by force majeure, the obligation so affected shall be suspended during the continuance of the prevention or delay so caused, and the party affected shall not be liable to the other party in damages or otherwise by reason thereof. The term "force majeure" as herein used means and includes fire, explosion, adverse action of the elements, strikes or other labor difficulties, restriction or restraint imposed by law or by regulation or order of duly constituted governmental authority, whether federal, state or local, acts of civil or military authorities, acts of the public enemy, breakdown of, or accident to facilities or equipment, freezing of wells or lines of pipe, inability to obtain necessary materials, equipment or rights-of-way on customary terms, and any other cause that is reasonably beyond control by the party affected thereby, whether or not similar to any cause above enumerated. Upon the occurrence of an event constituting force majeure, the same shall, so far as possible, be remedied with all reasonable dispatch. The settlement of strikes or other labor difficulties shall be entirely within the discretion of the party having the difficulty, and the above requirement that any force majeure shall be remedied with all reasonable dispatch shall not require the settlement of strikes or other labor difficulties by acceding to the demands of any opposing party therein

when such course is inadvisable in the discretion of the party having the difficulty.

ARTICLE FOURTEENTH

MISCELLANEOUS PROVISIONS

- 1. Seller hereby warrants title to the gas delivered hereunder. In the event of any adverse claim of any character asserted in respect to any of said gas, Pipeline may retain as security for the performance of Seller's obligations hereunder the purchase price thereof up to the amount of such claim, without interest, until such claim has been finally determined, or until Seller shall have furnished bond in amount, form and with surety satisfactory to Pipeline, or such other assurance satisfactory to Pipeline, providing for the full protection of Pipeline with respect to such claim.
- 2. Upon prior written notice to the other party, this contract may be assigned by either of the parties hereto to any person, firm or corporation who shall expressly assume in writing the obligations hereof to be performed by the assigning party, and who shall acquire all of the assigning party's interest in the properties necessary to perform this contract, but it may not otherwise be assigned without the prior written consent of the other party hereto. Any assignment of this contract shall be made only to a single firm, corporation or other person, it being expressly understood and agreed that the contract may not be partially assigned or assigned to more than one business entity, either jointly or severally, without the prior written consent of the non-assigning party. Any required consent to any assignment shall not be unreasonably

withheld. Nothing herein contained shall be construed to prevent either party hereto from pledging this contract, or all or any portion of such party's property, as security under any mortgage, deed or trust, or other similar lien, or from pledging any benefits accruing hereunder to the party making the pledge, nor to prevent Seller from making any complete or partial assignment of its leases or properties. All covenants, stipulations, terms, conditions and provisions of this contract shall extend to and be binding upon the respective successors and assigns of the parties hereto and shall be deemed covenants running with the oil and gas leases and other properties described herein for the full term of this contract. Any complete or partial assignment of Seller's leases or properties shall contain a provision expressly obligating Seller's assignee to perfrom Seller's obligations under this contract and to suffer and permit the full performance thereof. No conveyance or assignment of any interest of Seller shall be binding upon Pipeline until Pipeline has been furnished with a certified copy of such conveyance or assignment together with properly executed transfer orders.

3. For the purpose of permitting an equitable allocation of the quantity of gas to be purchased by Pipeline under the terms of subparagraph 1 (a) of Article Fifth hereof, a well shall be deemed to be one located on the standard spacing unit prescribed, from time to time, by the New Mexico Cil Conservation Commission for the Cisco and/or Morrow formations within the area outlined on Exhibit "B" or, in the event no standard spacing unit has been so prescribed, on a drilling unit of not less that six hundred forty (640) acres. In the event the acreage

attributable to the drilling unit upon which any well is located is less than such standard spacing unit, or six hundred forty (640) acres if no standard spacing unit has been prescribed by the New Mexico Oil Conservation Commission, then the quantity of gas to be allocated thereto shall be reduced by an amount determined by multiplying said quantity of gas by a fraction, the numerator of which shall be the number of acres attributable to such well and the denominator of which shall be the number of acres prescribed, from time to time, as the standard spacing unit by the New Mexico Oil Conservation Commission, or six hundred forty (640) if no standard spacing unit has been so prescribed. The terms of this paragraph shall be applicable solely and only to the allocation, by wells, of the quantity of gas to be purchased by Pipeline under the terms of subparagraph 1 (a) of Article Fifth hereof and shall be subject to the terms and provisions of Paragraph 12 of said Article Fifth. A reduced allocation to a well or wells on short acreage shall not serve to reduce the total quantity of gas which Pipeline is required to purchase under subparagraph 1 (a) of Article Fifth.

4. Any notice, request, demand, statement, or payment provided for in this contract, except as otherwise provided, shall be sent to the parties hereto at the following addresses:

Pipeline:

NATURAL GAS PIPELINE COMPANY OF AMERICA

122 South Michigan Avenue Chicago, Illinois 60603

With copy to:

NATURAL GAS PIPELINE COMPANY OF AMERICA

P. 0. Box 2211

Amarillo, Texas 79105

Seller:

Rainh ' nue

AGREEMENT FOR THE TEMPORARY EXCHANGE OF GAS

This Temporary Gas Exchange Agreement, dated as of the 19th day of March, 1965, between NATURAL GAS PIPELINE COMPANY OF AMERICA, a Delaware corporation, hereinafter referred to as "Natural", and TRANSWESTERN PIPELINE COMPANY, a Delaware corporation, hereinafter referred to as "Transwestern",

WITNESSETH THAT:

WHEREAS, Natural has filed, at FPC Docket No. CP65-169, an application for a certificate of public convenience and necessity authorizing Natural, among other things, to install and operate certain facilities, including an extension of its existing system from the Panhandle Area in Texas to Eddy County, New Mexico, herein sometimes referred to as Natural's "Permian extension", for the purpose of attaching certain reserves in the Indian Basin and Dagger Draw Areas of Eddy County, New Mexico, and the Bluitt Area in Roosevelt County, New Mexico, from which it has contracted to purchase gas. Said reserves, and contracts relating thereto, are herein referred to as "Natural's Permian Gas Purchase Contracts" and more particularly described in Exhibit "H" of Natural's application filed at FPC Docket No. CP65-169, to which reference is here made; and

WHEREAG, Transwestern has filed, at FPC Docket No. CP65-237,

BEFORE THE

Oil CONSERVATION COMMISSION

S. nta Fe, New M xico

E. hibit No. 4337

an application for a certificate of public convenience and necessity authorizing it to install and operate facilities necessary to exchange up to 158,000 Mcf of gas with Natural which said exchange, Transwestern alleges, would be in lieu of Natural's Permian extension and mutually exclusive therewith; and

WHEREAS, Natural has not entered into a contract for such exchange as proposed by Transwestern, and has denied that such proposed exchange is in the public interest, or that Transwestern's proposal is mutually exclusive with that of Natural or that a comparative hearing thereon is required; and

WHEREAS, Natural and Transwestern nevertheless recognize that a resolution by the Federal Power Commission, in a contested hearing, of the issues that exist or may exist between the parties could cause a delay in the movement of the gas to be purchased under Natural's Permian Gas Purchase Contracts;

NOW, THEREFORE, in consideration of the mutual covenants herein contained, the parties hereto agree as follows:

ARTICLE I

RESERVATIONS OF PARTIES

The execution of this Temporary Exchange Agreement is without prejudice to, and shall not be construed as either an admission or denial of, the positions heretofore taken or that may be hereinafter taken, by either Natural or Transwestern under their respective pleadings and/or evidence in relation to Transwestern's proposal at FPC Docket No. CP65-237

and Natural's proposal at FPC Docket No. CP65-169.

ARTICLE II

PRELIMINARY ACTS OF THE PARTIES

Each party hereto shall, with diligence, prepare, file and prosecute, such applications with the Commission as shall be requisite to authorize the installation and operation of facilities and the temporary exchange of gas as contemplated hereunder, and upon issuance of such authorizations in form and on conditions satisfactory to both parties hereto, shall accept the same and shall promptly proceed with the construction thereof, and, upon the completion of the same, shall, effective as of the date

Natural's sellers under its Permian Gas Purchase Contracts commence the sale of gas thereunder, exchange gas under the provisions and during the term of this agreement.

ARTICLE III

QUANTITY

Section 1. Volume. Transwestern shall receive from Natural, at the points of delivery provided in Section 2 of Paragraph IV hereof. the volumes of gas purchased by Natural under Natural's Permian Gas Purchase Contracts, plus any further gas Natural may purchase that is produced within two (2) miles of the acreage presently covered by Natural's Permian Gas Purchase Contracts, up to, but not in excess of, a maximum total quantity of 130,000 Mcf on any one day.

Transwestern shall redeliver to Natural, at the points of redelivery provided in Section 3 of Article IV hereof and in accordance with the provisions of Section 5 of Article IV hereof, and Natural shall accept delivery

thereof, volumes of gas equal to those delivered by Natural to Transwestern.

Section 2. Variation in Rate of Take. The delivery and redelivery of gas hereunder shall be at reasonably uniform rates of flow from day to day and hour to hour. Subject to Section 4 of Article IV hereof, the quantities of gas to be delivered by Natural to Transwestern on each day shall not be less than the minimum volume required to be physically taken each day under Natural's Permian Gas Purchase Contracts, nor more than the maximum volume provided in Section 1 of this Article III.

ARTICLE IV

DELIVERY AND DELIVERY POINTS

Section 1. Facilities and Commencement of Exchange. At the earliest practicable date following acceptance by Natural and Transwestern, whichever occurs later, of such certificate authorizations as may be issued by the Federal Power Commission as contemplated in Article II hereof,

Transwestern and Natural shall complete the facilities necessary to effect the delivery and receipt of gas provided for herein and the exchange of gas shall commence on the date provided in said Article II.

Section 2. Delivery Points. Delivery to Transwestern of the volumes purchased by Natural under Natural's Indian Basin and Dagger Draw Permian Gas Purchase Contracts shall be made in Section 13, Range 29 East, Township 17 South in Eddy County, New Mexico, at a point of

and the section of twenty-inch (20") pipeline extending northerly from said Indian Basin-Dagger Draw Areas that shall be installed and operated by Natural. Delivery to Transwestern of the volumes of gas purchased by Natural under Natural's Bluitt Permian Gas Purchase Contract shall be made into Transwestern's Panhandle Lateral at or in the immediate vicinity of the tailgate of the Bluitt Plant in Section 15, Range 36 East, Township 8 South, Roosevelt County, New Mexico; provided, however, Transwestern shall not be obligated to accept a volume of gas in excess of 9,000 Mcf on any one day at such point of delivery.

Section 3. Redelivery Points. The redelivery of gas to Natural by Transwestern, as provided in Section 1 of Article III hereof, shall be made as follows:

A volume of up to 90,000 Mcf of gas may be delivered in Section 192, H & TC R. R. Survey, Block 45, Hansford County, Texas, at an interconnection to be made between Transwestern's twelve-inch (12") Cactus Lateral and the main line of Natural at the point at which such lines cross in such section, it being agreed that Transwestern shall endeavor to make deliveries at such point up to such maximum volume prior to making any deliveries at the Gray County point of delivery hereinafter provided;

The remaining volumes, up to a maximum of 50,000 Mcf of gas shall be delivered in Section 42, I & GNR. R. Survey, Block 3, Gray County, Texas, at an interconnection to be made between Transwestern's Lefors Lateral and the Jack-Wise Counties pipeline of Natural at the point at which such lines cross in such section.

Section 4. Curtailment of Deliveries. Notwithstanding any other provisions of this Agreement, either party hereto may cause the deliveries of gas hereunder to be curtailed or suspended upon twenty-four (24) hours' notice to the other party when necessitated by construction requirements of said party; provided, however, no such curtailment or suspension period shall exceed forty-eight (48) hours in length. Any deficiency in the receipt of gas hereunder due to such curtailment shall be made up during the sixty (60) days following the end of such curtailment.

Section 5. Balancing of Volumes. Subject to Section 4 of this

Article IV, on each day Transwestern shall deliver to Natural a volume
of gas approximately equal to the volume delivered on the preceding day
by Natural to Transwestern. The parties shall use their best efforts to
keep in balance the cumulative volumes delivered by one to the other, and
such volumes shall be equalized at least once during each three months'
period; provided, however, that upon termination of this Agreement the
parties shall, at the earliest practicable date consistent with operating
conditions, equalize any such volumes accumulated hereunder.

ARTICLE V

DELIVERY PRESSURE

Section 1. Delivery Pressure. The volumes of gas delivered to

Transwestern hereunder shall be at a pressure sufficient to enter Trans
western's pipeline as such pipeline pressure may vary from time to time

at the points of delivery, but Natural shall not be obligated to make such

deliveries in excess of 950 pounds per square inch gauge at the Eddy County

delivery point and 1000. pounds per square inch gauge at the Roosevelt County delivery point.

Section 2. Redelivery Pressure. The volumes of gas redelivered by Transwestern to Natural hereunder shall be at a pressure sufficient to enter Natural's pipelines as such pipelines' pressures may vary from time to time, up to but not in excess of a 600 pounds per square inch gauge pressure on Natural's pipeline, at the Hansford County, Texas, point of delivery described in Section 3 of Article IV hereof, and up to but not in excess of a 650 pounds per square inch gauge pressure on Natural's pipeline at the Gray County, Texas, delivery point described in said Section 3.

ARTICLE VI

CHARGES

ection 1. Exchange Charge. Subject to Paragraph 1 of Article XI Yatural shall pay Transwestern a monthly charge of \$59,000 (to be prevated on a daily basis if less than a full calendar month is involved), plus a charge of 2.4¢ for each Mcf of gas delivered by Transwestern to Natural hereunder during each calendar year up to and including 36,500,000 Mcf, and 0.8¢ for each Mcf of such gas in excess of 36,500,000 Mcf delivered by Transwestern to Natural during each calendar year; however, if the term hereof includes a part only of any calendar year, for such partial calendar year the charge shall be \$59,000 per month and the charge for the volume up to 100,000 Mcf times the number of days of the term hereof in such calendar year shall be 2.4¢ per Mcf and the charge for all volumes delivered in excess thereof in such calendar year shall be 0.8¢ per Mcf. Each party shall submit a statement to the other on or before the 10th day of each month, reflecting the volumes of gas delivered to such other party hereunder during the preceding month. Natural shall pay Transwestern the sums due hereunder on or before the 20th day of the month in which the statement is received.

Section 2. BTU Adjustment. For each calendar month of the term hereof, the average BTU content of the gas delivered to each party hereto shall be determined by the use of a Cutler-Hammer calorimeter or by some other mutually agreeable method. If for any such month there is a difference in such average BTU content of 10 or more BTU's per cubic foot of gas, the party delivering the gas with the lower BTU content shall pay to the other party an amount of money per Mcf of gas delivered hereunder during such month by Natural to Transwestern, equal to a fraction - the numerator of which is the difference in such BTU content and the denominator of which is the BTU content of the gas having the lower BTU content, times the average price per Mcf paid or payable by Natural for the gas delivered hereunder to Transwestern during such month; such calculation shall be made by the 20th of each calendar month for the preceding calendar month, and any payment due under this provision shall be paid within fifteen (15) days after the amount due is determined.

Section 3. Taxes. Any and all taxes and assessments which are imposed upon the gas delivered hereunder up to the point of delivery shall be paid by the party delivering said gas. Any taxes and assessments which are imposed upon the gas delivered hereunder subsequent to delivery shall be paid by the party receiving said gas.

ARTICLE VII

QUALITY

Gas delivered by Natural and Transwestern hereunder shall be pipeline quality gas conforming to the following specifications:

Section 1. Oxygen. The gas shall not contain in excess of one per cent (1%) by volume of oxygen and each party shall make every reasonable effort to keep the gas delivered by it entirely free from oxygen.

Section 2. Sulphur. The gas shall not contain in excess of onequarter (1/4) grain of hydrogen sulphide per hundred cubic feet and shall not contain in excess of twenty (20) grains of total sulphur per hundred cubic feet, nor shall it contain mercaptans in excess of one-quarter (1/4) grain per hundred cubic feet.

Section 3. Carbon Dioxide. The gas shall not contain in excess of 3% by volume of carbon dioxide.

Section 4. Temperature. The temperature of the gas at the point of delivery shall be at all times less than one hundred twenty degrees (120°)

Fahrenheit.

Section 5. Objectionable Liquids and Solids. The gas shall be commercially free from dust, gum, gum-forming constituents, gasoline and other solid and/or liquid matter at the point or points of delivery, and shall not contain in excess of eleven hundred (1100) British Thermal Units per cubic foot determined on the basis provided in Section 8 of this Article VII.

Section 6. Water Vapor Dew Point. The gas delivered hereunder shall not contain more than seven pounds (7#) of water per million cubic feet.

Tests to determine the total sulphur, hydrogen sulphide, mercaptans, carbon dioxide and oxygen content of the gas at the point of delivery shall be

made by the party receiving the gas, and at its expense, by approved standard methods in general use in the gas industry. The other party shall have the right to test at its expense and, if the results thereof differ from the results of the other test, the parties shall retest at their joint expense.

Section 7. Sub-Quality Gas. Each party receiving gas, at its election to be exercised upon notice given to the other in writing, shall have the right to discontinue or curtail delivery of gas hereunder whenever the quality of the gas does not conform to the quality specification of this Agreement.

Section 8. Heating Value. Either party shall have the option to refuse to accept gas having a gross heating value of less than one thousand (1000)

British Thermal Units per cubic foot saturated with water vapor at a temperature of sixty degrees (60°) Fahrenheit and at an absolute pressure equivalent to thirty inches (30") of mercury at thirty-two degrees (32°) Fahrenheit.

ARTICLE VIII

FACILITIES

Section 1. Delivery Facilities. Natural shall own, operate and maintain all facilities required to transport, measure and deliver the volumes of gas to be delivered to Transwestern hereunder, including the measuring and regulating station at each point of delivery.

Section 2. Redelivery Facilities. Transwestern shall own, operate, and maintain all facilities required to transport, measure and redeliver the volumes of gas to be delivered to Natural hereunder, including the measuring and regulating station at each point of redelivery.

Section 3. Taps and Valves. Notwithstanding the above, each party

shall install, own and operate the taps and valves on its system that are required to perform this Agreement.

ARTICLE IX

MEASUREMENT OF GAS

Section 1. Unit of Measurement. The unit of measurement for gas hereunder shall be one (1) cubic foot of gas, and the term "cubic foot of gas" wherever used in this Agreement shall, except as specifically provided for in Section 8 of Article VII, mean a cubic foot of gas at a temperature of sixty degrees (60°) Fahrenheit and at a pressure of 14.65 pounds per square inch absolute. An "Mcf" is one thousand (1000) cubic feet.

Section 2. Check Measuring Equipment. Either party may install and operate check measuring equipment provided it does not interfere with the use of equipment installed by the measuring party in determining the volumes of gas delivered or redelivered hereunder.

Section 3. Metering and Computation of Volume. The following practices shall prevail:

(a) Metering and Computation of Volume. The gas shall be metered by orifice meters or other measurement facilities acceptable to both parties at or near points of delivery. Such orifice meters shall be constructed and installed in accordance with the applicable provisions of the American Gas Association's "Gas Measurement Committee Report No. 3, dated April, 1955." The volumes of gas delivered as measured at pipeline pressures and temperatures shall be computed from the meter records and converted into the unit of measurement specified in Section 1 of this Article IX in accordance with the methods prescribed in Gas Measurement Committee Report No. 3 of the American Gas Association, including the appendix thereto, as published April, 1955, or any subsequent

revision thereof. Correction shall be made for deviation from the Ideal Gas Laws at the pressure and temperature at which the gas is metered. To determine the factors for such correction a quantitative analysis of the gas shall be made at reasonable intervals with such apparatus as shall be agreed upon by both parties and the results of each such determination shall be made applicable to delivery hereunder, following the latest recommendations of the American Gas Association or as may be agreed to by the parties. For the purposes of measurement and meter calibration, the atmospheric pressure shall be assumed to be 13.2 pounds per square inch, irrespective of variations in natural atmospheric pressure from time to time.

- (b) Specific Gravity. The specific gravity of the gas delivered hereunder shall be determined by use of a recording gravitometer to be installed, owned, maintained and operated by the delivering party in accordance with standard industry practices at the point of delivery. The arithmetic average of the specific gravity recorded during periods of flow only shall be used in computing the volume delivered through such meter.
- (c) Temperature. The temperature of the gas delivered through each meter shall be determined at the delivery point by use of a recording thermometer to be installed, owned and operated by the delivering party. The arithmetic average of the temperatures recorded during periods of flow only shall be used to correct the volumes of gas delivered hereunder to the unit of measurement specified in Section 1 of this Article IX.

Section 4. Equipment Testing. The accuracy of the measuring equipment shall be verified by test, using means and methods generally acceptable in the gas industry, at least once each month or otherwise as agreed to by both parties. Notice of the time and nature of each test shall be given by the measuring party sufficiently in advance to permit convenient arrangement for the other party's representative to be present. Tests and adjustments shall be made in the presence of and observed by a representative of the non-measuring party, if present, and if any of the measuring

equipment is found to be registering inaccurately any percentage, it shall be adjusted at once to read as accurately as possible. If, after notice, the non-measuring party fails to have a representative present, the results of the tests shall nevertheless be considered accurate until the next test. All tests of such measuring equipment shall be made at the measuring party's expense, except that the non-measuring party shall bear the expense of tests made at its request if the inaccuracy is found to be two percent (2%) or less.

Section 5. Measuring Equipment Out of Repair. If for any reason any measuring equipment is inoperative or inaccurate so that the volumes of gas delivered is not correctly indicated by the reading thereof, and, if such reading is in error by more than two percent (2%) in the measurement of gas, then the volume of gas delivered, during the period such measuring equipment is inoperative or inaccurate, shall be determined by the parties hereto on the basis of the best data available using the first of the following methods which is feasible:

- (a) By using the registration of any check measuring equipment installed and accurately registering;
- (b) By correcting the error if the percentage of error is ascertainable by calibration, test, or mathematical calculations; or
- (c) By comparing deliveries made during preceding periods under similar delivery conditions when the meter was registering accurately.

And adjustment based on such determination shall be made for such period of inaccuracy as may be definitely known, or if not known, then for one-half the period since the date of the last meter test. In no event, how-

ever, shall any adjustment extend back beyond one-half (1/2) month from the date the error was first made known by one party hereunder to the other.

Any measuring equipment which is found to be inoperative or inaccurate, shall be adjusted to register correctly.

Section 6. Inspection of Equipment. Both parties shall have the right to inspect equipment installed or furnished by the other party, and the charts and other measurement or test data of the other party, at all times during business hours; but the reading, calibration and adjustment of such equipment and changing of charts shall be done only by the party installing and furnishing same. Unless the parties otherwise agree, each party shall preserve all original test data, charts and other similar records in such party's possession for a period of at least three (3) years.

ARTICLE X

TERM

Section 1. Term of Delivery Volumes. The temporary exchange of gas under this Agreement shall commence on the date provided in Article II hereof and shall continue from day to day thereafter until a final determination shall have been made by the Commission on the issues involved in FPC Docket Nos. CP65-169 and CP65-237 (including amendments and revisions thereof) and the completion of the installation of all facilities authorized.

ARTICLE XI

MISCELLANEOUS

Section 1. Regulatory Jurisdiction and Changes in Rates and

Service. This Agreement in all respects shall be subject to all valid legislation with respect to the subject matter hereof, either State or Federal, and to all valid present or future orders, rules and regulations of duly constituted authorities having jurisdiction. In the event the term hereof extends beyond January 1, 1967, then on such date or any time thereafter Transwestern shall have the right to propose to the Federal Power Commission such changes as it deems necessary in the rates and terms of service provided herein and this Agreement shall be deemed to include such changes or any changes which become effective by Federal Power Commission order. Natural shall have the right to oppose any of the foregoing and to request reduction in rates to the extent that Natural is legally permitted or required to do.

Section 2. Title. Each party hereby warrants title to all gas delivered by said party and that same is free from all liens and adverse claims, and, further, that said party has the right to deliver such gas hereunder.

Section 3. Force Majeure. Neither party shall be liable for any failure to perform the terms of this Agreement resulting from a cause or causes not reasonably within its control, providing that such party shall attempt with due diligence to remove the cause of the default.

Section 4. Passage of Title. Title of gas shall pass from the delivering party to the receiving party at the point of delivery.

Section 5. Assignment. This Agreement and each of its terms shall bind and inure to the benefit of the parties hereto, their successors and assigns.

Section 6. Entirety. This Agreement contains the entire contract between the parties and there are no oral promises, agreements or warranties affecting it.

Accordingly the parties hereto have duly executed this Agreement.

ATTEST:

(SEAL)

ATTEST

Assistant Secretary

TRANSWESTERN PIPELINE COMPANY

NATURAL GAS PIPELINE COMPANY OF AMERICA

ecretary

(SEAL)

GAS PURCHASE AGREEMENT

THIS AGREEMENT made and entered into this day of,	
, by and between	
	eri <u>usas tiri innuna menterian kandalah dan kerintara kerintaran di terbahan dan dan dan dan dan dan dan dan da</u>
(hereinafter referr	ed to as "Seller", whether one or more),
and SOUTHERN UNION GAS COMPANY (hereinafter referred to as "Buyer");	
WITNESSETH:	
WHEREAS, Seller owns interests in oil and gas leases which cover and	
affect the oil, gas and mineral interests in, to and under the lands made	
subject to this agreement; and	
WHEREAS, Seller desires to sell and Buyer desires to purchase all of	
such Seller's interest in merchantable natural gas produced from wells	
now or hereafter completed on lands made subject to this agreement;	
NOW, THEREFORE, for and in consideration of the mutual covenants,	
promises and agreements herein contained and for other good and valuable	
consideration, Seller and Buyer do hereby mutually covenant, contract and	
agree as follows:	
I.	
SUBJECT LANDS	
Section 1. Subject to the other terms and provisions hereof, Seller	
commits to the performance of this agreement its entire interest in gas	
	BEFORE THE
İ	OIL CONSERVATION COMMISSION Sinta Fe, New Mixico
	Exhibit No.
	Case No. 3237

produced from beneath the following described lands in which Seller has oil and gas leasehold interests (herein referred to as "Subject Lands"), to wit:

through wells now or hereafter completed on Subject Lands or on drilling on proration units including all or part of Subject Lands and connected to Buyer's lines (such wells being herein called "Subject Wells");

provided, however, that this agreement shall have no application whatsoever to (a) gas produced from formations below the base of the Morrow formation, (b) gas required by Seller for lease fuel, drilling, development and operation of his oil and gas leases covering the Subject Jands or any adjacent lands in which it may have an oil or gas leasehold interest, adjacent lands in which it may have an oil or gas leasehold interest, (c) gas that is required to be delivered by Seller to its lessor(s) under the terms of Seller's respective oil and gas leases, and (d) gas liberated from second stage liquid separation or stabilization.

Section 2. The control, management and operation of the Subject Lands and the leases thereon and the Subject Wells shall be and remain the exclusive right of Seller including, without limitation, the drilling of exclusive right of Seller including, without limitation, the drilling of exclusive right of Seller including, without limitation, the drilling of exclusive right of seller including, without limitation, the drilling of exclusive right of seller including, without limitation, the drilling of exclusive right of old wells, renewal, extension, release or termination in whole or in part of any lease agreement covering any of the subject Lands.

Section 3. Seller shall have the further right to form or to participate in the formation of any unit which may include all or any part of the Subject Lands and thereafter to increase or decrease the acreage contained in such unit so formed, to pool and combine any unit or any part tained in such unit so formed, to pool and combine any unit or any part of any unit with properties owned by others, provided this agreement shall of any unit with properties owned by others, provided this agreement shall of any unit with properties of Seller in any unit heretofore or herecontinue to apply to the interest of Seller in any unit heretofore or here after formed, increased or decreased to the extent that its interest in said unit is derived from the Subject Lands and its leasehold interest in

Section 4. Seller at its discretion may assign or convey any of its leasehold interest in the Subject Lands so long as such assignment or leasehold interest in the Subject Lands so long as such assignment or conveyance is subject to and not inconsistent with Buyer's rights hereunder;

provided, however, that no change in ownership of the leasehold interest in the Subject lands shall be binding upon Buyer until such time as Buyer shall have been furnished with either the original or a certified copy or an acceptable photocopy of the instrument or instruments effecting such change in ownership.

Section 5. Seller may, prior to delivery of gas to Buyer hereunder, remove therefrom by conventional mechanical gas-oil wellhead separator gasoline and other liquid hydrocarbons; provided, however, that no extractive process(es) employed by Seller shall materially reduce the pressure or volumes of gas otherwise available to Buyer hereunder, nor shall such process(es) materially alter the temperature of the flowing gas or change its characteristics as a useful fuel. Any gasoline, liquids or other liquefiable content, helium and other nonhydrocarbon constituents of gas delivered hereunder, after it has passed the delivery point, shall become the property of Buyer without payment of any additional compensation therefor.

II.

CONNECTION OF WELLS

Section 1. On or before 90 days after the date hereof, Buyer shall construct or cause another party to construct gathering pipelines connecting the presently existing pipeline of Buyer with each presently completed Subject Well. Thereafter, Seller shall give Buyer written notice of each subsequently completed Subject Well, accompanied by all available initial test data on the well and a copy of the completion report to the New Mexico Oil Conservation Commission on the well; and on or before 90 days after receipt of such notice, Buyer shall construct or cause another party to construct a gathering pipeline connecting the

pipeline of Buyer with such well, provided, however, that Buyer shall not be required to cause the connection hereunder of any subsequently completed Subject Well which (1) would require construction of a gathering line extension in excess of one mile for each 1,000 M.C.F. of gas per day that the well is capable of delivering hereunder against a pipeline working pressure of 600 p.s.i.g. or (2) which has less than one-half of the gas producible therefrom under gas sales contract to Buyer.

Section 2. If, for any reason other than lack of governmental approval or reports, any Subject Well is not connected to Duyer's pipeline within the periods specified in the foregoing Section 1, then Seller may, at its option, give Buyer written notice of such fact, and unless Buyer shall cause the connection hereunder of such well within thirty(30) days after Seller shall have given that notice, such well and the lands in the drilling or proration unit upon which the same is located shall be released from this contract.

Section 3. The gathering line to each Subject Well will be connected to Seller's delivery connection, or if Seller so elects to the outlet side of Seller's field separator serving that well. Sale and purchase of gas hereunder from each Subject Well will be commenced upon the connection of that well to Buyer's pipeline.

Section 4. The points of delivery of gas hereunder shall be the respective wellhead points of connection between Seller's facilities and those provided by Buyer, and gas shall be considered delivered to and taken by Buyer at such points. Seller shall be responsible for the safe conduct and handling of gas until it reaches the point of delivery hereunder at which point title to said gas as well as responsibility for the

safe conduct and handling thereof shall pass to Buyer. Each party hereto shall maintain the facilities owned or operated by it in good, safe, efficient operating condition and repair.

III.

QUANTITY

Section 1. Effective as of the date of initial delivery hereunder and subject to the other provisions of this agreement, Seller agrees to sell and deliver hereunder, and Buyer agrees to take and pay for, or failing to take nevertheless to pay for, the entire interest of Seller in an aggregate volume of gas which when averaged over each calendar year will equal not less than the Daily Minimum Quantity hereinafter specified for that year as follows:

- (a) For the remainder of the year 1964 and all of the year 1965, the Daily Minimum Quantity shall be 2,000 M.C.F. for each full 640-acre section of Subject lands.
- (b) For the years 1966, 1967 and 1968, the Daily Minimum Quantity shall be 3,000 M.C.F. for each full 640-acre section of Subject Lands.
- (c) For the year 1969 and subsequent years the Daily Minimum Quantity shall be 1,000 M.C.F. for each 8,000,000 M.C.F. of total ultimately recoverable natural gas reserves available to Buyer and initially underlying Subject Lands prior to commencement of deliveries hereunder.
- (d) If any wells, other than those new or hereafter completed on Sections 17, 19,21 and 36 in Township 21 South, Range 23 East, Sections 19, 31 and 32, Township 21 South, Range 24 East, and Section 2, Township 22 South, Range 23 East, be connected to the pipeline extension or gathering lines hereafter constructed from a point of connection with Buyer's presently existing pipeline system near Carlsbad, New Mexico to points of connection with Subject Wells and such connection is not required by the New Mexico Common Purchaser Act (Art. 65-3-15 NMSA 1953), as amended, then, effective as of the time of the first such well connection and until December 31, 1968, the Daily Minimum Quantity stated in Subsections (a) and (b) above will be increased by 500 M.C.F.

for each full 640-acre section of Subject Lands that has a well completed thereon and capable of producing gas from the Morrow formation.

provided, however, that for any period during which the aggregate delivery capacity of gas from Subject Wells under stabilized conditions into Buyer's pipeline against a working pressure of 600 p.s.i.g. be less than 150% of the Daily Minimum Quantity, the Daily Minimum Quantity shall be reduced to 65% of such lower delivery capacity.

Section 2. In the event a well is initially connected, or if a well ceases to produce to the end that gas is available for sale to Buyer here-under for only a portion of a year, then Buyer's minimum purchase obligation attributable to such well for said year shall be effective for only that portion of the year during which said well was capable of producing gas for sale hereunder. Seller shall furnish to Buyer at Buyer's request all of Seller's individual well data for purposes of establishing the delivery capacity of Subject Wells. All such data furnished to Buyer shall be returned to Seller within forty-five(45) days after receipt by Buyer.

Section 3. Buyer's yearly purchase obligation of gas hereunder shall not exceed Seller's interest in the aggregate volume available as restricted by allowables (if the Subject Wells are prorated) assigned to Subject Wells by the New Mexico Oil Conservation Commission or successor regulatory authority; provided, however, that Buyer shall nominate each year an aggregate volume attributable to Subject Wells at least equal to Buyer's minimum purchase obligation for such year. Whenever production of gas from Subject Wells is regulated or prorated by the New Mexico Oil Conservation Commission or any successor regulatory authority, Buyer shall have been deemed to have complied in full with its minimum purchase obligation

if during each proration period Buyer takes sufficient volumes of gas hereunder that none of the allowable assigned to Subject Wells is cancelled for
underproduction; and in the event of any cancellation of assigned allowable
for underproduction, the payment for gas not in fact taken during any calendar
year shall not exceed payment for the interest of each Seller in the amount
of allowable actually cancelled during that year because of underproduction.
Whenever allowable production is cancelled at the end of a proration balancing
period that extends over portions of two calendar years, the amount of
allowable so cancelled will be allocated to and considered to have been
setually cancelled in each of such calendar years in the same proportion
that the number of months in the calendar year and within the proration
balancing period bears to the total number of months in such proration
balancing period.

Section 4. Any payment for gas not in fact taken shall be made at the weighted average price of gas actually taken during the calendar year in which such payment obligation accrues. In each of two calendar years subsequent to any calendar year in which Buyer shall have become obligated to make a payment for gas not in fact taken, all gas taken by Buyer in excess of the minimum purchase obligation for each such subsequent year shall be considered "make-up" gas and shall be without charge to Buyer until such excess is equal to the amount of gas previously paid for out not in fact taken.

Section 5. At as early a day as is reasonably possible after October 1, 1968 and prior to January 1, 1969, a determination of the total ultimately recoverable natural gas reserves initially underlying Subject lands shall be made, and thereafter a redetermination of the total

ultimately recoverable reserves initially underlying Subject Lands and available to Buyer hereunder will be made when requested in written notice given by either party to the other after expiration of at least two years after the preceding determination or redetermination of such reserves. In each determination of reserves the wellhead abandonment pressure shall be assumed to be 250 pounds per square inch gauge, and the volumes of gas theretofore produced from the Subject Lands will be taken into consideration. Any adjustment of Daily Minimum Quantity arising out of the original determination of total ultimately recoverable reserves will be effective on January 1, 1969 and continue in effect until the next succeeding redetermination, and any adjustment of Daily Minimum Quantity arising out of a redetermination of total ultimately recoverable reserves will be effective on the date of request for the redetermination and continue in effect until the next succeeding redetermination.

Section 6. In each instance when a determination or redetermination of total ultimately recoverable reserves is required, Seller will deliver to Buyer a statement of the total ultimately recoverable reserves underlying Subject Lands on January 1, 1969 and available to Buyer hereunder, as estimated by Seller and upon receipt of such estimate Buyer shall notify Seller in writing as to whether Buyer is in agreement with Seller's reserve determination. If Buyer has any disagreement with Seller's estimate, Buyer and Seller will discuss the difference of opinion in order to attempt a mutually agreeable adjustment. If differences of opinion cannot be so adjusted, the determination or redetermination of total ultimately recoverable reserves will be performed by a competent and recognized independent reserve consultant selected by Buyer and approved by Seller with the expense thereof to be

borne one-half by Seller and one-half by Buyer, and the reserve estimate of such consultant will be final and binding on both Seller and Buyer for purposes of this contract. Should the parties fail to select an independent reserve consultant within sixty(60) days after Buyer shall have first proposed a particular consultant to Seller, then either Buyer or Seller may request that the independent reserve consultant be appointed by the then senior judge of the United States District Court in and for New Mexico, and the recoverable reserve determination of the independent reserve consultant so appointed will be final and binding upon both Seller and Buyer for purposes of this contract.

Section 7. Should Seller hereafter contract to furnish gas in substantial quantities for consumption in Eddy County, New Mexico, either directly or indirectly through any firm or corporation owned or controlled by such Seller or indirectly through any municipality engaged in the distribution of natural gas, to any consumer then buying gas from Buyer to the end that the quantity of gas thereafter purchased by such consumer from Buyer is or will be reduced, then such party shall advise Buyer in writing at least sixty(60) days prior to their commencement of deliveries of the volumes that they propose to furnish pursuant to each such contract and in such case Buyer shall have the right by giving such party notice in writing to reduce the volumes of gas that Buyer is otherwise obligated to take or pay for hereunder from such party by an amount equal to that which Buyer's sales volumes to such consumer shall be reduced as a result of such sales. Reductions in minimum volumes authorized by this section may be made effective at any time during the continuance of deliveries by any party or parties herein named as Soller and may thereafter continue in effect for such period as Buyer may elect, and the exercise or nonexercise by Buyer of rights available to it under this section shall not exhaust or waive the right of Buyer to thereafter avail itself of the benefits of this section. Reductions made in volumes required to be purchased by Buyer from Seller under this agreement shall not also be made in minimum volumes required to be purchased by Buyer from the same Seller under other contracts containing like or similar provision.

IV.

METERING

Section 1. Buyer, at its sole cost, risk and expense, shall install, maintain and operate at each point of delivery hereunder a standard type orifice meter or meters for measuring the volume of gas purchased by Buyer at each separate point of delivery and Buyer shall cause said meters to be read at least every eight(8) days. The meters and other facilities so installed at each point of delivery shall be constructed and installed in accordance with the specifications prescribed in Report No. 3 of the Gas Measurement Committee of the American Gas Association dated April, 1955, and appendix thereto.

Section 2. Said meters and all meter readings and meter charts shall be accessible at all reasonable times to inspection and examination by Seller, but the calibration and adjustment of Buyer's meters shall be done by Buyer.

Section 3. Said meters shall be calibrated at least once each thirty (30) days by and at the expense of Buyer, but in the presence of Seller's representative. Buyer shall give Seller or its designated representative notice of each such calibration test in sufficient time to enable Seller to have its representative present. If upon any such test the measuring

equipment is found to be no more than two per cent (2%) erroneous in the aggregate, previous readings of such equipment shall be considered correct in computing the deliveries of gas hereunder, but such equipment shall be adjusted at once to read accurately. If upon any test the measuring equipment shall be found to be inaccurate in the aggregate by an amount exceeding two per cent (2%) at a reading corresponding to the average rate of flow for the period since the last preceding test, then any previous reading of such equipment shall be corrected to zero error for any period which is known definitely or agreed upon, but in case the period is not known definitely or agreed upon, then for a period extending back one-half (1/2) of the time elapsed since the date of the last test. If for any reason any of the measuring equipment is out of service or out of repair, so that the volume of gas purchased cannot be ascertained or computed from the reading thereof, the volume of gas purchased during the period such equipment is out of repair shall be estimated and agreed upon by the parties hereto on the basis of the best data available, using the first of the following methods which is feasible:

- (a) By using the registration of Seller's check meter, if installed and accurately registering;
- (b) By correcting the error in Buyer's meter, if the percentage of error is ascertainable by calibration test or mathematical calculation;
- (c) By estimating the volume of delivery, by using as a basis the volumes delivered during preceding periods under similar conditions when the meter was registering accurately.

Section 4. Seller may install, maintain and operate upstream of Buyer's measurement equipment such check measuring equipment as deemed appropriate; provided that each check meter and equipment shall be so

installed as not to interfere with the operation of the meters to be installed and maintained by Buyer at or near each point of delivery hereunder as provided in Section 1 of this Article IV.

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UNITS OF VOLUME

Section 1. The unit of volume for all purposes hereunder (except for determination of heating value for purposes of Article X and Section 2 of Article VII) shall be one(1) cubic foot at an absolute pressure of fourteen and nine-tenths (14.9) pounds per square inch at a temperature of sixty (60) degrees Fahrenheit.

Section 2. The unit of volume for the determination of heating value for purposes of Article X and Section 2 of Article VII hereof shall be the amount of gas, saturated with water vapor, which would occupy a volume of one(1) cubic foot at a temperature of sixty(60) degrees Fahrenheit and under a pressure equivalent to thirty(30) inches of mercury at thirty-two(32) degrees Fahrenheit.

VI.

MEASUREMENT

Section 1. All measurement of gas hereunder shall be in accordance with the recommendations for measuring gas contained in Report No. 3 of the Gas Measurement Committee of the American Gas Association, dated April, 1955, including the appendix thereto, applied in an appropriate manner, and correction shall be made for deviation from the Ideal Gas laws. For measurement purposes hereunder an assumed atmospheric pressure of thirteen and two-tenths(13.2) pounds per square inch absolute shall be utilized irrespective of any variation of the actual barometric pressure

from such assumed pressure.

Section 2. The temperature of the gas flowing through the meter or meters shall be determined by the use of a recording thermometer of standard manufacture, installed, maintained, and operated by Buyer at its sole cost, risk and expense so that it may properly record the temperature of the gas flowing through Buyer's meter or meters at the point of delivery. The arithmetical average of the twenty-four(24) hour record, or of that portion of the twenty-four(24) hours during which gas was passing if gas had not been passing during the entire period, from the recording thermometer shall be taken to be the gas temperature for the day and shall be used to make proper corrections in volume computations.

Section 3. The specific gravity of the gas delivered hereunder shall be determined by spot tests made with an instrument of standard manufacture acceptable to the parties. The specific gravity of the gas delivered hereunder shall be determined as requently as is found necessary in practice to insure accurate measurement. Each test shall determine the specific gravity to be used in computation for the measurement of natural gas delivered until the next succeeding test.

Section 4. The gross heating value of the gas as determined for purposes of Article X and Section 2 of Article VII hereof shall be determined by means of some mutually acceptable method at such intervals as Buyer may elect.

Section 5. The deviation of the gas from the Ideal Gas laws shall be determined in accordance with the recommendations of Committee Report No. 3 of the American Gas Association dated April, 1955, including the appendix thereto.

Section 6. Buyer or its designated representative shall conduct the

tests and determinations under this Article VI which are to be made with equipment owned or to be furnished by Buyer, but Buyer, prior to making such test or determination, shall give Seller or their designated representative notice of each such test or determination in sufficient time to enable Seller to have their representative present.

Section 7. It is agreed that if by reason of valid law, order or regulation, there shall be prescribed as to any gas delivered hereunder any basis for measurement or computation of gas volumes differing from that set forth above in Articles V and VI, then the applicable prices set forth and/or provided for in Article VII shall forthwith be adjusted and corrected to compensate for the change(s) thus effected in the basis of measurement or computation of volumes of gas delivered hereunder, it being the intention of the parties that no change so effected in the basis of measurement or computation of gas volumes shall affect in any way the total price to be paid for volumes of gas delivered hereunder.

VII.

PRICE

Section 1. The price to be paid for gas delivered, or made available up to the quantity specified in Article III hereof, for delivery hereunder measured as hereinbefore provided shall be, as follows:

- (a) 15¢ per M.C.F. during the initial period ending on November 14, 1969.
- (b) 16¢ per M.C.F. during the next five-year period of the term hereof.
- (c) 17¢ per M.C.F. during the next five-year period of the term hereof.
- (d) 18¢ per M.C.F. during the next five-year period of the term hereof.

(e) 19¢ per M.C.F. during the remaining period of the term hereof.

Section 2. For each M.C.F. of gas containing less than 1,000 B.T.U.'s per cubic foot (such B.T.U. content measured and determined in accordance with Section 2, Article V hereof) the price per M.C.F. specified in the foregoing Section 1 shall be reduced to such amount as is equal to the product of such price multiplied by a fraction, the numerator of which shall be the B.T.U. content per cubic foot of such gas and the denominator of which shall be 1,000.

VIII.

PRICE EQUALIZATION

Section 1. Any other provision in this agreement to the contrary notwithstanding, if at any time after the execution of this agreement and while this agreement remains in effect, Buyer shall execute a contract for the chase (1) at the wells, of gas which is produced in either Lea or Eddy counties, New Mexico, or (2) at a central point on Buyer's pipeline system, high pressure, pipeline quality gas which is produced in either Lea or Eddy counties, New Mexico, at a higher price (excluding for this purpose Buyer's reimbursement, if any, of tax cost to the other seller) than is being paid to Seller hereunder(excluding for this purpose Buyer's reimbursement, if any, of tax cost to Seller) and Seller's gas is delivered under similar conditions, giving due consideration to differences in contractual requirements of quality, volume and pressure, then Buyer shall pay such higher price to Seller for its gas delivered hereunder so long only as Buyer shall pay that higher price to such others. In determining whether any higher price is being paid by Buyer for purposes

of this Article VIII, the units of gas measurement shall be computed to the same pressure base and there shall be disregarded (1) any excess or premium amounts paid or required to be paid on account of gas royalty or overriding royalty or on account of liquefiable hydrocarbon content specifically recognized, and (2) the price paid by the Buyer to Northern Natural Gas Company, Transwestern Pipeline Company, El Paso Natural Gas Company, or successors in interest to the pipeline system of any such company, for pipeline gas delivered to Buyer. Upon commencement by Buyer, with requisite authorization provided by Article XX hereof, of transportation, sale or utilization of gas from Subject Wells outside of the State of New Mexico, the provisions of this Article VIII shall be of no force or effect as to gas thereafter sold and delivered hereunder for so long as the lawful rules and regulations of the Federal Power Commission shall prohibit the filing, as rate schedules, of contracts containing pricing provisions of that type or prohibit the granting of Certificates of Public Convenience and Necessity authorizing sales under contracts containing that type of pricing provision.

IX.

BILLINGS AND PAYMENTS

Section 1. On or before the tenth(10th) day of each calendar month
Buyer shall render a statement, by wire or letter, to Seller or its designated
representative giving the total volume of gas purchased hereunder during
the preceding calendar month. Payment in accordance with such statement
shall be made by Buyer to Seller on or before the twenty-fifth(25th) day
of each calendar month. All statements, billings, and payments shall be
subject to correction of any errors contained therein until the expiration

of one(1) year after rendition.

Section 2. When requested to do so by Seller, Buyer shall mail all charts or microfilm copies thereof to Seller or its designated representative for checking as soon as is conveniently possible after computing the volumes therefrom after which such charts or microfilm copies thereof shall be returned to Buyer within forty-five (45) days of receipt by Seller and kept on file by Buyer for the mutual use of both parties for a period of at least one(1) year.

Section 3. In the event any payment due hereunder shall be delinquent and Buyer shall fail to make such payment after thirty(30) days' written notice by Seller to Buyer of such delinquency sent by registered mail, Seller shall have the right and option of suspending delivery of gas hereunder until all delinquent payments are made in full; provided, however, that such right of suspension shall not apply pending settlement of a bona fide dispute concerning the amount payable by Buyer if Buyer shall have made timely payment of all amounts not in dispute; and provided, further, that in the event any adverse claim is made against any gas delivered hereunder, Buyer may retain without interest any sums accruing with respect to the claimed interest until such claim or claims shall be finally adjudicated or settled or until Seller shall furnish to Buyer adequate and satisfactory indemnity against all loss, liability, costs or damage which Buyer may suffer or incur by reason of such claim.

In the event, pursuant to the provisions of this Article IX, Seller suspends delivery of gas hereunder for a period of thirty(30) or more consecutive days, Seller, in addition to any other right or rights available to it, shall have the right to terminate this agreement at any

time thereafter upon ten(10) days' advance written notice to Buyer sent by registered mail, unless, prior to the expiration of such ten(10) day period, all delinquent payments (to the extent not in bona fide dispute) shall have been made by Buyer in full.

Section 4. Both Seller and Buyer shall have the right to examine, at reasonable times, books, records, laboratory tests, and charts of the other, to the extent necessary to verify the accuracy of any statement, test, chart, or computation made under or pursuant to any of the provisions of this agreement.

х.

QUALITY

Section 1. All gas delivered hereunder shall be commercially free from liquid substances and shall have a minimum gross heating value of 950 B.T.U. per cubic foot, and Buyer may, at its option, decline to accept gas tendered for delivery that does not meet those requirements.

XI.

TAXES

Section 1. In addition to the price to be paid for gas delivered hereunder, Buyer agrees to pay Seller in an amount equal to three-fourths (3/4ths) of any increased, additional or new production, severance, gathering, processing, transmission, sales, delivery or similar taxes in excess of or in addition to those in existence on the date hereof, which are levied upon or attributable to all or any portion of such gas or the value thereof, before delivery of such gas to Buyer. Buyer shall bear and pay any and all taxes levied on such gas after receiving delivery thereof.

Section 2. Payment to Seller for any such increased, additional or

new taxes shall be made in conjunction with monthly settlements for gas delivered hereunder. Buyer shall not be obligated to reimburse Seller for any ad valorem taxes on properties or for income taxes nor to reimburse Seller for any tax or taxes which are based upon or measured by the natural gasoline, other liquefied hydrocarbon content, or other constituents separated from the gas before delivery to Buyer hereunder.

Section 3. Buyer shall be entitled to reimbursement from Seller to the extent of any payments made by it to Seller pursuant to this Article XI which may be subsequently refunded to Seller.

Section 4. Taxes applicable to any royalty, overriding royalty, production payment or similar interest shall be considered to be covered by the provisions of this Article XI only if the reimbursement made with respect thereto is passed on to the owner of such royalty, overriding royalty, production payment or similar interest.

XII.

DIRECT PAYMENT OF ROYALTIES AND TAXES

Section 1. Seller, from time to time, upon request will furnish to Buyer reasonable evidence of title, including abstracts and division orders covering all interests in the gas, but no examination, reliance or action of Buyer thereon or pursuant thereto shall alter or impair Seller's warranty of title. Buyer may, without incurring any obligation to do so, deduct from the purchase price of gas hereunder any royalties, overriding royalties and/or New Mexico state taxes due from sums owing to Seller and pay same directly to the person(s) and/or authorities respectively entitled thereto, accounting to Seller only for the remainder.

XIII.

WARRANTY OF TITLE

Section 1. All rentals, royalty, overriding royalty and production payments, if any, due as the result of Seller's ownership or operation of its leases or on account of the production, transportation, or processing of gas before delivery to Buyer hereunder, or as a result of the sale of gas by Seller to Buyer hereunder, shall be and remain the obligation of Seller.

Section 2. Soller expressly warrants its title to and right to sell all gas that may be delivered to Buyer under this agreement, and Seller shall hold Buyer harmless from and against adverse claims thereon or thereto.

XIV.

DISCONNECTION OF WELLS

Section 1. The gas to be delivered hereunder shall be delivered by Seller into Buyer's lines against the pressure existing therein from time to time at the point of delivery, which shall not be in excess of six hundred (600) pounds per square inch gauge.

Section 2. Buyer shall not be obligated to purchase any gas tendered for delivery at a pressure of less than 500 p.s.i.g., and if Seller fails to deliver gas hereunder at at least such pressure for a period of sixty (60) or more consecutive days from any Subject Well, Buyer shall, thereupon have the right and option, upon thirty(30) days' advance written notice to Seller, to discontinue the purchase of gas from such well and to remove and salvage the gathering line to such well and other related facilities.

Section 3. If Buyer shall, pursuant to the provisions of Section 2 above, discontinue the purchase of gas and disconnect gathering lines from any Subject Well, either party hereto shall have the further right at its option to have the disconnected well released from this contract upon thirty (30) days' advance written notice to the other party.

Section 4. Nothing contained in this Article XIV shall be construed as requiring Seller or Buyer to increase, or to prevent Seller or Buyer from increasing, the natural pressure of gas deliverable hereunder by installation of compression facilities or otherwise.

ΧV.

RIGHT OF WAY

Section 1. Insofar as it may lawfully do so without impairing its own similar rights, Seller hereby grants and assigns to Buyer an easement and right of way on, over and across all the Subject lands (and any adjoining lands in which Seller may have an oil and gas leasehold interest) for Buyer's purposes of installing, constructing, maintaining, repairing, inspecting and removing, from time to time as Buyer deems necessary, pipelines, measuring equipment and any other facilities useful in the performance of this agreement, together with the right of free ingress and egress to and from said lands for Buyer's personnel and equipment.

Section 2. All property installed or placed in or on said lands by Buyer shall remain personal property and shall be subject to removal by Buyer during the term of this agreement and during a reasonable time after termination or expiration hereof.

XVI.

DURATION OF AGREEMENT

Section 1. This agreement shall be effective as of the date hereof

and shall continue in force and effect for twenty(20) years from and after the date hereof and as long thereafter as gas is produced or producible from Subject Lands.

XVII.

FORCE MAJEURE

Section 1. In the event that either party hereto is rendered unable, wholly or in part, by force majeure or other causes herein specified, to carry out its obligations under this agreement, other than Buyer's obligation to make payments of amounts due hereunder for gas delivered and received, it is agreed that on such party's giving notice and reasonably full particulars of such force majeure in writing or by telegraph to the other party within a reasonable time after the occurrence of the cause relied on, then the obligations of the party giving such notice, so far as they are affected by such force majeure or other causes herein specified, shall be suspended during the continuance of any inability so caused, but for no longer period, and such cause shall so far as possible be remedied with all reasonable dispatch.

Section 2. The term "force majeure" as employed herein shall mean acts of God, strikes, lockouts or other industrial disturbances, acts of the public enemy, wars, blockades, insurrections, riots, epidemics, landslides, lightning, earthquakes, fires, storms, floods, washouts, arrests, and restraints of the Government, either federal or state, civil or military, civil disturbances, explosions, sabotage, malicious mischief, breakage or accident to machinery or lines of pipe, freezing of wells or lines of pipe, temporary failure of gas supply, inability of any party hereto to obtain necessary materials, supplies or permits, due to existing or future rules, regulations, orders, laws or proclamations of governmental authorities

(both federal and state), including both civil and military, and any other causes, whether of the kind herein enumerated or otherwise, not reasonably within the control of the party claiming suspension.

Section 3. It is understood and agreed that the settlement of strikes or other labor difficulties shall be entirely within the discretion of the party having the difficulty, and that the above requirement that any force majeure shall be remedied with all reasonable dispatch shall not require the settlement of labor difficulties by acceding to the demands of the opposing party when such course is inadvisable in the discretion of the party having the difficulty. XVIII.

COVENANTS TO HOW WITH THE LAND

Section 1. The covenants and provisions of this agreement chall run with the land and with the oil and gas leases and other interests, if any, of Seller in the Subject Lands; including any and all renewals and/or extensions of such leases and/or preference right leases hereafter issued on account of any thereof. XIX.

Section 1. This agreement is made in contemplation of, and all provisions hereof shall be subject to all present and future laws of the State of New Mexico and the United States, and all orders, rules and regulations of duly constituted governmental authorities having jurisdiction which are applicable to the subject matter hereof and effective from time to time.

Section 1. It is a condition of this agreement, without which Seller INTRASTATE UTILIZATION

would not have agreed to sell, that all of the gas sold and delivered hereunder shall be transported, distributed, sold, consumed and utilized within the State of New Mexico unless the agreement of Seller to transport, sell or utilize such gas outside of the State of New Mexico has first been obtained. Therefore, if at any time during the term of this agreement Buyer shall find that under duress of business compulsion it becomes necessary for Buyer to transport or sell all or any part of the gas subject hereto for utilization outside of the State of New Mexico, either in Buyer's pipelines or otherwise, Buyer will give Seller at least ninety(90) days advance written notice of any such intended sale or transportation for utilization outside of New Mexico, and in the event of any such notice Seller shall have the right by giving written notice thereof to Buyer to terminate this agreement in its entirety effective as of a date to be designated by Seller which date shall be prior to the date on which Buyer shall have elected to transport or sell such gas for utilization outside the State of New Mexico; provided, however, that no such termination notice to Buyer shall be effective unless Seller in such notice shall undertake and agree that Seller will thereafter enter into no contract with any other party or parties or otherwise take any action which will or may result in the sale, transportation or utilization in any state other than the State of New Mexico of any gas theretofore subject to this agreement on terms which Buyer is able and willing to meet; and if Seller shall fail to comply with this undertaking and agreement, then failure to comply by Seller shall have the effect of voiding Seller's notice of termination, and unless Buyer by written notice to Seller shall promptly elect to the contrary, this contract shall thereupon be reinstated in full force and effect with the Buyer thereafter authorized to transport and sell gas then covered by

this agreement for utilization outside of the State of New Mexico, or if Seller complies with this undertaking and agreement, and Buyer is willing and able to meet the terms of Seller's proposed contract with such other party, then Seller and Buyer will execute amendments and modifications of this agreement to incorporate therein the terms and conditions that are to be met by Buyer and this agreement, as so amended, will be reinstated in full force and effect with Buyer thereafter authorized to transport and sell gas then covered by this agreement for utilization outside of New Mexico. If Seller fails to give Buyer notice of termination within the ninety-day period herein provided for, Seller shall be deemed to have waived the aforesaid right of termination and to have agreed that Buyer may transport and sell gas delivered hereunder for utilization outside the State of New Mexico.

XXI.

SUCCESSORS AND ASSIGNS

Section 1. This agreement shall bind and benefit the parties hereto and their respective successors and assigns, provided that no assignment by either party hereto shall be binding upon the other party until furnished with written notice and true copy of such assignment.

XXII.

NOTICES

Section 1. Notices to be given hereunder unless otherwise designated in writing shall be deemed sufficiently given and served when deposited in the United States mail, postage paid and registered, to the following addresses; or to such other address as either party may respectively hereafter designate, except that settlement statements and payments for gas

purchased and communications relating to routine accounting matters shall be in accordance with Section 2 hereof.

To Seller -

To Buyer -

Southern Union Gas Company Fidelity Union Tower Dallas, Texas 75201 Section 2. Routine communications including monthly statements and payments shall be considered duly delivered when mailed, postage prepaid, by either registered mail or ordinary first-class mail to the above addresses or to such other address as may be agreed upon by the parties hereto for purpose of operational convenience, and it shall be considered sufficient for said routine communications, from Buyer to Seller, to be sent to the Operator only, in the event there are two or more Sellers hereto.

XXIII.

MISCELLANEOUS

Section 1. As to all matters of construction and interpretation, this agreement shall be interpreted, construed and governed by the laws of the State of New Mexico.

Section 2. No modifications of the terms and provisions of this agreement shall be or become effective except pursuant to and upon the due and mutual execution of an appropriate supplemental written contract by the parties.

Section 3. No waiver by either party of any one or more defaults by the other party in the performance of any provisions of this agreement shall operate or be construed as a waiver of any future default or defaults whether of a like or of a different character.

Section 4. It is agreed and understood that nothing in this agreement or in any approval thereof shall be construed as affecting any of the relations of the United States and its lessee, particularly in matters of gas waste, taking royalty in kind and the method of computing royalties due based on minimum valuation, and in accordance with the terms and provisions of the oil and gas operating regulations applicable to the lands covered by said agreement.

Section 5. In the event there are two or more parties as Seller under this agreement, no notice of Seller's intention or desire to terminate this agreement shall be binding upon Buyer unless such notice shall have been signed by all of the parties designated as Seller herein, or unless the one of such persons not signing such notice shall theretofore have notified Buyer that the other of such persons is authorized to give such notice on behalf of the one not so signing.

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COUNTERPART EXECUTION

Section 1. This agreement may be executed in any number of counterparts, no one of which need be executed by all parties, or may be ratified or consented to by separate instrument, in writing specifically referring hereto, and it shall be binding upon all parties who execute a counterpart ratification or consent with the same force and effect as if all such parties had executed or signed the same document, with each separate counterpart, ratification or consent deemed to be an original.

IN WITNESS WHEREOF, this agreement is executed all as of the day and

year first above written.	
	SELLER
ATTEST:	SOUTHERN UNION GAS COMPANY
	Ву
Assistant Secretary	Vice President
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STATE OF	
COUNTY OF	
On this day of	, 19, before me appeared
, to	me personally known, who, being by me duly
sworn, did say that he is the _	President of
an a	nd that the soal affixed to the foregoing instru-
ment is the corporate seal of se	aid corporation and that said instrument.was
signed and sealed in behalf of	caid corporation by authority of its Board of
Directors, and said	acknowledged said instrument to
be the free act and deed of said	d corporation.
IN WITHESS WHEREOF, I have	set my hand and seal of office on this
day of, 19	·
	Notary Public in and for
My Commission Expires:	County,
STATE OF	
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	rporation by authority of its Board of Directors,
•	acknowledged said instrument to be the free
not and dood of said corporation	•
	cot my hand and seal of office on this
day of, 1	,
Wy Commission Expires:	Notary Public in and for
,	Country 1

BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION Hobbs, SaxtaxFe, New Mexico April 14, 15, 1965

HEARING REGULAR

IN THE MATTER OF:

HEARING 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

Case No.

PEFORE:

GOVERNOR JACK M. CAMPBELL

SECRETARY-DIRECTOR A. L. PORTER

LAND COMMISSIONER GUYTON B. HAYS

TRANSCRIPT OF HEARING

DEARNLEY-MEIER REPORTING SERVICE,

X.

SIMMS BIDG. . P. O. BOX 1092 . PHONE 243-6691 . ALBUQUERQUE.

MR. PORTER: The hearing will come to order, please. We will take up next, Case Number 3237.

MR. DURRETT: Hearing 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.

MR. PORTER: At this time I would like to call for appearances in this case.

MR. DURRETT: If the Commission please, Jim Durrett, appearing for the staff of the Oil Conservation

Commission. I will have an opening statement which I would like to make at the end of appearances, with your permission.

WMR. NEWMAN: Kurt Newman, Midland, Texas--Mr.
Norman Baer, representing California Oil Company.

MR. MORRIS: Mr. Commissioner, Dick Morris of Seth, Montgomery, Federici and Andrews, Santa Fe, New Mexico, appearing for Southern Union Gas Company. Associated with me in this case is Mr. John Dermott of the legal department of Southern Union Gas Company, Dallas, Texas, a member of the Texas Bar.

MR. COUCH: Terrell Couch, Houston, Texas, representing Marathon Oil Company. Mr. Malone of Ross & Malone is associated with us in this case, and our appearances are on file.

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SIMMS BLDG. . P. O. BCX

W MR. HUNKER: George H. Hunker, Jr., attorney, Roswell, New Mexico, representing Monsanto Company.

., MR. SPERLING: J. E. Sperling, Albuquerque, of the firm of Modrall, Seymour, Sperling, Roehl & Harris, representing John H. Gill of Dallas, Texas.

MR. SMITH: J. R. Smith, representing Pan American Petroleum Corporation, Fort Worth, Texas. Local counsel, I would like to show for the record, is Jim Sperling.

MR. EATON: Paul Eaton, attorney, Roswell, New Mexico, of the firm of Hinkle, Bondurant & Christy, representing Robert N. Infield and Hadding Petroleum Corporation.

MR. TOMLINSON: Phil Tomlinson, Atlantic Refining Company, Roswell.

MR. CUNNINGHAM: M. Cunningham, representing Sinclair Oil & Gas, Midland, Texas.

Trigg, Roswell.

WR. CARNES: John Carnes, representing Sun Oil Company.

MR. WILLIAMS: C. D. Williams, representing Kerr-McGee.

MR. MORGAN: Charles Morgan, representing Ralph Lowe.

MR. DURRETT: Mr. Chairman and members of the

EXPERT TESTIMONY, DAILY

HEARINGS, STATEMENTS.

DEPOSITIONS,

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Commission, as the call of this case shows as the case was advertised, the staff of the Oil Conservation Commission will present a case here today concerning gas prorationing--the instituting of gas prorationing in the Indian Basin-Upper Pennsylvanian and Indian Basin-Morrow gas pools in Eddy County, New Mexico. We will present our case to consider limiting the production to reasonable market demand and to the capacity of the gas transportation facilities.

I would like just briefly to give you a resume of the witnesses we will present, so that you will have an idea of the line that our testimony will follow. The Commission will present Mr. Dick Stamets, who is a geologist with our Artesia office, to testify concerning the geology of this area, and we will introduce several geological exhibits through him. Then we will call as a witness for the Commission, representatives of the various gas purchasers who have indicated they intend to purchase gas in this pool, or these pools. We will call Mr. Jack Ramsey, who is with Natural Gas Pipeline Company of America; Mr. Oren Hazeltine, who is with Southern Union, to testify concerning their company's plans in this area; and we will also call as withesses for the Commission representatives of the parties who are anticipating construction of gas plant facilities in this area. We will call as Commission witnesses Mr. Ellis Wind, who is with Marathon, and Mr. Gordon Σŧ

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Llewellyn, who represents John Hill.

Anticipating somewhat the possible line the crossexamination could follow, I would like to state at this time that the Commission will attempt to limit the -- I should say the Commission staff, will attempt to limit the scope of the cross-examination to the direct examination, particularly concerning these witnesses I have stated, who do not work for the Commission but represent their home companies and who have volunteered, at my request, to testify for the Commission, to fill in the Commission on the basic facts. We will then present Mr. Elvis Utz, who is our gas engineer in the Santa Fe office, and his testimony will be broken down into two parts. The first part will be to consider instituting gas prorationing in these two pools, and the second part of his testimony will concern the suggestions that have been made about assigning allowables to unconnected wells. He will discuss the various alternatives that have been suggested to the Commission.

With your permission I will call the witnesses now, and have them sworn.

MR. PORTER: You may call your first witness, Mr. Durrett.

MR. DURRETT: The Commission calls Mr. Dick Stamets.

I. S T A M E T S, the witness, having been duly



sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. DURRETT:

- Q Mr. Stamets, will you please for the record state your name and position.
- A R. L. Stamets, geologist with the Oil Conservation Commission in Artesia, New Mexico.
- Q Mr. Stamets, are you familiar with the geological characteristics of the Indian Basin field in Eddy County, New Mexico?
 - A Yes, sir.
- Q And have you made a geological study of this area in the verv recent past, at my request?
 - A Yes, sir,
 - Q How many gas pools are in this field, Mr. Stamets?
- A There are two defined was pools and one gas pool which is not currently named by the Commission.
 - Q How are those pools designated -- by what name?
- A The Indian Basin-Upper Pennsylvanian gas pool and the Indian Basin-Morrow gas pool.
- Q Could you tell us the exact date, if you know it, and if you don't, approximately when the pools were discovered and created by the Commission?
- A I don't have that information with me. It's a matter of Commission record.

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Has it been two or three years, or something like that?

- Within the last two or three years.
- Not real recently? Q
- Comme ce, comme ca. It's relatively recent in my tenure with the Commission. It might be considered a long time if you're figuring on paying out a well.
 - Now, Mr. Stamets, you have some exhibits, I believe?
- Yes, sir, I do. I have three exhibits which I have prepared fully; four which I have participated somewhat in.

MR. DURRETT: I don't mean to interrupt the witness, but we have ton copies, and the Commission has two or three. We have them on the board, but I will pass these out and maybe you can kind of group together. Would you please, while I'm passing out this exhibit, Mr. Stamets, refer to Exhibit 1 and state for the record what that purports to be.

I'd like to point out at this time that there are certain figures on all three of the first exhibits which will be the same, and I'd like to discuss those first. All three of these are prepared on a base map of the Indian Basin area that show all wells drilling or drilled to the Pennsylvanian or deeper. I have excluded all surrounding wells. The well symbols identify the status of the wells. These, along with other information, will be found at the legend just to the

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bottom, to the right of center.

You're talking about Exhibits 1, 2 and 3 at this

Yes, sir. Unless otherwise noted, all singly time? completed wells are Upper Pennsylvanian--there are no Morrow singles, and all dual completions are Upper Penn and Morrow. Exhibit 1 is a contour map of the top of the Pennsylvanian or, as it is referred to in this pool, the Upper Pennsylvanian; using the Penn top as shown in the example in the lower lefthand corner of the map. The sub-sea datum for my peak of the Penn top is indicated near each well. This map shows an eastnortheast plunging nose with two associated highs, plus one additional high located slightly to the north and west. These areas I feel probably result from the structure as well as from growth of the reef which forms the Upper Pennsylvanian reservoir. Also in a dashed blue line are current horizontal limits of the Indian Basin-Upper Pennsylvanian gas pool.

The dotted lines are the current horizontal limits?

Yes, sir. I believe that covers the salient points Α on this exhibit.

Please approach the exhibit I have taped up here--I think that probably might help some, since I don't have copies -- and indicate the particular features you think should be pointed out to the Commission concerning the structure of



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This is the east-northeast plunging nose to which this formation. There is a definite high located here. Currently I referred. I don't have well locations on this well.

What section are you referring to?

Section 4, 22 South, 23 East. However, the scout reports which I have seen on this well have picked the Pennsylvanian top here, and it is a relatively good marker here. Also I have heard reports from people in the field. This is a high well in the Upper Pennsylvanian. The second high feature is located in Section 31, 21-24. I haven't closed the contour around this well--some people have, but I have left it more or less as a connected high, so to speak. The third high is located in Section 19, 21-23. I feel this high probably is more related to structure than the other two.

Will you please pass on to Exhibit 2, which is on the wall, and state for the record what that is.

I have a few additional copies of those here too, if someone would like to have one. These are extras. Exhibit 2 is an isopach map or my estimate of gross feet of dolomite in the Upper Penn reef section. This is contoured on a 100foot thickness interval. I say "estimate" because I didn't have cores or samples to work with; however, checking around with various field personnel, I got their opinion on how best

TESTIMONY, DAILY COPY, CONVENTIONS

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to do this, and I used that method. It is estimated from the well logs which we had available in our office, which is practically every well—the only ones we did not have logs on, you will note, are in Section 4-22-24 and 32-21-24. We did have a well log on this well, but the full Penn section wasn't penetrated, so I did not put a figure there for that well.

- Q What are the pertinent things this exhibit shows, Mr. Stamets?
- A I believe that this isopach tends to indicate the pool limits. As you will notice, there are no Upper Penn productive wells—lying just inside the 100-foot contour, or outside. All wells located in this area have been dry holes in the Upper Penn section. Therefore I feel the productive limits will lie between the 100-foot and 200-foot contour lines.
 - Q What are the orange markings on the map?
 - A The orange markings on the map surround sections which I feel will more than likely be productive as the pool develops.
 - Q And this is based on information which you have at this time, is that correct?
 - A That is correct.
 - Q Do you see any particular structural trend here which you feel you should comment on in any way?



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- Oh, just that this porosity development seems to follow the base reef development, would be the size of it.
- Do I understand correctly that this is a gross feet of dolomite isopach, and not necessarily a gross pay?
 - That is correct.
- Do you feel that this would give you a fairly good Q indication of gross pay?
 - No, I would say it would be only a relative thing. Α
 - Relative? Q
 - Yes, sir.
 - Do you feel you could get some indication from this?
- That's right. In general--from the logs which are run in the Upper Penn section it's rather difficult to get the porosity figures. You get indications of porosity, but most of the time they don't give you exact figures.
- Do you consider this to be a conservative projection?
 - Α Yes, sir.
- Do you feel you have been conservative in making Q your estimate here?
 - Ä Right.
- Am I correct that you are not indicating that anyone that drills outside the orange limit is going to get a dry hole?

- A No, sir.
- Q All right. Please pass to Number 3, and please state for the record what Exhibit 3 is.
- Lime here. I have picked the top of the Morrow lime as shown in the example in the lower left-hand corner of the map. The sub-sea datum 4 of the Morrow top is indicated near each well. The map shows the Morrow lime dipping to the east and southeast at a rate of about 225 feet per mile. This is interrupted by an area of shallower dips in the center which takes the form of a bench. Also in the dashed blue line I have indicated the current horizontal limits of the Indian Basin-Morrow gas pool and, as on the previous map, the orange line indicates the estimated area where Morrow gas will likely be found.
 - Q You projected this on this contour map, contoured on top of the Morrow lime?
 - A That is correct. I have looked at this with the idea that the area between minus 4900 feet and minus 5400 feet will likely be a good area for exploration in the Morrow, but the deep continuous nature of the sands precludes reasonable extension of the pool limits beyond those I have shown on the map.
 - Q We don't have an isopach or gross pay map concerning the Morrow?

A That's correct.

Q Please state to the Commission why you did not prepare such a plan or map.

A I feel each individual sand would have to be worked up in this area. There are very few wells which are—which you can trace the sand from one well to the next, and it would be just a matter of isopaching maybe eight or nine individual sands in the area, which I don't believe would prove anything.

You don't feel that you have enough information available from a geological standpoint to prepare any type of interpretation that would be worthwhile?

A No, sir, I don't.

Q The orange, again, is your projected limits?

A Yes, sir.

Q And you're not stating that if you drill outside the orange you're going to get a dry hole, are you?

A No, sir; nor will I guarantee it if you drill inside the orange. But nonetheless I do feel this is a reasonable projection.

Q Were Exhibits 1, 2 and 3 prepared by you or under your supervision?

A Yes, sir, they were.

MR. DURRETT: If the Commission please, move the introduction of these three exhibits. That concludes my direct

examination of Mr. Stamets.

MR. PORTER: Is there any objection to the admission of the exhibits? The exhibits will be admitted. Does anyone have a question of Mr. Stamets?

CROSS-EXAMINATION

BY MR. SMITH:

I have a question I might ask Mr. Stamets. Direct ing your attention to Exhibit 2, I notice in the 100-foot marker which cuts to Section 28, down at the bottom--do you follow me?

> Yes, sir. Α

--It comes across diagonally through, going to the east?

> Yes, sir. Α

Through Sections 14 and across the bottom of Section 12, and cutting across the corner of Section 7?

Yes, sir.

For what reason did you eliminate Section 12 from Q

As our attorney questioned me on that point, we this area? were being conservative in this estimate.

In other words, it's just a guess as far as you're concerned -- you would have no objection to putting Section 12 into the productive limits?



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A If a well was drilled on Section 12 and a gas well was accomplished there, I certainly would have no objection.

Q Getting back to your original testimony, you have no objection to admitting this to include Section 12 within your own boundaries?

A My recommendation on that point is-was made up some time ago, and I do not wish to change my recommendation. I would not object if someone else would recommend section 12 to be put in, but I don't believe I will recommend that it be put in.

Q Isn't it your testimony that you consider anything between 100 and 200 feet to be reasonably proven to be productive, based upon the evidence you have before you? Wasn't that your testimony?

A Let's see how I would say that, exactly--

Q Well, perhaps you'd like to have the reporter read it back to you. Will you find that and read it back?

A I believe I said--at least I intended to say the cut-off point lay between 100 and 200, I did not say exactly where I felt it would be.

Q According to that testimony you could eliminate Section 11, by reason of that nose that cuts up in Section 3?

A It's possible, but I chose not to.

Q Actually you made an arbitrary selection, by

reason of this orange line, and you had no actual evidentiary basis, except being conservative, to fix it the way you did, did you?

I don't know that that's exactly a fair statement. In my opinion, I included Section 11 and I intend to leave it there.

In your examination, is all of this work--was all your examination of core analyses and logs, or did you get it from someone else?

As I stated to begin with, we do not have cores and do not have samples. This is information which is reflected in files of the Commission and from the logs which we have available in our office.

- Did you actually do the work yourself?
- Yes, sir.
- Or was it done under your supervision?
- It was done by me at the request of the Santa Fe office of the Commission.

MR. SMITH: That's all.

MR. PORTER: Mr. Morris?

MR. MORRIS:

When you were discussing Exhibit 2 and the features shown on that exhibit, was it your statement that the porosity in this area follows the reef portions of the structure?

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- A Tended to.
- Q There is greater porosity in the areas where there is greater reef thickness?
- A There is greater porosity where there is greater dolomite development in the reef area.
- Q Have you attempted to make any computations concerning the reserves in this pool, or reserves under the particular tracts in this pool?
 - A No, sir, I have not.
- Q Concerning Exhibit 3, Mr. Stamets, you stated that you had insufficient evidence from which he prepare an isopach of the Morrow lime. Are you convinced that this pool is one common source of supply?
- A No, sir. -- Well now, let me take that back. Let me say that there are discontinuous sands in the Indian Basin-Morrow gas pool. I wouldn't be one hundred percent prepared to say that they were not connected in some way, shape or form, but I feel like an adequate analysis of the Indian Basin-Morrow pool would take an individual analysis of each individual sand member on its own.
- Q You could not state as your opinion that the sands in this area comprise one common source of supply, is that correct?
 - A I could not.

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MR. MORRIS: Thank you-that's all.

MR. PORTER: Does anyone else have a question of Mr. Stamets? ... He may be excused. Call your next witness, Mr. Durrett.

(The witness the gupon was excused and withdrew from the stand.)

MR. DURRES

Ramsey.

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DIRECT EXAMINATION

BY MR. DURRETT:

Mr. Ramsey, please state your name om you are employed and in what capacity, for the cord.

Jack Ramsey, with Natural Gas Pipeline Company of Α I am superintendent of production operations. America.

- Where are you located? Q
- Amarillo.
- Mr. Ramsey, are you familiar with Natural Gas Pipeline's plans concerning the Indian Basin field in Eddy County, New Mexico, and the purchase of gas from this area?
 - Yes, sir.
 - Would you please state to the Commission the number Q



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of wells that you anticipate will be connected to your system when it is ready to go.

Well, we're going to buy gas from the plant. We're not going to actually connect the wells; they're going to be gathered and brought to the plant. Right now twenty wells are drilled within the contract area. Seven of these wells are dual. I would say it's a reasonable estimate that there will be somewhere between forty and fifty wells completed on the acreage committed to Natural when it is fully developed -- that's just an estimate.

Now, Mr. Ramsey, if you would please direct your Q attention to this Exhibit 4, which is designated as an area map. Can you see that from where you are?

> Yes. A

Would you please state whether or not this map indicates the acreage that you will be committed to; and let me state for purposes of this question that this map has been prepared to indicate the acreage that Southern Union actually -- the cross-hatched acreage is Southern Union. Can you state whether or not that correctly portrays the acreage as committed to your system?

That's the general area, yes. I have a little map here which shows the 73-section contract area that lies all in Eddy County, in Range 22 and 21 South, and 23 and 24 East,



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of Eddy County.

Q This is your contractual area?

A That's right. This is the exhibit on our contract with the Indian Basin producer.

Q Could you approach the area map we have here as Exhibit 4. Let me give you a colored pencil, and would you please color or draw on there the area, in some manner, so we can identify it.

A Well, let's see. I've got two different deals here now. 21, 20, going down to 19; going over here to 12, and then going up here. What is that—13? And then it comes up here. And what is that—is that 12? Back down to 13, and it goes out over here to—what is that? Can you read that?—15, and down to 16. There it is.

Q Why don't you make a wiggling mark of some type so we can be sure of seeing it.

A I don't know whether you can follow that or not-I hope so.

Q You have indicated with a red pencil on this area map marked Exhibit 4, the area you will be contracting in?

A Yes, sir.

MR. PORTER: Would you stand over here, please, and take the pointer and outline for the people in the audience the contract area.



(Indicating) A

- How much acreage is that, if you have this infor-Q mation available?
- There's 39,481 acres within that area I outlined, dedicated to Natural Gas and Pipeline Company.
- Q Please indicate to the Commission the number of wells you have contracted for or are going to contract for that you know about, in split connection?
- To the best of our knowledge there are now four completed wells in this area--that is, within Natural's contract area, where there is a dedication to another pipeline. These wells are located in Section 19, 21 South, 23 East. We have 53% of that acreage dedicated to Natural. The well in Section 20, 21 South, 23 East--87% of the acreage in that section is dedicated to Natural. Section 19, 21 South, 24 East--69% in that section is under contract to Natural. Section 31, 21 South, 24 East--121/2% is under dedication to Natural.
- Please refer to Exhibit 4 once again, and on these Q various sections -- you're speaking of acreage?
 - That's correct.
- I realize the audience can't see it from that distance, but please indicate on there the percentage, by writing with a red pencil on each section the percentage

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committed to your company; and as you do so, maybe you could read it off again.

A 53% in Section 19, 21 South, 23 East. In Section 20, 21 South, 23 East, 87½%. In Section 19, 21 South, 24 East, we show that we have 60% under contract to Natural; and the next one is Section 31—we have 12½%.

Q Thank you. As far as Exhibit 4 goes, would I be safe in assuming that any other figures that appear on this Exhibit other than the ones you wrote with with red pencil, your company would not agree with?

A Well, according to our records this is what we have, as shown by exhibits to each of the contracts. So if there's anything any different, I wouldn't know how they arrive at it; but everybody can make a mistake; but this is what our records show that we have under contract.

- Q As you have marked with red pencil on Exhibit 4?
- A Right.
- Q Would you just very briefly state to the Commission the basic provisions in your gas purchase contracts you are executing.
 - A Within that contract area?
 - Q Yes.
- A Well, under the contract provisions, the first year Natural will be obligated to take 100 million cubic feet

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of gas per day, averaged over the first year. Then after the first year our take will be one million a day for each eight billion of recoverable gas reserves. The present contract provides the normal quality specifications, and other items—the price is sixteen cents, adjusted for BTU. There's a lot of other provisions, but I think those are the pertinent ones—the takes and the price.

Q Do you have with you a gas purchase contract we could introduce here as an example of the type you are using?

A I tell you what—when we came down here we brought a contract, but it was an executed contract with one of the independent producers, so I tore the first page off the contract. I didn't mind it having our name on it, but I didn't want the other party's on it, and I tore the last page off, which is the execution page. I certainly have no quarrel about giving you the contract or mailing you one of our blank ones, with all the provisions, but I just didn't feel I was authorized to give you a contract with someone else's name on it.

Q With the exception of the first and last pages, we would have a pretty good idea of what your contracts are, from this?

A Yes, and the first and last pages don't mean too much—the execution page does; I was thinking of the first page—the "whereases."

(Exhibit 4A thereupon marked.)

MR. DURRETT: Is this Exhibit marked 4A which I hand you, that contract, less the front and back pages we've been discussing?

- Right.
- Please also fill us in just on the basic provisions of the swab agreement or trade-out agreement with Trans-Western, and give us a little background on that.
- The background I think everybody is familiar with. Trans-Western has filed a so-called competitive application to ours.
 - That's with the FPC?
- With the FPC, right; so therefore while we are continuing to fight the matter out before the FPC as to who has the right to take gas out of the Indian Basin area and other gas facilities bought from the State of New Mexico. We are entering into a temporary agreement with Trans-Western Pipeline for the exchange of up to 130 million cubic feet of gas per day. The gas which you see in this Indian Basin area, Natural will build a line from that area to Trans-Western Pipeline, some thirty miles, still in Eddy County, New Mexico. We will deliver that gas along with some gas up in Russville County, the Bluett area. That gas will go into the Trans-Western system without too much to do. The agreement is for

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terms something like this, after certificates have been issued by the Commission and have been accepted and facilities have been studied--then it will continue on a day-to-day basis until such time as matters now pending before the FPC are determined. And the agreement is, of course, a matter of public record, and we have made it available to a lot of people already, but the agreement provides in part that we will pay Trans-Western a fee for performing this service. The Ree, if anybody is interested, I think is 2.4 cents plus--do you want to take time for that? Do you want to know what the fee is the going to charge us? It's \$59,000 a month plus million cubic feet.

- Do you have a copy of that agreement that you could leave with us as an exhibit?
- Yes, sir. This is executed by Trans-Western and Natural; and I won't tear the back page off that one.
- Would you just hand that to the reporter. -- I hand you what the reporter has marked Exhibit 4B, and ask you if this is a copy of the agreement you were just talking about, with Trans-Western.
 - A Yes, sir.
- Q Will you please state to the Commission your anticipated date of connection.
 - Α December 1, 1965.



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And what will be your anticipated take from each Q pool?

Well, during the first year, as I mentioned a minute ago, 100 million gas per day, and that will be divided during the first year, 10% to the Morrow formation, and 90% to the Cisco. I call it the Cisco; I believe the other gentleman called it the Upper Penn, but we refer to it as the Cisco. Now, after the first year it will be strictly on the basis of one million per day for each eight billion cubic feet of recoverable gas reserve.

- As for your anticipated connection date, that's what you project at this moment--December 1st, I believe you stated?
 - That's right.
- And that would depend upon getting approval of the Trans-Western exchange with the FPC, and I suppose several other factors?
 - That's right--there are other matters.
 - But that is the date your company is projecting Q at this time?
 - yes, sir.
 - What would be your market for gas from each pool? Q
 - Our market is primarily the Chicago metropolitan area. We have other areas in Iowa and Nebraska, but prin-

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cipally our market is in the Chicago metropolitan area.

- Is your company anticipating that this market would increase in the near future?
- It has been increasing each year, and we hope it can continue to do so. I don't have the figures on it but I would be happy to supply the Commission or anybody else with the growth we have experienced in the Chicago metropolitan area. I don't have those figures with me but I would be happy to furnish that if desired.
 - That would be a gradual growth?
- Yes, year-to-year growth, as to the increasing amount of gas supplied by our pipeline to the growing marketyes, sir.
- MR. DURRETT: I believe that's all I have of Mr. Ramsey on direct. I would move the introduction of Exhibits 4A and 4B.
- MR. PORTER: Is there any objection to the admission of the exhibits? ... They will be admitted into the record. Does anyone have any questions of Mr. Ramsey?

CROSS-EXAMINATION

BY MR. SMITH:

- Mr. Ramsey, isn't there a minimum taker pay obligation in the contract?
 - Α You bet.



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- Q What are its terms?
- A The minimum taker pay is 100 million a day for the first year, that we have to take or pay for.
 - Q One hundred million a day for each well?
- A No--I'm talking about per day, for the entire contract area.
- Q Under the contract provisions what are the minimum taker provisions for each well--for each producer?
- A This 100 million will be distributed to each of the wells in the pool. They will get their pro rata part of the 100 million a day.
- Q How many wells do you anticipate will be connected on the 1st of December?
- A I don't know. You'll have to ask the producers who drill them.
 - Q You testified--
- A There's twenty completed now that are dual, and when the field is fully developed we think there will be forty to fifty on our contract area.
- Q Have you projected as to December 1st as to how many wells you think may be completed at that time?
 - A No, sir.
- Q Based on twenty wells and 100 million a day, how much gas would you be taking from each well?

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Five million a day from each well.

That's right, as of 1 December? Is this contract with the producers activated or will it be activated on 1 December, by reason of this trade-out arrangement with Trans-Western?

Yes.

So that the producers will be adequately protected on 1 December on the basis of the minimum taker provision, or actual takes?

I don't understand the question.

In your opinion, don't you think there is adequate contractual provision for protection of the producer by reason of your guarantee to pay them for produced or actual takes as of 1 December?

I'm having a little bit of trouble--I'm sorry--Α understanding the particular question. Are you saying that come December 1st when we start taking gas--on December 1st under the contract provision the producer is going to be paid certain amounts of money--that's true.

Is there a recoupment clause in your lease contract whereby if you pay for more gas than is taken, you can make it up at a later date?

> Yes. Α

Over what period of time does the recoupment Q

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extend?

A Five years, I believe. Some of them are the life of the contract, I believe; some of them are for five years.

I don't have all the contracts here; I don't know.

MR. PORTER: Does anyone else have a question of the witness?

BY MR. MORRIS:

- Q Mr. Ramsey, is it a provision of the contract that each producer must deliver into your pipeline at 1,000 pounds pressure?
 - A Each one?
 - Q Yes.
- A The producer from the plant? Is that your question?
- Q --Must deliver into the pipeline at 1,000 pounds pressure?
 - A I believe most contracts say that, yes, sir.
- Q Has 1,000 pounds pressure been used by your company in calculating the abandonment pressure for purposes of reserves?
- A I couldn't tell you one thing about that--I'm sorry--I know nothing about how they calculate reserves.
- Q Under the terms of your contract are you obligated to take the allowables that are assigned to the wells by this



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Commission?

- No, sir. Α
- Under your contract do you guarantee to nominate any particular amount of gas?
- Consistent with the terms of the contract, yes, sir. In other words, each contract quantity is from one to eight. We will nominate consistent with the terms of the contract.
- There would be nothing to prevent you from nomi-0 nating more than that amount?
 - In the contract?
 - Yes, sir.
- I wouldn't think there would be, in any particular one month, or just any time.
 - Over any period of time?
 - I think so.
- If you wanted to take more gas you could set up your nominations, right?
 - Set them up?
- Yes-increase your nominations to reflect your projection of your current market demand?
 - I would think that would be true.
- MR. MORRIS: If the Commission please, I have other questions of this witness, but in order to cooperate

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with Mr. Durrett's original suggestion that we not go beyond the scope of direct examination, may I ask that Mr. Ramsey be made available later on in this hearing after the conclusion of the Commission's case, at which time we would wish to call him as an adverse witness.

MR. DURRETT: I have no objection to that procedure. I'm sure Mr. Ramsey will take the stand as an adverse witness.

MR. RAMSEY: I just wondered--have I got any voice in that?

MR. COUCH: Terrell Couch from Marathon. wish to be understood as concurring in any commitment that this man can be called as an adverse witness, by Southern Union or anyone else. I think it would depend upon the nature of the testimony they sought from him and the position they had before this Commission, as purchaser or otherwise; and I'm not going to concur here--in fact, I would request that the Commission not make a commitment of that sort, other than that Mr. Ramsey will be available in town.

MR. SMITH: May I suggest also that the use of the term "adverse witness" might not be what you're looking for. I think probably as far as Mr. Morris is concerned, he would hesitate to call a stranger as a witness, and be bound by his testimony.

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. . . MR. RAMSEY: And I don't know if I want him asking me questions.

MR. SMITH: May I suggest to the Commission, since we don't have inflexible rules, that he may be called as a witness without the person who calls him being bound by his testimony.

we get to it, if we get to it. Mr. Ramsby, I'd like to see if I can clarify your answer to the question Mr. Smith asked you with regard to the effective date of your contract. You said that as of December 1st you were obligated with your contracting parties either to commence the taking of gas or commence payment for it, under the terms of the contract?

A No, sir. What I meant to say in answer to his question, and I hope I did, was that come December 1st and as Trans-Western starts taking--we move gas from Indian Basin to Trans-Western, then our contracts are placed into effect and we are bound by the terms of the provisions thereof, including minimum take or pay, and all the other provisions.

Q But the question of whether Trans-Western begins to take at that time, of course, depends upon the action of the Federal Power Commission?

A Yes, sir, it does. Are we going to resolve this other thing? I was thinking about going home.

MR. MORRIS: I have a few more questions--let me

Is this going to take the place ask a couple more, if I may. of your other suggestion? Let's try to dispose of that, if we can. I'm sure Mr. Ramsey is not reluctant to answer pertinent questions. Why don't you try?

MR. MORRIS: With reference to the contract that-from which you removed the front and back pages --

Would you refer to page 17 of that contract and Yes, sir. tell me whether that contract has the following language in it, under what would be paragraph 13, Article Five.

On page 17?

Well, maybe yours isn't numbered the same way mine Would you refer to Article 5 and paragraph 13.

Yes, sir. I'd like to know if it reads this way: shall have the right from time to time, and only so long as such condition prevails, to sell and dispose of any gas which in its judgment. exercised in good faith, is necessary to prevent migration or drainage from any lease hereunder, after first offering to Pipeline the right, to be exercised within ninety days after receipt of written notice of the quantities involved and an explanation of the existence and amount of



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drainage, to purchase such gas hereunder, in addition to the quantities herein provided."

- A Yes, sir.
- Q Is that the customary provision in all your contracts?
- A I wouldn't say all of them, but it's a customary provision. I wouldn't say it's in all of them.
- Q You said that your company is paying seventeen cents--sixteen Cents & million cubic foot for this gas?
 - A Yes.
- Q Is rat price at the wellhead or tailgate of the processing plant?
 - A At the line.
- Q This price is subject to Federal Power Commission approval?
 - A Yes, sir.
- Q You're not assured of that being approved, are you?
 - A What?
 - Q The sixteen cents per million cubic feet?
- A I'm not really sure of anything. As far as the price is concerned, we think it will be approved, based upon recent acition of the Commission. We think it's a reasonable --more than a reasonable chance that it will be approved, yes,

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sir.

- Likewise, all of the escalation provisions of the Q contract will be subject to future FPC approval?
 - Yes, sir.
- Mr. Ramsey, if you were purchasing gas at the Q wellhead and after mechanical separation, would you still be willing to pay sixteen cents per MCF for this gas?
- I don't know--we just look at any deal offered to us at the time. It may be worth twelve cents or seventeen cents, or worth something else. I couldn't speculate on what the gas would be worth until we got interested in a piece of gas and tried to buy it.
- Does your company have any monetary interest in the gathering facilities to be constructed in this area, or the construction of the gas gathering or gas processing facilities?
- You're talking about Indian Basin--do we have an interest in the gathering system to be constructed by the producer, and the plant to be constructed? Only that we hope it will be built -- we don't have any monetary interest in it.
- Mr. Ramsey, it will come up a little bit later, I'm sure, in this hearing, whether the Commission is going to assign allowables to wells that are now shut-in; and in that connection I would like to ask you, as a pipeline company, as



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to whether it really affects your projections of the gas you are going to take from this pool, as to whether the Commission grants that relief or not.

A Would you read that question back.

MR. DURRETT: If the Commission please, the question goes outside the scope of direct examination-goes outside the scope of the case, as far as what is in the record now.

GOVERNOR CAMPBELL: What is the purpose of this line of questioning?

MR. MORRIS: The purpose of this line of questioning, Mr. Chairman, is to show that regardless of what action the Commission takes upon this particular point, the purchaser's market demand—reasonable market demand is something that's going to be existent from month to month, and from six months to six months, independent of how the Commission assigns allowables; and if this purchaser wants to help out the producers that are connected to its line, it can merely, when the time comes and the connection is made, increase its market demand or its nominations of market demand, and take as much gas as they are able to take; and the problem that is before the Commission with respect to assigning allowables to unconnected wells is largely rendered moot, due to the manner in which the producers operate. The producers have a limited

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market demand, and they're going to fulfill it when the time comes, and that's going to be reflected in the nominations they make to the Commission, or can be; and that is the purpose of this line of questioning.

MR. DURRETT: If the Commissioner please, I renew my objection to the line of questioning, and state that if Mr. Morris wants to establish these facts he should call a witness of his own--I'm sure he is representing a gas company or two today--and establish what will or will not be done by his witness, so he can be bound by the testimony of his witness. This is outside the scope of the direct examination.

MR. MORRIS: If I might make one further observation—what's going to happen on down the line is very much a question of what this particular purchaser is going to do; how this particular purchaser intends to nominate, how this particular purchaser can handle the problems of its own producers. I realize this is going beyond the scope of direct examination, but I'm just trying to cover some of the areas now that I would like to cover with Mr. Ramsey. I don't think I can cover them satisfactorily with any other witness.

GOVERNOR CAMPBELL: You have the contractual provisions here; you have the provisions of this contract. I can see where you can examine him on the subject matter in the contract, but beyond that it seems to me you're definitely

outside the scope of the examination--and the scope of the hearing, it seems to me, at this point in time.

MR. MORRIS: I would agree with you, Mr. Chairman—this line of questioning is a little bit ahead of the statement of the problems that's going to come later, through Mr. Engle.

I'm just trying to handle Mr. Ramsey at this time without having to recall him.

GOVERNOR CAMPBELL: Would you read the question to the witness, please.

REPORTER: "Question. Mr. Ramsey, it will come up a little bit later. I'm sure, in this hearing, whether the Commission is going to assign allowables to wells that are now shut-in; and in that connection I would like to ask you, as a pipeline company, as to whether it really affects your projections of the gas you are going to take from this pool, as to whether the Commission grants that relief or not."

GOVERNOR CAMPBELL: Can you answer the question?

MR. RAMSEY: I'll see if I can-that's a pretty long question, but maybe I can answer. Our projection is that we're going to take 100 million a day, starting with the first year of operations. That's the minimum obligation-we're going to take or pay for that, and then after that it goes on the basis of reserves, one million a day for each eight billion cubic feet of gas. I don't even know what the reserves



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will be, so I have made no projections as to that--if that answers the question.

GOVERNOR CAMPBELL: You say you intend to comply with the contractual obligation?

A You bet.

GOVERNOR CAMPBELL: Does that answer your question, Mr. Morris?

MR. MORRIS: Yes; and coupled with your earlier answer, you're not bound or limited to that amount--you could nominate--

A Overrun the contract. I think I stated we had the right in that contract, yes, sir--that's a part of the contract.

MR. MORRIS: I think that's all the questions I have.

MR. PORTER: Anyone else?

MR. SPERLING: I am J. E. Sperling. I'd like to ask, Mr. Ramsey--you stated you anticipate being able to take gas by December 1, 1965?

A Yes, sir.

Q Would you explain to us the status of your company's application before the Federal Power Commission, both with relation to Trans-Western's contract and with relation to your application to install facilities or take gas from

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this pool.

I'm no lawyer, but I'll try to. We filed an application to build this land on the Permian Basin; it's set for hearing in May, and it's a consolidated procedure which involves Trans-Western, et al, so that will go forward from that point. As to the temporary arrangement to haul gas through Trams-Western facilities by us building a line from the Indian Basin to Trans-Western, some thirty-eight miles, we have made application with the FPC. That was made a couple weeks ago--I don't have the date, and Trans-Western has also filed their part of this deal, so that they have to have a certificate and we do too, so those matters are before the Commission, if that answers your question.

In other words, you are making the prediction that the FPC will have you fully certificated as of December 1st, without having an assurance that you will be?

We are projecting to run gas out of the field on December 1st, yes.

But the question was, you're making the prediction without having any idea when action might be taken by the FPC on the application?

We made a projection that we will be certificated to run gas out of the Indian Basin by December 1st, so that would include the action required.



- Q I'll put it another way. Is the Federal Power Commission committed to December 1, 1965?
 - A I don't know that they are committed to anything.
- Q Is Trans-Western opposing what we'll call the main application of your company?
- A The Permian Basin extends past the building of the 250 miles of line from the point up around Stinnet, Texas to a point in the Indian Basin, yes, sir.
- Q But they are supporting you in the temporary application?
 - A They have filed their application, yes, sir.
- Q Is the opposition based upon duplication of their facilities by what you project in the main case?
- A It's quite tenethy, their application is, and
 I would say their opposition is to the building of that portion
 of the line.
 - Q As a duplication of an existing facility?
- A No, it wouldn't be a duplication. Ours is not a duplication, no, sir.
- Q What is the status of your company's certification insofar as your market area is concerned?
- A It's all in this hearing that will be started, as I think I said, May the 25th. I think the hearing has been set for that date, so it's all in there.

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS. EXPERT TESTIMON

Q But the expanding market you spoke of earlier-that is, your servicing of that market, is also dependent
upon future certification by the FPC?

A Let's have that one again.

GOVERNOR CAMPBELL: He's asking if you need to get authority both to receive gas from the producing field and buy it, and to sell it at the other end.

A I think you'd have to ask a lawyer. I don't think this last temporary arrangement is contingent upon any market certification, but I may be wrong about that.

MR. SPERLING: Is it your understanding that the producer contract you testified concerning would become effective in the event of certification, upon a temporary basis?

- A Yes.
- Q What do you mean by "temporary"?
- A I think it's styled "temporary agreement"--I may be wrong.--The agreement is styled "Agreement for Temporary Exchange of Gas."
 - Q For what period of time do you anticipate that this would be in effect?

A It will start when we have got certification.

The term of it is, it goes from day to day and terminates—
well, let's state it this way: It will go from day to day
until matters pending before the Commission are determined.



Those matters pending are our application and that of Trans-Western, which are filed, and the two docket numbers I don't remember offhand.

- Q And both are to be heard in May?
- A I don't know about the last one. We just filed the last one a week or so ago--the temporary agreement was just filed a couple weeks ago. I don't think any action has been taken; I'm not aware of it.
- Are you making a prediction, as you have made insofar as the December 1st date is concerned—are you making a prediction as to when action might be taken on the temporary certification? You have guessed as to the December date—are you guessing as to a date on the other one?
 - A I can't give you any date.
- Q Do you anticipate that it would be before December 1, 1965, or after?
 - A It could be. I just don't know.
- Q Is it your best judgment that it would be before December 1, 1965?
- A I would like to make no predictions beyond what we said as far as running gas.
- Q You have chosen to make a prediction as to one contract, and chosen not to make a prediction as to the other one?

- I just don't have that information. I don't follow FPC matters that close.
 - You don't?
- Not every day, no. I don't follow it from day to Α
- What is the obligation of your producers presently day. under contract, insofar as those contracts are concerned? After December 1, 1965 are they bound by those contracts in the event you are not taking gas at that time?
 - December 1st?
 - res. Q
 - Are they bound by the contract?
 - Q
 - Are they bound by December 2nd--would that be what you're saying?
 - What I'm asking is if you are not certificated by December 1, 1965, are your present producer contracts effective insofar as those producers are concerned?
 - Yes.
 - They are not subject to cancellation? Q
 - They have cancellation rights in them, yes. Α
 - There may be the date, December 15, in your contract. Would you refer to the contract.
 - If I can find it.

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Q The provision to which I am referring is found in paragraph 3.

A Yes, sir.

Q Would you read that.

A "Anything to the contrary in this contract notwithstanding, should the above referred to certificate
authorizations of Pipeline and Seller be not issued and accepted
within twelve months from the date on which the aforesaid applications for such authorizations were filed, either party
hereto may, on thirty days! written notice to the other party,
given prior to the issuance and acceptance of such authorizations, cancel and terminate this contract." So I believe
we filed on December 11th, and within thirty days there can
be this cancellation provision as stated in paragraph 3.

MR. PORTER: Does that conclude your questioning?
MR. SPERLING: Yes.

GOVERNOR CAMPBELL: What happens to your exchange agreement in the event your application is denied? You say the temporary exchange agreement is binding until such time as a decision is reached by the Federal Power Commission?

A Yes, sir.

GOVERNOR CAMPBELL: What is the situation in the event the Federal Power Commission decides the case adversely to you, and denies you authority to contract the longer

NEW MEXICO

pipeline?

А Trans-Western I presume would be allowed to haul this gas under their competing application, which are the two applications referred to.

GOVERNOR CAMPBELL: They have likewise sought authority, in addition to objecting to your obtaining approval of the application?

Yes, they have filed such an application, and they want to haul this gas for us.

MR. PORTER: Are there any other questions of this witness? ... He may be excused.

(The witness thereupon was excused and withdrew from the stand.)

MR. DURRETT: The Commission will call Mr. Oren Hazeltine.

OREN HAZELTINE, the witness, having been duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. DURRETT:

Will you please state for the record your name, by whom you are employed and in what capacity, and where you are located.

My name is Oren Hazeltine; I work for Southern



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Union Gas Company as manager of gas supply. I am located in Dallas.

- Q Mr. Hazeltine, Southern Union intends to purchase gas from the pools we have been discussing here today, is that true?
 - A Yes, sir.
- Q And how many wells do you think will be connected to Southern Union?
- A Initially we intend to connect four, two of which are dual, and ultimately there will undoubtedly be others; but initially there will be four wells.
- Q And then you anticipate additional wells in the future?
 - A Yes.
- Q Would you please approach Exhibit 4 which we have up here on the board, which is designated "Area Map," and state if the hashered area marked in there is the acreage that is committed to Southern Union at this time.
- A You have drawn in on this thing some legal subdivisions, and I have committed to memory the legal subdivisions. I can testify to the interest in each section, which ought to be adequate.
 - Q I think that will be sufficient.
 - A All right--let me get some notes.

TESTIMONY, DAILY COPY, CONVENTIONS

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While you're doing that, Mr. Hazeltine, will you please call out the section you're pointing to, so the people here will be able to follow you.

Yes, sir. Beginning over here in Section 19 of 21 South, 23 East, our understanding is that we have 100% to payout, and after payout we will have either 25% or 50%, depending on what happens to the forced pooling thing you continued this morning; but we understand we will have 100% until payoff, and then we will drop to the range of 25% or 50%.

Let me interrupt a moment. This acreage you are speaking of, is that in Section 19?

- Yes--19 of 21 South, 23 East.
- And an application is now pending before the Commission to compulsorily pool that acreage?
 - I saw it on the docket.
 - Fine. Will you continue.
- Now then, in Section 20 of Township 21 South, 23 East, I believe we have 25.6% of this until payout, and 12.8% after payout.
 - Is there a figure on that map for that acreage? Q
 - Yes, he has 87%. That corresponds pretty close Α to what I think we have.
 - Are you speaking of the figure Mr. Ramsey wrote? Q
 - Yes. A



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O Do you correspond with him on the first section there, 19?

A Well, if he's talking in terms of before this forced pooling is settled—if he's talking in terms of 53% of that entire section—according to my figures it's roughly a quarter of the section. Then you have here in Section 19, 21 South, 24 East—I think we've got 40 to 45%, around that, of that. Now, he has 69% there. Until division orders are signed we don't really know. Once division orders are signed, as far as we're concerned those would be the title.

Q Let me hand you a green pencil. Please mark on Exhibit 4 your interpretation or your company's standpoint of how much is committed to your company.

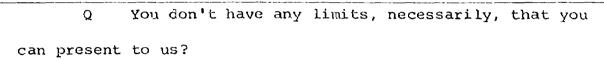
A I'll mark "100% UPO"--that's until payout, in Section 19 of 21-23, and then 25 or 50% after payout, and that's pretty close, in Section 20. Let's call it--that's Township 21, 23--I'd say 25% until payout and 13% after payout. In Section 19 of 21-24 I think we've got 40 to 45% here. In Section 31 of 21-24 we've got in the neighborhood of 80 to 85%, which, judging from Mr. Ramsey's number, leaves maybe 7½% not contracted. Again, I don't really know until we get division orders. And in addition to that, we have some contracted interest in Section 17, 21 South, 23 East. Our interest there does not become available until after payout,

so we have zero percent until after payout, and after payout I think we will have around 25% of Section 17, 21 South, 23 East.

- Is there a well there now? Q
- Yes.
- So that's another split connection, so to speak? Q
- I hope not. A
- It will be split after payout only? Q
- Again, I hope not. We do not have a split con-A nection there yet, and I hope we never get one.
- And you have marked your company's interest in the acreage as far as acreage goes, on this Exhibit 4, with a green pencil?
 - Yes. Α
- Now, as far as the hashered area goes, being Q sections, quarter-sections, et cetera, you don't necessarily know that this is the particular acreage, but the percentage is what you're testifying to?
 - That's correct. I don't have the contracts with me to check the exact subdivisions.
 - Do you have an area you are contracting in, similar to what Mr. Ramsey testified to?
 - No, sir. We're just contracting in the productive area.



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- No, sir.
- Could you please state to the Commission the basic provisions of your contracts with the producer.
- First of all, the two most important things from the producer's standpoint are guaranteed take--we guarantee to take during 1965 two million per day for each full 640 acres. That is netted down in the case of these partial contract coverages. For the years 1966 and 1967, which is an eight daily minimum, it would be three million per day for each 640 acres, and at that time we go on a one to eight basis, one million per day for each eight billion recoverable reserves available to us.
 - That is after what date?
 - December 31, 1968.
- Basically that is what your contractual provisions are?
- I forgot what I was going to tell you. The price we pay is fifteen cents at wellhead on metered volumes. We have one-cent escalation each five years; the first escalation is November 15, 1969. We have a quality provision which is typical for wellhead purchases, in that it doesn't have to be pipeline quality--let me see if I can find that here:



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"Shall be commercially free from liquid substances and have a minimum gross heating value of 950 British Thermal Units per cubic foot."

- Q Is that which you have in your hand an example of the type of contract you have been executing?
 - A Yes.
 - Q Could you leave that with us as an exhibit?
- A Yes. I might add that it's hard to say where to stop on basic contract provisions, but deliveries are to be made at pressures not to exceed 600 or 650--I forget which one got into that contract--PSIG; and there's a favored nations clause in the contract. I think that's basically what's in it.

MR. DURRETT: I ask that this be marked Commission's Exhibit 4C. Now, Mr. Hazeltine, what is Southern Union's anticipated date of connection in this field?

- A The pipeline is under construction. I think 45 days, maybe 60.
 - Q From now?
 - A From now.
- Q And you say you have started on construction of the pipeline?
 - A Yes, sir.
 - Q How far have you progressed?

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Not very far. The actual dirt moving operation is underway now, but of course all the right-of-way and survey work was back of that, so physically the pipe is purchased, has been wrapped, and we are waiting on the contractor now to get the ditch open.

- And the 45 to 60 days -- that would be your earliest anticipated day, is that correct?
 - ves. Α
- And your market now will be an intra-state market Q for this gas?
 - That is correct.
 - What will be your anticipated take from each pool? A Q
 - We will anticipate around ten million a day initially, and that will probably go on up to around twenty over the next two or three-year period. These takes I gave you out of the contract are from the Cisco or Upper Penn. In addition to that, we have agreed to take five hundred per day out of the Morrow, where the Morrow is completed.
 - That is, where the wells are dualed?
 - Yes.
 - Five hundred out of the Morrow in those wells? Q
 - Yes. Α
 - And you think your take as far as your demand when you originally connect and start producing, would be



ten million a day?

A I think that's the figure we've been using. I think that's about right.

Q can you state, if the Commission does decide to proprate this pool, that you anticipate that that would be your nomination for the first month?

A Our nominations will be precisely what we expect to take. Based upon my guessing now that we take ten, then we would nominate ten.

Q Where is your market?

A This gas goes into Lea and Eddy Counties, and up in Chavez County.

Q And that is an area you are presently not servicing now?

A Oh yes, this is an existing market area for us.

Q Do you feel you do have a demand for an additional ten million in that area?

A We have some short-term gas that could be cut off on sixty days' notice. We have some high-pressure gas we can get out from under, and we have some declining wells. We are not short of gas. We served last heating season without Indian Hills--this is just part of our continual practice of buying gas to meet our present-day need and future need. We didn't suddenly develop any load that re-



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quired us to rush to Indian Hills and buy that gas.

- Q This is not necessarily a new market?
- A No.
- Q And you anticipate twenty within two years?
- A Yes
- Q And that would be a gradual incline as far as your company projections?
 - A Yes.

MR. DURRETT: If the Commission please, that will conclude my direct examination of Mr. Hazeltine, and I would move the introduction of Exhibit 4 and Exhibit 4C at this time.

MR. PORTER: Are there any objections to the admission? They will be admitted.

CROSS-EXAMINATION

BY MR. PORTER:

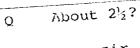
- Q You say your estimated initial take will be about ten million per day?
 - A Yes, sir.
- Q Also you expect to take two million per day from each full 640 acres?
 - A Yes.
- Q How many full 640's do you have at present, adding all these fractions?
 - A Around $2\frac{1}{2}$ net 640's, in both the Cisco--



EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

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Yes, sir. A

Then your initial take, in order to reach ten million, would have to exceed two million per day for the 640

We will take some Morrow gas along with this. That ten million a day will include Morrow gas, so I think there will be about a million a day out of the Morrow.

And then you would have about five million from one source and one million from another. Where is the rest coming from?

We are not limited to that four million a day, if the producer tenders it.

MR. PORTER: All right. Are there any other questions?

MR. COUCH: You have given us some percentage figures, and to try to get clear in my mind, are those percentages of acreage in the sections you have given up there, on your Exhibit. 4?

Yes, those are percentages of the particular sections we are referring to.

Percentages of acreage in the sections that are committed to your company?

No, percentages of the section. The section is the drilling and prorating and spacing unit, and some sellers



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sign a contract that offers their interest in a section to those referred to subdivisions that contribute to that particular drilling unit. What I'm talking about here is the percentage of that 640 acres.

- Percentage of the 640 acres?
- Yes.
- Or are you talking of percentage of production from the well?
- When you're talking about before and after payout --I'm not sure what would be the precise answer to your question in a case where we have twice as much gas available before payout as we do after payout. It simply means there was a carried working interest not under contract to us, and people who are non-carried working interest have had the right to sell gas from that acreage.
 - Your percentage figures relate to the percentage of gas reduced from that, since you understand your company has a right to take?
 - That might be a more precise way of stating it; that's right.
 - Would that apply on current production -- that is, a certain percent of the current production of the well?
 - No, sir. We have tendered a contract to buy and the producer has offered to sell his interest in the gas



available in that unit. It has no reference to current production.

- What does it have reference to? Q
- Basically, his share of the reserves in place.
- But you say it's not related to current production?
- Not necessarily.
- Is it your intent from some of these sections where you said you had less than 100%, to purchase, if proration is put into effect, your percentage of the allowable of that well?
- We have not contracted ourselves to purchase any particular percent of any allowable.
- I was just asking whether that percentage figure you had given means you would purchase within the limits of your contract, that percentage of the current allowable of the well, if it were prorated?
- That's the problem of the producer, as to what he is going to tender us. He's got to reach a decision as to how to stay in balance with his co-owner--that's his problem. We have offered to come to the well and buy his share of that gas.
 - And whenever it can be made available?
- There are certain contract obligations on his part, also on our part, with respect to when it is to be made available or to be taken.
 - You stated you had a guaranteed take in your con-Q

SPECIALIZING IN: DEPOSITIONS, HEARINGS,

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tract. Does that have a reciprocal provision of take or pay, or does it have an absolute take obligation?

- A It's a take or pay.
- Q How long do you expect to nominate ten million a day from these two pools, once you start?
- A It's hard for me to say exactly. I would say we will probably start out in the area of ten a day, and within three years we will probably be in the area of twenty a day.
- Q Do you have any estimate as to when you would increase above the ten, starting from the date you first began taking gas?
- A It would be pretty hard. I would say the next heating season we would go up, at least during the heating season. Whether or not we would continue would depend on a lot of things.
- Q Is it possible that you would be nominating as much as twenty million a day by this fall?
 - A Oh, I would say it's possible.
 - Q Do you consider it probable?
 - A No, sir.
- Q Do you consider it certain that you would not be nominating in excess of twenty by this fall?
- A No, sir, I wouldn't say--I wouldn't put a top on that. We dream about new markets coming in our area that

would soup up untold volumes, of course.

- Do you know of any such markets?
- No, sir.
- Have you heard of any substantial increase in the market served by Southern Union in the next several months?
- We have our salesmen out beating the bushes all the time, trying to sell, and they are always optimistic.
- I'm asking if there is any substantial market that you are aware of, within the next several months, that may become available to you.
- Yes, we have under contract a generating station-it's cut here west of Hobbs, that has a new unit that will go on the line probably this year.
 - Q About when?
 - We are hoping by mid-year. A
 - That's about June or July of 1965? Q
 - A Yes.
- What will be the volume you will deliver to that unit?
- I think they will use twenty million a day; maybe more.
- Q How much of that do you intend to take from the Indian Basin?
 - None. It displaces gas--Indian Hills gas wili A



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never get over there.

- It's a matter of swopping it out?
- Yes, sir.
- But you would anticipate a twenty-million market increase in about mid-year?
 - Yes.
- Do you know of any other sales outfits or increases of market of substantial amounts within the next several months?
- We are competing for some good loads but I don't think I want to testify to that, due to the possible detriment to our competitive position -- we may not get any others.
- I'm not trying to get a privileged decision, but I do want to get as definite an idea as you can give me about how much gas your company will be nominating for--would take from the pools in the next six months.
- I believe I stated that as ten million a day, over the next six-month period. Wasn't that your question?
- Yes, but I thought you answered that you didn't know how far the ten million would go, and it might go over twenty.
- I agreed with you that possibly it would go above twenty. I didn't say I expected it.
 - Q Is it your expectation that it will remain ten



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million for the next six months?

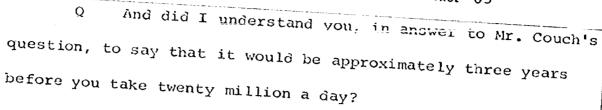
- A Ten or thereabouts.
- Q I'm just trying to get your best prediction.
- A I'm trying to give it to you. I think that's as close as I can get it.
- Q Would it be inquiring into your private business too much to know about the short-term gas or high-pressure gas you can get out from under?
- A That involves other pipelines. Personally, I don't have any objection, but they might--they are inter-state pipelines.
- Q Do you have any plans for getting out from under short-term or high-pressure gas in order to take additional amounts from the Indian Basin area?
- A We don't want to get out from under the shortterm gas; it's a good cheap gas. We might decide on a highprice gas field, to get out from under that, if it fits our
 picture, if we can do it and supply our needs adequately with
 cheaper gas.
 - Q Would this be cheaper gas?
 - A Yes.
 - Q And might serve to replace this other gas?
 - A Yes.
 - Q Would it be inquiring too much into your business

to ask the source of this high-priced gas?

- Yes, I think it would.
- How about the declining wells?
- Well, we are connected to several of them--gasoline plants also to which we are connected. Several of them have experienced a decline in gas they have available for us.
- You mentioned also that your contract has a favored nations clause? Yes.
 - Does that exclude Natural Gas Pipe sales?
- Our favored nations is not a three-party favored nations. They could pay twenty cents, and it wouldn't affect
- It's favored nations as far as Southern Union is concerned, right?
 - Right--yes, sir.
 - MR. COUCH: Thank you. No further questions.
- MR. UTZ: In Section 19, Township--(unintelligible) South, 24 East, are those percentages you gave us on Exhibit 4 --was that from now on, or just to payout? Which sections?

 - 19 and 31--22--21 South, 24 East.
- No, those are from initial production on through the life of the lease.

SPECIALIZING IIN: DEPCISITIONS, HEABINGS



- A That is our present anticipation.
- Q It might be sooner?
- A Yes, sir.

MR. PORTER: Are there any further questions?

MR. EATON: Paul Eaton. Mr. Hazeltine, has there,
in the last two years or so, been any decline in your market
in Eddy County?

- A No, sir, I don't think so.
- Q Your sales level has maintained at the same level?

A I believe in total it has continued to grow. We lost a good customer two or three years back--you may have reference to that. I don't recall whether that dropped the total sales for the year or not, but in general the area, like most of New Mexico, is growing.

Q Are you then saying there has been a growth each year, up to the present time?

A I'm trying to say that to the best of my knowledge it has. There may have been that one section during recent times, but outside of that I think the growth has been positive each year.

MR. PORTER: Any other questions?



1120 SIMMS BIDG. • P. O. BOX 1092 • PHOWE 2.13-6691

MR. MUNDELL: You have a take-or-pay clause on your contract. What date does that commence?

- A Ninety days from the date of the contract.
- Q Do you have an approximate time when all contracts are signed, or are they all strung out?

A In a number of them the take or pay started last March 18th.

MR. PORTER: In other words, you are already paying for gas?

A Yes, sir.

MR. PORTER: Does anyone else have a question? ...

The witness is excused. At this time we're going to recess

the hearing until tomorrow morning at eight-thirty. We will

reconvene in this same room; and remember, I said eight-thirty

and not nine o'clock.

(The hearing recessed at 5:10 o'clock P.M., April 14, 1965.)



MR. PORTER: The hearing will come to order, please.

(The hearing reopened at 8:30 A.M., April 15, 1965.)

Mr. Durrett?

MR. DURRETT: If the Commission please, the staff will call Mr. Ellis Wind to the stand.

ELLIS W I N D, the witness, having been duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. DURRETT:

Mr. Wind, will you please state your name, by whom you are employed and in what capacity, and where you are located.

Ellis Wind; I work for Marathon Oil Company, engineer, from Houston.

- And are you a petroleum engineer, Mr. Wind?
- Yes, sir.
- Are you familiar with Marathon's plans as far as a cooperative gas plant that would be built in this area of the Indian Basin?
 - Yes, I am.
- Would you please brief the Commission on the plans of the various people that are going to get together to construct this plant.



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A Yes, sir. Marathon has been selected by a substantial number of the working interest owners in the Indian Basin field to be operator—to supervise the construction and operation of various facilities in this area to gather, treat, process and, deliver Indian Basin gas. The proposed location is slightly different than shown on your Exhibit 4; it would be the southwest quarter of the northeast quarter of that section. You have the southeast.

- Q You're speaking of what we have indicated on this Exhibit 4 as Gas Plant Site Number 1?
 - A Yes, sir.
- Q And that is Section 23, Township 21 South, Range 23 East?
 - A Yes, sir.
 - Q And this location is an error?
- A You have it in the southeast of that quarter quarter. It would be in the southwest.
 - Q Fine. Would you continue.
- A All the producers, so far as we know, within a certain 42-section area have been offered the opportunity to participate in the plant ownership, and this area can be expanded as required, and any producer who for any reason does not elect to become a plant owner is offered the same processing agreement, same terms, as the plant owners. The plant owners

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will sign a processing agreement and non-owners will be offered the same processing agreement. The necessary contracts between the working interest owners and the contracts with the plant contractor are expected to be executed within the next couple weeks. However, upon verbal approval of some 70% of the working interest owners, to speed this thing along, Marathon has contracted with a plant contractor and has begun ordering materials, and the detailed design is well under way. These facilities are proposed to be designed to gather, treat, dehydrate and deliver up to 150 million cubic feet a day, and the processing facilities are designed to recover approximately 70%, or are planned to have a guaranteed recovery of 70% of the propane and essentially all of the heaviers when processing 120 million, when air temperature is 100 degrees. These recovery rates will differ, as recovery goes up and down as engine temperatures differ. Produced would be butane, propane and natural gas. The plant contractor represents that treating, dehydrating and delivering facilities will be ready to go in operation in early December; and that schedule was reviewed in detail with the contractor last Friday and verified, and based on material delivery schedules, it is reasonable to expect that this schedule will be made. All the major vessels are on order, the major prime movers, and the design is nearly completed.

- You say the plant would be designed to handle 150 million a day, is that correct?
- It's designed to pass 150 million cubic feet and deliver specification gas at a certain pressure drop. That would be the guaranteed requirements -- it is expected that it will do considerably better.
- And could your plant be expanded, as far as its physical design -- expanded with some ease, if the necessity occurred later?
 - Over and above the 150 million?
 - Yes, sir.
 - It could be expanded, if required, a number of ways. We have actually put an extra six inches in the main vessels.
 - To where it should handle considerably more than 150 million right now?
 - It could handle more than 150 million right now, and could be expanded further on with considerable case, but it would take some investment.
 - You will be treating gas to be delivered to Natural now, is that correct?
 - Yes, sir, to the producer. The plant has no connection with where the gas goes. The processing agreement says we will deliver processed gas at the plant outlet to the

Whatever they wish to producer's purchaser or their nominee. do, that's the producer's responsibility.

As far as your plans right now, you will be dealing with gas that will be going to Natural, is that a generalization that is fairly correct?

The processing agreement is offered to everyone, but who will actually sign I don't know. But the processing agreement has been offered to all producers.

Now, do I understand correctly that the gas in this area has to be treated in some manner before it can be

Well, that's correct. It has to be dehydrated-delivered to a pipeline? all gas does. What you're referring to is the Upper Pennsylvanian gas, I believe--it's sour, and has to be sweet to meet specifications.

- It has to be sweet?
- What about the Morrow? Does it have to be sweet? yes, sir.
- No, it is sweet.
- As far as your plant goes, you would sweeten the gas and also break the various components out that you have testified concerning?

That's correct. We have it set up to where, if for some reason the processing facilities were out of oper-



ation, we could still deliver treated and dehydrated gas to the purchaser.

Q Will you once again state the projected date on this, when it will be ready to go.

A Early December.

MR. DURRETT: Thank you, Mr. Wind. That's all I have on direct examination.

MR. PORTER: Does anyone else have any questions of Mr. Wind?

CROSS-EXAMINATION

BY MR. COUCH:

Q I have a question or two. I believe, Mr. Wind, in your testimony you said that we had contracted with a plant construction contractor. The actual written contract is still in the final stages of negotiation, is that correct?

A That's right.

Q What we have done is make commitments to him, to permit the ordering of these vessels?

A That's right. A cost-plus type arrangement, to where the contract will be executed as soon as it can be put in final form.

Q But we haven't actually finally entered into a written contract; we've just been moving too fast for that, is that right?



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A Yes, sir.

- Q You also mentioned early December as the beginning date. Does that relate to facilities for treating and dehydrating gas, as distinguished from the complete processing plant itself?
- A That date is for the facilities to treat and deliver unprocessed gas. The processing facilities will be ready less than a month later.
- Q This is according to the contractor's firm prediction to you?
- A That's right, and there could be less time differentiation; but as of now they represent that it will be less than a month.
- Q And two weeks--is that a reasonable estimate, based on your knowledge?
 - A Yes.
- Q Will you briefly state what will be done as far as condensate is concerned?
- A We propose to bring condensate in from the wells along with the--with any salt water produced, and we would treat, stabilize and store this condensate for the producer, and he could take his condensate from the central location.
- Q This is distinguished from the normal method of separating, letting the condensate in tanks until the vapors

go off?

A That is correct. Any vapors brought in with the condensate will be saved and processed.

Q --Making the condensate available to the lessee or working interest owner for sale at the central plant site?

A That's right. That is their condensate--it isn't a plant project.

- Q But it will be stabilized at the plant?
- A Yes.
- Q --Under present proposals?
- A That's correct.

MR. COUCH: I don't have any further questions.

GOVERNOR CAMPBELL: Mr. Wind, is Marathon's

position as operator, for commitment as operator or contract
negotiator, conditioned upon any action by the FPC, or are
you going to proceed, whatever action they may or may not
take?

A No, they are not conditioned on any action by the Power Commission.

MR. SMITH: In the contract you contemplate with the construction concern, whoever it may be, is there a date for completion to be set out in that contract? Perhaps Mr. Couch could answer that question better than you.

MR. COUCH: I think probably the question would be

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more correctly directed to me than to Mr. Wind. I don't know, J. K. Actually the contract is still in the negotiation stage --we have merely made commitments to the contractor to get things going. I don't know whether it will have a firm completion date on it or not.

MR. PORTER: Are there any further questions of

MR. DERMONT: John Dermont, from Southern Union. this witness? Have those producers who have signed contracts with Natural all agreed to join in the processing operation with Marathon,

I don't know of any who have not agreed. I would Mr. Wind? say we have gotten verbal approval by a majority of the working interest owners. Does that answer your question?

MR. DERMONT: Yes.

MR. PORTER: Does anyone else have a question of the witness? ... He may be excused.

MR. DURRETT: The Commission will call Mr. Gordon Llewellyn.

LLEWELLYN, the witness, having been duly sworn, was examined and testified as follows:



BOX 1092

DIRECT EXAMINATION

BY MR. DURRETT:

- Q Please state your name for the record, Mr. Llewellyn.
- A My name is Gordon Llewellyn; I am from Dallas,

 Texas: and have represented Mr. John Hill as his attorney in
 the negotiations on this proposed line.
- Q You have been retained by Mr. Hill concerning his gas plant, is that correct?
 - A Yes, sir.
- Q And are you familiar with his proposed operation in the Indian Basin area?
 - A Yes, sir.
- Q Would you briefly file the Commission in on Mr.

 Hill's plans concerning construction of a gas or gas plants—

 a gas plant or gas plants, or sweetening plants, in this area.
- A Yes. I have some extra copies of these last two exhibits, if you would like to see them, or the Commission would like to have those.
- Q We could hand those out to the Commission. Would you refer to the exhibit which has been marked Exhibit A.
- A First let me state that this exhibit was prepared some time ago, and there have been some minor changes in it which I can call to your attention, and also with respect to

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your previous exhibit there, Mr. Durrett; and that is the sweetening plant indicated on this exhibit in the northwest quarter of Section 31-
Q Which exhibit are you referring to now, Mr. Llewellyn--Exhibit A?

- A I'm referring to this one right here.
- Q Exhibit A?
- A Right, if that's what it is -- Section 31, Township 21 South, Range 24 East. The actual location of that has been changed to the northeast quarter of Section 30 of 21 South, Range 24 East.
 - © Section 30?
 - A Yes, sir.
- Q So this exhibit, Exhibit 4, which has been introduced in the record here, is in error as far as Gas Plant Site Number 2 is concerned?
- A That's correct. It will now be in the northeast quarter of 30.
- Q But this gas plant Number 2 is in the vicinity of the--
- A Yes, just one section to the north. His system will connect with Southern Union's line in Section 9, Town-ship 21 South, Range 27 East, and will extend westward--will all lie in Township 21 South; will go almost due west until



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it reaches the western part of Range 25 East, and at that point will bear southwest through the canyon down to the proposed sweetening plant to be located in Section 30. This will be a ten-inch line.

Is that the trunk line?

Yes, sir, that is what we refer to as the trunk line. There will be 90,000 feet of 10-3/4 inch pipe, 21,000feet of 10-3/8 line, and 29,600 feet of 6-5/8 inch line. This will be west of the sweetening plant, the six-inch; and then the small gathering lines--there will be 20,000 feet of $4\frac{1}{2}$ inch line. A contract has been let to Mermis Construction Company and they are presently in operation at this time, in constructing the line.

That's the trunk line you're speaking of?

That's the entire line -- the gathering system and trunk line. We anticipate making connection within fortyfive to sixty days, assuming the weather is good and there are no unforeseen circumstances. We don't have any definite plans as to the type of extraction plant that will be constructed; it is our feeling that there has not been enough production and there isn't enough information on the gas to determine the extent and size of the plant that is needed. We have retained the engineering firm of Purvis & Gurtz to test the gas after we get it on stream, and let them make an 1092 . PHONE 243-6691 . AIBUQUERQUE, NEW

analysis so we can be better apprised of the type plant we need. However, I can say that when the plant is built it is our intent to put it way down on the east end of the line, close to the connection to the Southern Union lines. We have two main reasons for doing this—first of all, it is close to the highway and is accessible; secondly, there appears to be some gas south of this line and east of the Indian Hills area that we are presently working with the working interest owners to pick up this gas. It is our understanding that they don't have a market available to them at this time, and we are discussing it with them at this time.

- Q John Hill has an agreement with Southern Union to process their gas?
- A That's correct. The contracts we have now are in fact Southern Union gas purchase agreements, and our agreement with Southern Union is to gather and deliver gas for them.
 - Q And will John Hill be purchasing gas on his own
- A At the present time there are no contracts like that. There is nothing in our contract with Southern Union that would prevent Mr. Hill from contracting with the owners—the producers.
- Q But at any rate, do you feel that Mr. Hill plans to take gas from another source other than the Indian Basin area?



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A We hope so--we would like to carry the gas for them. The facilities at the present time will be built--the sweetening plant and the proposed gasoline plant will be built to handle up to 30 million a day.

Q What about the expense of this plant? Could this be expanded without a great deal of expense?

A Well, I have been told by the engineers that the sweetening plant can; that this is not a major problem; and on the extraction plant, of course, it would take an additional investment to expand it.

Q Are we to gather here that this gas plant, Site Number 2, which we know should be up in Section 30--that that is really a sweetening plant?

A That's correct. That is not an extraction plant.

Q The extraction plant will be over someplace by the highway, which has not been definitely determined as yet?

A That's correct.

Q How far a distance are we talking about here, as far as between the sweetening plant and the extraction plant, approximately?

A Oh, we have roughly between thirty and thirty-five miles of line there, particularly when we get into the canyon, which meanders around.

Q And John Hill will build the gathering lines?

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Yes--build, maintain and operate.

- As far as physical construction of the line, what is its progress?
- I haven't talked to Mr. Mermis in several days, but he commenced work the first of the week. How far he has progressed I don't know. I do know that at that time the ditcher was out and the maintainer, and his equipment is on the site and working.
- Does this Exhibit A portray the areal extent of what we're discussing here correctly?
- I'm not sure. You mean the lateral lines shown on that?
 - Yes, that's what I'm referring to.
- I have the surveyor's plat I'm looking at here. There are some minor changes. Apparently that was the proposed site which was given to the surveyor, and apparently when he went out and made the actual survey he had to deviate from that to some extent. I notice there's a lateral line from the sweetening plant over to Section 32, 21 South, 24 East. That lateral will not be there at this time. We are negotiating to purchase Sills gas in Section 32, so that would not be absolutely correct there. The lateral from Section 19 of 21 South, 23 East on the survey goes a little bit more directly east than what is indicated there. That one goes

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Has John Hill negotiated for right-of-way, and is that all cleared up?

Actually Jouthern Union has secured the right-ofway -- in our negotiations with them, this was a part of the consideration. Mr. Hill does not have the office staff of Southern Union. They have actually taken the right-of-ways in their name, with the exception of the right-of-way across the Atchison, Topeka & Santa Fe Railroad, which I secured in his name, the highway crossings, which are in his name, and one canal crossing which will be in his name, and that will be from the Bureau of Reclamation. Other than that, they are in Southern Union's name, and will be assigned to John Hill. These other types of right-of-ways are not assignable-that's the reason we took those in his name.

please refer to Exhibit B and point out to the Commission what that represents.

This shows the general area of the Indian Hills, the general location of our plant and the line in relationship to Southern Union's eight-inch line which runs north and south and then bears southeast and cuts back up northward to the potash mines.



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And do you agree that the Upper Pennsylvanian gas has to be sweetened before it can be delivered into the pipeline? Is that John Hill's understanding?

Yes. I'm not qualified to answer that, but tests that have been made certainly indicate that there has to be some sweetening, and that's the reason for the plant.

He plans to sweeten the Upper Penn gas before it goes into the line?

The sweetening plant has been ordered and a portion of it has already been delivered to Carlsbad.

Will you give us the proposed capacity of the sweetening plant again.

Up to 30 million per day.

And what, once again, is the anticipated date of completion to where you could start processing gas?

Forty-five to sixty days. Ā

MR. DURRETT: I think that's all I have on direct, Mr. Chairman.

MR. PORTER: Does anyone else have a question? CROSS-EXAMINATION

MR. EATON: Mr. Llewellyn, just one or two ques-Perhaps Exhibit B shows it; I can't see it from here-but where will Southern Union pick up the gas that will be delivered?



A The gas will be Mr. Hill's responsibility until it reaches the connection point at the Southern Union line, which is Section 9 of 21-27.

Q Secondly, I believe you stated that the construction work has started?

A Yes.

Q And what work has been started, if you know?

A Well, as far as I know they are clearing the right-of-ways, and they have a ditcher. Whether they've actually started ditching or not, I don't know.

Q Have all the right-of-ways been secured?

A The last time I talked to the Southern Union man in Carlsbad, which was Monday morning, there were some pieces of fee land way down past the canyon area that have not been secured.

Q Finally, as to the extraction plant, it is my understanding that at this time you have formulated no plans as to the type of plant, or the size of the plant?

A Well, our plans go to this extent, Mr. Eaton--and again, this is more of an engineering question, but they are trying to determine whether or not the plant should be one that would turn out a ninety-pound deanphanous product as opposed to multiple production. To this extent we don't know, but we have allocated roughly \$650,000 for a plant.



GOVERNOR CAMPBELL: Where is the additional gas located which you think you might be able to pick up at some future date?

A Mr. Chairman, I can't give you the exact location. Gulf has some acreage Mr. Hill has been negotiating with them. It's south of the line, and I would guess it lies in either 21 South, 22 East or 26 East. This is just a general area—I'm not absolutely positive of that. I do know it's on eastward on the line, though.

Q Do you know anything about the possible volume?

MR. PORTER: Are there any further questions?

- A No, sir. We are actually talking now to Purc and Humble and Gulf and H Brothers, and are negotiating with them on their gas.
 - Q In the area we were just referring to?
 - A Yes, and also on westward.

MR. COUCH: Mr. Llewellyn, with regard to the sweetening plant, you stated that it is ordered and that a portion of the material has been delivered to Carlsbad. Was the construction of that plant included in the contract with Mermis for his trunk line system?

A Mr. Mermis is to clear the location, and I received correspondence to the effect that a portion of the plant was en route, and Mr. Mermis was requested to go out last week and

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clear the location. He's not going to construct the plant.

- Q Is Trigg going to construct the plant himself? -The sweetening plant?
 - A Mr. Hill, you mean?
 - Q Yes.
- A We are having it done--hiring it done. Our own employees are not doing it.
- Q The contracts have actually been made, but they are just orders. We don't have written contracts on the construction of that plant; we have been dealing with Mr. Jerry Edmondson of Panhandle Steel -I believe that's correct. Mr. Hill's engineer actually had those conversations with him; but there's no written contract on it, but it is being constructed.
- Q Well, you have to have a commitment from someone to do the construction work, don't you?
- A Oh yes. In fact, the contract price for the sweetening plant was \$147,000.
- Q Do you expect that to be completed within the forty-five to sixty-day period you gave us on the pipeline?
- A I expect it to be completed and on location, I guess within the next fifteen or twenty days.
- Q So that the main delay here would be the pipeline --construction of some thirty to thirty-five miles of line?



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Does that thirty to thirty-five mile figure include the gathering system within the Indian Basin area proper?

I would say not, Mr. Couch. I really don't know the answer to that; I would say not, though. If you're interested, I gave those footage figures on the ten-inch line, and then the gathering line, the six-inch and four-inch line, and it's just a matter of dividing that out.

I couldn't write them down as fast as you gave them.

We have two different types of ten-inch line. One is 90,000 feet and one is 21,000 feet. That's the total length of the trunk line.

Was it contemplated originally that Mr. Hill would Q build this much trunk line in this gathering operation?

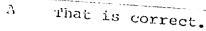
No, sir. The initial plans were that Southern Α Union would build the line from the present connection point westward to a point in Section 13 of Township 21 South, Range 25 East, which was approximately half of the trunk line.

Is it contemplated, when and if an extraction plant Q is built, that Mr. Hill will be the sole owner of that plant?

That is definite--yes, sir, he will.

Speaking now of the processing or extraction plant Q on the east end of your trunk line?





Q The contracts between Mr. Hill and Southern Union do give him the exclusive processing rights on this gas in the Indian Basin area?

A Yes, sir.

Q And Mr. Hill under those contracts obtains 100% of the plant extraction?

A That's correct.

Q Does that include the condensate?

A The contracts of Southern Union allow for mechanical separation at the wellhead. We are also presently talking to several producers—I say "we"; Mr. Hill is talking to the producers and negotiating to the effect that if they don't put their separators at the wellhead there will be an estimate made of what they would have extracted had they put them there and we will then pay them for one—half of that much; and this will save their investment in a mechanical separator, and their gas will be run through our plant without any separation.

Q Would that include any water produced in these wells? Would you run that in your line too?

A I really don't understand the question.

Q Well, the operators would be--I just wanted to ask the question whether the operators there would have any problem disposing of any produced water themselves, or would



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you move that off for them too?

- A I assume we would. I don't know.
- And unless some different contractual arrangement is made, the condensate that is produced, along with the gas committed to Southern Union, would be the responsibility of the working interest owner, and his obligation to separate it at the well, and dispose of it at that point?
- A That's my understanding of the Southern Union contract.
- MR. PORTER: Does anyone else have any questions of this witness?
- MR. DURRETT: I would like to move the incroduction of Exhibits A and B at this time.
- MR. PORTER: If there is no objection, the exhibits will be admitted. The witness may be excused.
- MR. COUCH: Mr. Porter, may I ask one other question. Do you know at what point physically Mr. Mermis has started on this work?
- A Yes, he's starting on the east end of the line and working westward. There has been some discussion of working from both ends, but I don't know whether or not that has actually taken place.
- Q You haven't yet decided whether to work both ends against the middle, or--





A He's definitely starting in the east and going westward.

MR. COUCH: Thank you.

MR. PORTER: Are there any further questions? ...
The witness may be excused.

(The witness thereupon was excused and withdrew from the stand.)

 $\mbox{MR. DURRETT:} \ \mbox{The commission calls Mr. Elvis Utz.}$

E L V I S A. U T Z, the witness, having been duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

MR.DURRETT: Let's pass out these extra copies before we start the examination, Mr. Utz. This is the same exhibits that were distributed at the pretrial conference.

Mr. Utz, will you please state your name and position for the record.

A Elvis A. Utz, engineer with the Oil Conservation Commission.

- Q Are you familiar with the Indian Basin field in Eddy County, New Mexico?
 - A I am reasonably familiar with it, yes, sir.
- Q Do you know how many declared gas pools there are in that field now?

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There are two declared gas pools--the Indian Basin-Upper Pennsylvanian and the Indian Basin-Morrow, the Morrow being the lower pool.

Could you tell us approximately when those gas pools were created?

They were created as Indian Basin pools in February of 1963. They were, however, the Indian Basin and Indian Hills, I believe, some time prior to that; the date I don't recall.

- Then they were redesignated as the Indian Basin?
- That's right, in February, 1963.
- Now, calling your attention to Exhibits 1, 2 and 3 that have been formally introduced into this hearing, do these exhibits correctly show the horizontal limits of those pools presently existing?

Yes, they do. Exhibit 1--I believe that's Exhibit 1, on the left--is the present horizontal limits of the Upper Penn. On Exhibit 3 the blue line is the present horizontal limits of the Morrow.

Have special pool rules been written for these pools, Mr. Utz, by the Commission, and are they now in existence?

- Yes, they have.
- Let me call your attention to Exhibit 5 and ask you what that portrays.

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A Exhibit 5 is actually Order Number 2440, which is special pool rules for the Indian Basin-Upper Pennsylvanian pool. This was filed on the application of Ralph Lowe. This, as I stated, is the special pool rules, and involves spacing rules, size of the proration units, non-standard units, administrative approval, unorthodox location, topographical administrative approval, and one of the last special stipulatios that the order will be in effect as a temporary order until one year after the date of the first connection, which I presume will be the first Southern Union connection.

- Q Then these will be re-opened under the provisions of this order, is that correct?
 - A That is correct.
- Q And this Exhibit 5 covers the Indian Basin-Upper Pennsylvanian?
 - A Yes, sir.
- Q What do the special rules provide as far as well locations?
- A They provide 1650 feet from the proration unit line and not nearer than 300 or possibly 660 feet--I don't recall now--from the quarter-quarter section lines...330 feet from the quarter-quarter section lines.
 - Q What is the spacing provided by these rules?
 - A The spacing is 640 acres.

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Q Are the majority of the wells portrayed on these Exhibits 1, 2 and 3 we have discussed previously in this hearing, on standard locations?

A I believe--I'm not absolutely positive, but I believe there are two of them that are non-standard locations. The rest of them would be standard locations under the special rules.

Q Is it your understanding that those were administrative exceptions?

A As of the issuance of this order.

Q Oh, you mean when the rules were written, they were accepted by the order?

A Yes, sir. They were non-standard before the rules.

Q All right. Please pass to Exhibit 6 and state what that represents.

A Exhibit 6 is a companion order to Number 5, which is actually Order Number R-2441, and is the special pool rules for the Indian Basin-Morrow pool, with the same rules precisely as have previously been explained for Exhibit 5.

Q Identical spacing and well location requirements?

A Yes, sir.

Q And it also provides that they are to be reopened--when?

A One year after the first connection.

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Q Now, as far as the Morrow goes, Mr. Utz, what about those wells? Are they mainly on standard locations, or are just a few of them?

A Mr. Durrett, I didn't specifically look at the Morrow. I can't tell you how many non-standard locations there are.

Q All right. Let's pass to Exhibit 7.

A I hear a rumble from the audience that they are all standard locations.

GOVERNOR CAMPBELL: Who rumbled?

MR. UTZ: The Commission representative.

MR. DURRETT: Mr. Utz, please refer to Exhibit 7, and state to the Commission what this exhibit represents.

Basin wells--or rather, all wells in the Indian Basin area, both dry holes, drilling wells and completed wells, in the four-township area involved in this study. On the left side we have the operator's name, lease, and name of the well. In the second column, the purchaser of the four Southern Union wells. All other wells, to the best of my knowledge, are contracted or are being contracted to Natural Cas. The third column is location; next is elevation of the wells, where it was available. The next two columns are completion intervals of the Upper Penn and Morrow, respectively; and the next two

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colums is dedicated acreage, shown by our C-128 and well files.

- Is that your Commission form for the acreage dedication plan--the C-128?
- Yes, and the "NPs" on those two columns indicate that there is no plat filed yet by the operator, as to his dedicated acreage; and I might suggest that they file them.
- I note that there are two figures here--it says, "Upper Penn C-128," and the first figure is "10-640." That means what?
 - That means Section 10, 640 acres. 7
 - The first figure is the section?
- Yes, sir. It looks like you just called my attention to an error there. I've got some figures down there that I don't believe could possibly be sections.
- I was wondering about that. Can you tell what the error is?
- I think the "5"--undoubtedly the stenographer took my "S" for a "5," so if you'll just make an "S" out of that I'm sure it will be proper.
 - If we make the "5" into an "S" it will be proper?
 - Yes.
- And the same is true for the Morrow, is that correct?
 - That's correct.



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Q What does that show next?

A The next column, or the next two columns is absolute open flows we have had reported to us and recorded for the Upper Penn and Morrow. The third column is status of the wells on 4-1-65, "SI" being "shut-in," "DR" being "drilling," and I don't have to explain dry holes.

- Q What are the figures at the bottom?
- A Those figures are some general data which I accumulated for the Upper Penn and Morrow, as to the gravity of the gas; and that shows for each pool average figures and range of those figures used in obtaining the average for gas gravity, liquid gravity and wellhead pressure.

GOVERNOR CAMPBELL: Isn't there a mistake on the wellhead pressure? The average shows below your lowest point on the range.

MR. UTZ: There obviously is.

MR. DURRETT: Can you tell what the error is?

GOVERNOR CAMPBELL: I guess we can average it. I

don't care, but it should be corrected sometime.

MR. DURRETT: Can you computate that?

MR. UTZ: I think I've got my worksheet here somewhere. I only proofread this about three times.

GOVERNOR CAMPBELL: With a roomful of engineers there ought to be a slide rule.

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MR. UTZ: I don't believe a slide rule would help on this. I don't have a worksheet showing all the individual pressures.

GOVERNOR CAMPBELL: I just called it to your attention so it can be corrected for the record at the appropriate time. I don't think it's significant otherwise.

MR. UTZ: I feel sure it will be somewhere in the neighborhood of the 2300's.

MR. DURRETT: Would you just please state for the record the procedure that should be gone through to arrive at the correct figure—the mathematical procedure to get the error corrected.

A I think the correct procedure would be to take the proper pressures off the C-122 and properly average them.

Q Do you think you may have got the wrong pressure here, or do you think it's just a mathematical error?

A I think it's either human error on the calculator or a calculator error.

GOVERNOR CAMPBELL: I'm sorry I mentioned it.

MR. DURRETT: Now, this exhibit portrays various calculations for both the Upper Penn and the Morrow, is that correct?

- A That is correct.
- Q Does this exhibit contain all the basic well data

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that the Commission has concerning the wells in this pool which you would feel is of any importance from an engineering standpoint?

A To the best of my knowledge it does, for all wells reported to us as of 4-1-65; and that includes 23 wells which are either drilling, which is my understanding, or at some stage of completion; at least they've had DSTs which show they will be producing wells. And there are eight duals—I heard seven here, but I counted eight; and that would include one which has a dual completion permit, and the eight duals are all completed in the Upper Penn and the Morrow. So that would be eight Morrow, eight dry holes, and seven of the 23 are drilling.

- Q Summarizing this exhibit now, would you tell me once again how many wells are in each pool. I believe you just stated there are eight in the Morrow?
- A Twenty-three in the Upper Penn and eight in the Morrow.
- Q How many of these wells are completed and shut-in, awaiting connection?
- A I would have to count them. ... Well, eight from 23 would be 15.
 - Q Fifteen?
 - A Yes.

MR. PORTER: What was the question?



MR. DURRETT: "How many wells are shut-in, awaiting a connection, at the moment."

MR. PORTER: Aren't they all shut-in, awaiting connection?

- I count 16. A
- How many does that leave drilling?
- That leaves eight drilling.
- Eight drilling? Q
- That's my count here. GOVERNOR CAMPBELL: Seven.
- That's right--I have seven. If it wasn't for the Governor I'd be in a heck of a mess.

MR. DURRETT: How many dry holes?

- There's eight dry holes, I feel sure.
- And you have presented the open flow data for each P001?
- Yes, all open flow data we have reported to us, which is shown in the appropriate columns.
- As far as Exhibit 7 is concerned, does it have all the information you have available to you concerning pressures, at least in a summary form?
 - Yes, it does.
- What about porosity calculations, Mr. Utz? Do you have that available?



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Mr. Durrett, I'm not even sure how many wells have been cored, if any wells, in either of these pools. Our records don't reflect that, and therefore I made no attempt to gather any core information, which, if there is some, I feel sure we would have gotten it; but we made no attempt to because of the stage of development of both pools. So I have no reservoir information as far as porosity data and permeability data are concerned.

Did you calculate deliverabilities?

No, I did not calculate deliverabilities. I looked at absolute open flows and on some wells I have as many as three tests on the same well, all with different data. Because of this I didn't know which one to use to calculate deliverability, so I felt it was better not to make any calculation as to that unlil such time as the wells were on the line and produced enough to where they will stabilize; and if we want deliverabilities then, I feel sure we can get some pretty accurate ones.

Could you please state to the Commission whether or not there has been any production in either of these pools as of this date, to your knowledge.

There has been a slight bit of production for some drilling gas.

Do you consider that to be a significant volume of

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Quite an insignificant volume, as compared with I also understand there has been some flaring in those pools too.

- You don't have any figures on the volumes of gas? Q
- Now, does this Exhibit 7 show what wells in this No. А pool could produce without restriction?
- Was your question, how much gas they could produce V. without restriction?
 - According to absolute open flows--and of course Yes, sir. that has a zero back pressure or atmospheric pressure -- the total open flows reported to us are on the order of 702 million for the Upper Pennsylvanian. For the Morrow it's in the neighborhood of 80 million absolute open flow. The ability of the wells to produce would be something less than that, but it's still a good-size field. Because they are open flow wells, I feel that most wells will have the capability of producing all the gas they want to put on the line.
 - And they have the capability of producing more than Q they want to put on the line?
 - A
 - Now: you have heard the testimony presented today yes. Q



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and yesterday concerning the capacity of the gas tank facilities to be constructed in this area?

- Yes.
- Are these wells capable of producing gas in excess Q of the capacity of these facilities?
 - I'm positive they are.
- Do you feel that gas prorationing should be instituted in one or either or both of these pools?
- It is my recommendation that as soon as there are connections in each pool, we institute gas prorationing for the connected wells.
 - And are you testifying concerning both pools? Q
 - yes, sir. A
 - Do you feel that instituting gas prorationing in the--let's talk about the pools together--in these pools, will prevent waste?
 - Yes, I think it will.
 - Would you please go into some detail as to how you A Q feel this will happen.
 - Well, first it will restrict production to the actual market demand for gas that is being utilized. In my opinion, by instituting ratable take with the proper formula we will also conserve reservoir energy.
 - Do you feel that instituting gas prorationing in Q



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these pools will protect correlative rights?

- A If the proper formula is used I'm sure it will.
- Q How do you feel that will happen?
- A By preventing drainage between tracts by allowing proper counter-drainage, which is a normal and acceptable operation by this Commission, and has been for many years; and also by protecting correlative rights it will give each operator his fair share of the gas.
- Q Do you have a formula you would recommend to the Commission to adopt concerning gas prorationing?
 - A Yes, I do, and I recommend 100% acreage.
- Q Do you feel that this is the most reasonable basis for allocating production in the pools?
- A Based on the information we have at the present time, I feel that it is not only the simplest basis, but as accurate as we could determine at this time.
- Q With the information you have aiready available, from the Commission standpoint do you feel that pool reserves or individual tract reserves could be computed with any degree of accuracy?
- A Not at this time, no, sir; and as I stated, the reason I feel this way is because these pools are really much less than half developed, and I don't feel we have the proper information at this time in order to calculate reserves. I

think at some later date we might well have that information

Am I correct that you would recommend that the available. Commission institute gas proration on a straight acreage formula in both pocls, or a 100% acreage formula?

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Are you recommending that they adopt this formula Yes, sir. and that that be it, as far as prorating these pools; or are you recommending that this be adopted at this time, realizing that it could be changed later by the Commission or any other

I think as we always do; in these pools or in any interested party? prorated pool we always take a look at it from time to time, and I'm actually just recommending this as a temporary measure until we know what we want to do, with further information. But you don't feel that an order should be written

with a specific date on it, do you, as far as being temporary? sir, I think it should be reopened at the time

we feel we have enough information showing the formula which

Do you feel that the Commission staff should should be used.

watch that matter and keep track of it--as I'm sure the operators will be doing -- do you feel we should maintain some type of continuing study concerning the data that is available?

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Yes, sir, I think that for some time after all the wells are connected and begin to produce, we should keep a pretty close check, and use whatever data is available in order to determine whether the pool is being prorated properly or

Will you very briefly explain the mechanics of the not. formula you are recommending? How will this in fact work, Mr.

Actually for those that are familiar with our present prorating procedure in southeastern New Mexico, it will Ut.z? work exactly like the system we're using in those pools.

This is the way you're doing it now?

Yes, sir. We have a pool balancing procedure which takes nominations and adjusts those nominations by the first previous month--by that previous month's nominations as balanced against that month's allowable. If the allowable is less than the nomination, then we feel that the people that nominate should know what they're going to take, so it's a positive adjustment. In other words, with just two previous nominations on the second previous month we adjust the first nominal figure by the net pool allowable, or the allowable available to the pool as of the first of that month against production that was produced that month--adjusting to production. If the allowable is higher, it's a negative adjustment.



As far as your recommendation concerning prorating these two pools, are you recommending that the Commission prorate in the manner it's doing in other pools in southeastern New Mexico, on a 100% acreage formula, specifically prorating only the wells connected to the gas transportation facilities?

- That's correct.
- And going into that portion of the case concerned with gas prorationing as such, and into a discussion concerning the allowable for unconnected wells, have you made some calculation concerning the possibilities or probabilities of what could occur if consideration was given to assigning allowables to unconnected wells?
 - And have you prepared some figures to present to yes, I have. the Commission in the form of an exhibit?
 - Yes, I have. That is Exhibit 8, and it consists of four pages; one situation for each page.
 - Refore we begin discussion of this in detail, what is your first page, now? That concerns the Upper Penn pool, is that correct?
 - Yes, that is correct.
 - And the second page concerns the Morrow? Q
 - yes. A



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GOVERNOR CAMPBELL: As soon as you finish your identification let's take a break, so the reporter can have a rest.

MR. DURRETT: Yes, sir. Then your third page will be the Upper Pennsylvanian pool again, is that correct?

- That is correct.
- And the fourth page will again be an analysis of a different situation in the Morrow?
 - That's correct. A

MR. DURKETT: That will finish my identification, I think, Governor.

GOVERNOR CAMPBELL: We'll take a ten-minute recess. (The hearing recessed at 9:45 o'clock A.M. and reopened at 10:02 o'clock A.M.)

MR. PORTER: The hearing will come to order, please. MR. DURRETT: Mr. Utz, before we proceed with our discussion of Exhibit 8, please refer back to Exhibit 7.

- Yes, sir.
- Now, during the coffee break did a private attorney Q approach you concerning the second well from the bottom, called the Federal, and mention something about that it didn't appear on the plats?
 - Yes, he did. A
 - Was he correct? Q



BOX 1072 •

Yes, he was. It doesn't show on our plats.

- Please approach Exhibits 1, 2 and 3 that have Q formerly been introduced in this record, and make that correction.
- That well is in Section 20 of 21 South, 24 East, and is in Unit M of Section 20, which will be in the extreme southwest quarter.
- You have appropriately marked that now on Exhibits 1 through 4, is that correct?
 - Yes, sir, I have.
 - What is the status of that well? Q
 - Α It is a dry hole in the pool limits.
 - A dry hole? Passing back to Exhibit 8--Ω
- I think that's one of the things that makes it so Α interesting for these operators.
- --Will you please state to the Commission what that first page here represents.
- The upper half of the first page is some general data for all four situations, and the lower half is one situation in the Upper Pennsylvanian pool. Now, the upper half shows the data--known data or estimated data--I had available to me to conduct this study from our well files, as well as the potential purchasers in this pool. And before somebody has an opportunity to jump on me about it, you will note that

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I used 20 million for Southern Union. That was my information at the time I made this study, and I closed out my figures about 4-1-65. I understand now that initial takes for the first couple years will be somewhere between 10 and 20; but it could very well be 20 and could very well be less than 10, too.

Q If it was 10 it would change your figures--just adjust them downward, is that correct?

A If the market demand for Southern Union changes it will affect my calculated underage on the unconnected wells shown on this exhibit. If it is lower, the underage will be lower; if it is higher, the underage will be higher.

Q All right, sir. First please summarize the basic data you have shown here at the top.

A On the Southern Union estimate, as I previously stated, I used 20 million a day. I have made a division between the Upper Penn and the Morrow for that 20 million as follows: Take that on the basis of absolute open flow; and I might as well state here that someone else could probably estimate some of these considerably different, and come up with a different percentage figure if they wanted to; and if they want to do that, fine and dandy. I made the estimate based on my best opinion and the information I had available to me, and I did estimate some undrilled acreage which I thought would be productive, and I estimated open flow for that. I didn't have



a good enough picture to do anything else.

Q You worked with Exhibit 7, the figures on there, as far as the absolute open flow is concerned?

A Yes.

Q And then you say you projected some figures. How did you project it?

A I projected the undrilled acreage absolute open flows by using the offset absolute open flows and the percentage of absolute open flow, in order to determine how much of that 20 and 100 million I was going to assign to the Morrow. So on that basis I assigned to the Upper Penn 18 of the 20 million, and to the Morrow two of the 20.

Q That figure has been corrected on all the exhibits, so it should read--

Pipeline, they informed me, and I believe this is still a firm figure of 100 million initial. I assigned that to the Upper and Lower Penn on the same basis—80 million to the Upper Penn and 20 to the Lower Penn or Morrow. At the bottom part of the page I made my first estimate for the Upper Pennsylvanian pool. This is based on the number of productive units that were either completed and shut—in, or in the process of being completed. Some of them may show on my Exhibit 7 as drilling wells as of 4-1-65, and that would be wells within the existing

horizontal limits of the Upper Pennsylvanian pool as shown on

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Exhibits 1 and 2. That would be the units we felt were productive at the time, on the basis of current information.

It doesn't include, however, the units that are not drilled.

Meeting those certain qualifications were four units for

Southern Union and 18 units for Natural Gas Pipeline. Assigning gas production to the units on the basis of 100% acreage,

we have four units into 18 million cubic feet, or 4½ million

a day for an allowable, times the four units times 108, 2½

days or the average days in a six-months provation unit, I

come up with 3285 MCF for an M squared CF for a provation

period.

- Q That's for a six-months proration period?
- A That's correct. Now, it will be my recommendation that if we're going to assign anything to unconnected wells, we do it on an equitable basis, so that is what I used in this estimate here.
- Q You're not going to recommend through this case that an allowable be assigned to unconnected wells or that it not be assigned to unconnected wells, is that correct?
 - A That is correct.
 - Q All right--
- A So if we assign $4\frac{1}{2}$ million a day to producing wells or connected wells, then the unconnected wells would receive $4\frac{1}{2}$ million a day, according to my plan. Multiply that by 18 units

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part of the year.

or assigned underage, or a total of 18,000,067 for the pool. In order to determine how long it's going to take Natural Gas to produce this acreage underage, it occurred to me that all you had to do was divide how much gas they were going to take against accrued underage, or 185 days underproduction in one six-month proration period, which would be approximately two years underproduction and four promation periods. I used two years because I felt it very well might be two years before these people were connected. At the time I made this I knew there was a tentative contract in the process, or an open negotiation, but it wasn't negotiated at that time, so it looks like now they might have some wells connected maybe the latter

and the number of average days in the proration period, which

would give us 14,000,782 cubic feet for the proration unit

- And if it was a less period of time it would proportionately adjust the figures down, where if it was a longer period of time you would adjust them up?
- You can adjust these figures any way you see fit, for time. On page 2 I made the same estimate for the Morrow pool...the development as of April 1, 1965. Southern Union had two productive units; Natural Gas had six productive units. The allowable assigned to connected wells would be a million a day times the number of units and the days in the proration



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period again, or 365 million for the proration period. The unconnected wells being assigned an allowable on that equitable basis would receive six times that for six units, for 1095 or 1460 for the proration. By making simple division we would see that under those conditions the Natural Gas people would be underproduced 55 days in one proration period, and in two years they would be underproduced something like six-tenths of a year.

- Q Now, page 2 of Exhibit A is, once again, based on the productive acreage within the existing limits of the pool, is that right?
 - A That's correct.
 - Q As shown on Exhibit 3?
 - A Yes, that's right.
 - Q Will you please proceed to the next page.
- A On page 3 of this Exhibit 8 I have made an estimate, based on the area that we feel will be productive, based on information that Mr. Stamets and I arrived at mainly on the basis of Mr. Stamets' geology.
- Q Are you referring to the acreage within the orange line as shown on Exhibit 2, that Mr. Stamets testified was his projected production acreage?
- A That's correct. And I will call your attention to the fact that that productive acreage or estimated productive acreage does not include the dry hole in Section--what is it?

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BOX 1092 •

Twenty-four, I believe, which is in the pool limits.

Do you also feel, as Mr. Stamets stated during his direct examination, that this is a conservative estimate, based on information we have available at this time?

Yes, sir. I could include 43 productive units in all for the Upper Penn. Five of those units would be assigned to Southern Union; 38 of them to Natural Gas. I note that we have one more unit assigned to Southern Union here which is not shown on Exhibit 4. That is, I guess you would say, based on some inside information. I know they're negotiating for some acreage which I think is going to be productive, in there.

But it isn't shown on the maps?

It isn't shown on the maps because they didn't want us to divulge where it was, but we know it's there. So of the 18 million which would be taken from this pool under full development, we have five units attributable to it for 3.6 cubic feet per day, and the number of days in the unit, 3285 MCF in a proration unit. Unconnected wells on that basis would have 24,000,966 M squared CF underage in a period; making the simple division again of 80 million a day, they would be underproduced at the end of a sixmonths period of 312 days, four periods, about 3-4/10 years.

Once again, the figures go up and down, depend-

ing on the length of time in which there was an actual

connection by Natural?

As to time as well as to difference in Southern Union's production.

Please proceed to page 4.

This is the same type of estimated productive arrangement for the Morrow pool. This wasn't done on the basis of geology; it was done on the basis of productive offsets, or we used known drilling wells and decided whether that offset to those drilling wells might be productive or not. In this case there were only two units difference and those were inside locations, and we felt there was a good chance that they would be productive.

Do you feel that this is an extremely conservative estimate?

A Yes.

Is this area shown by the orange boundaries on Exhibit 3?

Yes, sir, it is. We estimated the Morrow production for Southern Union at two million a day. Going through a like computation, it would be 365 million for the period. Assigning like allowables to unconnected wells, which here number eight, at 460 M squared CF per proration period; making the division by 20, we see in one proration period that Natural Gas would be underproduced 73 days, or in two years



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approximately 8/10 of a year. As may be seen from these four exhibits, based on our estimate, the underproduction situation would not be too bad in the Morrow, but if we had more area assigned to Natural Gas it could be as bad as it would be in the Upper Penn.

Am I correct, as far as Exhibit 8 goes, that the Q only way you feel that what you have shown here as a conclusion would happen, is if all assumptions incorporated in here turn out to be all true, 100%, the projections in here?

That's right.

Otherwise it would simply show what might be anticipated?

I think we might mention at this point--I think the Commission surely understands by now that one of the reasons for this would be to show them what the conditions would be at the end of an estimated period. If these conditions exist and come to be a fact; at the end of the period at which Natural Gas would connect their wells, we assigned an allowable to unconjected wells, we would have a very substantial amount of underproduction. During this period, in order to give Natural Gas an opportunity to produce this underproduction, we're going to have to waive balancing procedures for at least the period shown on these exhibits, which in effect would be, in one instance 2-4/10 years in accruing underage, and in

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another, 2-4/10 in producing underage, unless they took higher rates or had less underproduction than I show. So in effect we would be assigning allowables without any balancing procedure for in excess of four years.

- Q If the Commission decided to assign an allowable to unconnected wells, in order for your Exhibit A to come about they would have to suspend balancing provisions of the rules as usually applied?
 - A Yes, after Natural Gas had been connected.
- Q Now, please proceed to Exhibit 9, and state what that represents.
- A That is a list of four alternatives which could be used in handling the problem of unconnected wells, or procedures to be used in handling unconnected wells.
- Q Once again, you're not going to recommend that the Commission assign allowables to unconnected wells, and you're not going to recommend that they do not?
- A That's right. They may think I'm unloading the decision on them, and I am. I think this problem of assigning allowables to unconnected wells is not only a legal problem but a policy problem, and since I don't make policy decisions
- Q But the various alternatives that appear on your Exhibit 9 are alternatives that the Commission staff has con-

sidered and that have been suggested to us, is that correct?

- That is correct.
- Would you please proceed through these figures numerically, and discuss each one.

I think the best way would be to read each one. Num ber 1, "Assign underproduction to a well after it is connected if the owner of the well establishes that he has been denied the opportunity to produce his just and equitable share of gas in the pool" That's just an attorney's way of saying that the Commission should do nothing unless somebody comes in for a hearing.

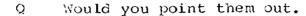
So Number 1 would really be, "Do nothing now about assigning allowables to unconnected wells"?

Yes. Number 2, "Allocate allowable production to connected wells based on the acreage in a proration unit committed to a connection." That is, a well with 320 acres committed to Southern Union and 320 acres committed to Natural Gas Pipeline would receive a 320-acre allowable upon connection to Southern Union, and 640 upon connection to--I should say both Southern Union and Natural Gas.

Strictly from an administrative standpoint, as far as handling any type of procedure that would be set up for assigning allowables to unconnected wells, do you see any difficulties to Exhibit 2?

I see all kinds of difficulties.





A One of the difficulties is that we would have to assign partial allowables to a well on a unit. We have never done this, and I don't think we ever should...not only because it's going to cause me a lot of work and us a lot of administrative procedures, but we would have to get into a proposition of determining title within a proration unit, and as we can see from this hearing, the purchasers haven't agreed yet what they own. If we're going to get into this sort of thing, I would recommend to Mr. Porter that we start hiring another lawyer to help you.

MR. DURRETT: I'd like the record clear on that.

MR. UTZ: I think I made the record clear--that it
was an "additional" lawyer.

Q (MR. DURRETT) You were referring to Exhibit 4, were you not, and the testimony of the gas purchaser that was given yesterday?

- A I meant to refer to Exhibit 4, yes, sir.
- Q Please proceed.

A Number 3: "Allow each unconnected well to accrue underproduction based on total pool production divided by the number of unconnected wells."

Q Do you see too much difficulty from an administrative standpoint, as far as doing Number 3?





As far as administrative procedures are concerned, we can administer Number 3 just as well as we can administer any of the rest of them. I certainly am not recommending Number 3 because I think it's wrong and will not protect correlative rights.

- Let's proceed to Number 4.
- Number 4 is, "Allow each unconnected well on a standard unit to accrue underproduction equivalent to the allowable assigned to a connected well on a standard unit." Of course by using the word "standard unit" we mean any adjustment in the size of the unit should be made.
- A non-standard unit would receive corresponding treatment, then?
 - That's right.
- From an administrative standpoint as far as handling any assignment of allowables to unconnected wells, do you feel that this would be the best way or not?
- I recommend--if we're going to assign allowables to unconnected wells, I recommend that we use Procedure Number 4, which would in effect assign on an acre per acre basis, the same allowable that is assigned to Southern Union connections. As far as the administrative procedure is concerned, this would of course increase the procedures -- we would have to keep books on the wells from the date of the first assignment of allowable



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There would be no balancing procedures until such time as we saw fit to put balancing procedures in effect.

Q So you would have to suspend balancing procedures in order to make Number 4 work?

A Yes, sir, after the first connection of Natural Gas Pipeline.

Q Also what you are speaking of here is assignment of allowables to a unit, more than to the well, as such--that's the way you handle it, as far as prorating?

A In effect that's what we do now on our proration—we only list the well in order to tie the well to the unit.

Q And as far as split connections, how would you handle them? Under this they would just receive an allowable for the unit?

A Yes, sir. We would assign that well a full allowable, and any division of allowable would have to be ironed out among the parties concerned.

Q Going back into the prior testimony concerning instituting prorationing in these pools, that's also the way you propose to do it—a straight acreage formula you recommend?

A For connected wells--yes, sir, exactly.

Q Now, is Exhibit 5 a true and correct copy of Commission Order Number R-2440?

A Yes, it is.



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Is Exhibit 6 a true and correct copy of Commission Order Number R-2441?

Yes, it is.

Were Exhibits 7 through 9 prepared by you or under your supervision?

Yes, they were.

MR. DURRETT: If the Commission please, move the introduction of Exhibits 5 through 9, and that will conclude my direct examination of Mr. Utz.

MR. PORTER: Is there any objection? ... The exhibits will be admitted. Does anyone have a question of Mr. Utz? Maybe I ought to say, who wants to be first?

CROSS-EXAMINATION

BY MR. MORRIS:

Mr. Utz, how many prorated gas pools do you have in southeastern New Mexico?

We have ten.

Are all of these pools governed by the provisions of Order R-1670, as amended?

Yes, they are.

I realize some of these pools have special pool rules, but as far as the procedures for nominating and balancing are concerned, are all of the pools presented prorated in the southeast governed by the basic provisions of Order Number SPECIALIZING IN: DEPOSITIONS, HEARINGS,

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R-1670?

- yes, they are. Α
- If this pool were given any special treatment, then it would be a definite exception among prorated gas pools in southeastern New Mexico?
 - Yes, I believe I stated it would be the first time.
- Assuming, Mr. Utz, that the Commission should decide to assign allowables to unconnected wells in accordance with your proposal Number 4 on Exhibit 9, I'd like to see if I understand or can figure out how it would work in actual practice. Do I understand that the provisions of Order Number R-1670 would still apply to the extent that they weren't in conflict with the provisions that would assign allowables to unconnected wells? In other words, except for assigning allowables to unconnected wells, would Order Number R-1670 still apply?
 - Yes, they would, to connected wells. And you stated your question -- the beginning part of it, that I recommended this. I don't recommend this, but if they're going to assign allowables to unconnected wells, I recommend that they do it this way.
 - How would you contemplate that the purchasers' nominations would be made, as soon as Southern Union makes its first connection?



A The allowables would be assigned to Southern Union connections in exactly the same manner as we assign allowables to connected wells in the ten prorated pools in southeastern New Mexico. Those nominations would be adjusted as I explained in the pool balancing procedure here in my direct examination. The resulting unit allowables computed from that balancing would be assigned to the connected wells on an acreage to acreage basis. Those same allowables would be assigned to the unconnected wells. In that manner Southern Union would not be denied any market demand whatsoever.

- Q Southern Union would actually submit nominations to the Commission under the present Rule Number 1670?
 - A That's correct.
- Q And that would require each gas purchaser in the pool to submit his nominations for the amount of gas which he actually in good faith desires to purchase during the succeeding proration period, in the case of preliminary nominations; and per month in the case of supplemental nominations?
 - A That's correct.
- Q Do you contemplate that Natural Gas Pipeline would make any nominations to the Commission during this period of time, as to what their market demand would be for the current proration period?
 - A Natural Gas will not have a market demand until



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they are ready to take gas from the pool; therefore they couldn't make nominations under this system. The reason we can't assign allowables by nominations is because they will have no production in order to balance nominations, and we could end up with any figure from one to as far as you want to go.

Q So allowables would be assigned to wells connected to Natural, even though Natural would have no market demand for that current proration period?

A That's right.

GOVERNOR CAMPBELL: When you say "connected," you don't mean physically connected; or do you?

MR. MORRIS: Yes, under the contract to Natural.

Now, when Natural Gas Pipeline is physically connected to these wells, if that comes about, how would you contemplate that the proration would work, if the Commission has been assigning allowables to these unconnected wells; and particularly with reference to what type of nomination you would expect to receive from Natural at that time?

A Well, to begin with, I thought it was pretty much of a certainty they were going to connect these wells. I would expect that Natural Gas would make nominations at that time in accordance with the amount of gas they intended to take from their connection. If that is above or below Southern

Union's nominations, I should say they should nominate what they intend to produce.

- Q So at the time Natural is actually connected, then they will make a nomination as to what their intended takes will be, without regard to allowables that have been assigned to the well?
 - A Yes, they would nominate for the underproduction.
- Q The point is, assuming Natural is going to nominate in good faith what it actually desires to purchase for the then current provation period, will those nominations be taken into consideration by you in fixing new allowables—additional allowables for these wells, or will those nominations be disregarded at that time, and effect given to the allowables that have been allowed to stack up on these wells?
- A The way I visualized this thing, Mr. Morris, is that when Natural Gas begins connecting, and in accordance with the number of connections they have made and the gas they can produce, they make nominations for those; those nominations would go into the pocl balancing procedure the same as Southern Union's nominations.
- Q So if those nominations by Natural actually reflect their current market demand, you're going to be stacking them on top of the allowables that have already been allowed to stack up on the wells?



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A I'm trying to visualize this underage when they start connecting, I think that's what you're driving at. When you start connecting the Natural Gas wells, then the total pool net allowable will come into the picture and then an adjustment would be made on the net allowable figure which would be a part of their underage; but as far as their nominations against their production, I don't see any difficulty. It may be that on the pool balancing figures, the underproduction would cause quite a fluctuation in pool allowables.

Q What I'm getting at is, if at the time Natural is connected to these wells—if it then nominates its current market demand and what it expects to take for that proration period, and the allowables are assigned based upon those nominations, at that time, then, Natural will be provided with allowables that will allow it to meet, no more, no less than its market demand at that time; and this can be accomplished under the provisions of Rule 1670, without having to resort to tinkering with the proration schedule by this business of assigning allowables to unconnected wells, is that correct?

A That's a pretty good question, Dick. As I visualize it--maybe this will answer your question; I'm not sure. As I visualize it, the only deviation from R-1670 that would be necessary would be suspension of the balancing

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procedures, for the reason that it would be impossible for Natural to produce these accumulated underages unless we do. In other words, I don't think they can produce them all in a six-month period, or two six-month periods. If they don't produce them all in the second six-month period they're going to be subject to cancellations, and if we're going to do that, what good would it do to assign them in the first place?

- Q Everything depends on what Natural's market demands are at the time it's assigned?
 - That's right.
- If it nominates at that time for what its market demand then is, an allowable can be provided to Natural to allow it to take that market demand, without reference to any assignment of allowables to any unconnected wells?
- I believe you're correct. At least--yes, sir, you are correct.
- If I am correct, Mr. Utz, in that, and if you are correct in agreeing with me, the assignment by this Commission of allowables to unconnected wells and the tinkering with the proration mechanism would be an unnecessary act?

MR. DURRETT: If the Commission please, Mr. Utz stated on direct examination that he did not have a recommendation to make concerning whether or not the Commission should assign allowables to unconnected wells. This line of questioning



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obviously is leading to that, but he has previously stated that he has no recommendation. We will object to the question on

MR. MORRIS: If the Commission please, I haven't got those grounds. to the point of asking Mr. Utz to make a recommendation to the Commission; but if Mr. Utz can testify that the assigning of allowables to unconnected wells would be a useless act and that wells in question that are committed to Natural would be able to produce the same amount of gas when connected, under the ordinary provisions of R-1670, then it is certainly material to the Commission, because I know the Commission doesn't want to do a useless act or make an exception where exceptions are not needed.

GOVERNOR CAMPBELL: The Commission of course is going to ultimately decide whether it's a useless act; so I don't see much point to the question.

MR. PORTER: The objection is sustained.

MR. MORRIS: Mr. Utz, so long as Southern Union Gas Company is the only purchaser who is actually making takes from this pool, is there any danger of production in excess of the

Oh, it's possible, but I would doubt it. You mean market demand? Southern Union's market demand?

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No, T wouldn't say so.



So long as there is only one purchaser in the pool, is there any real need for prorationing?

MR. COUCH: Object to that question. I think that's a matter the Commission can finally decide. It's a question of law as well as a question of fact, as to whether there is any need for prorationing in a pool where there is only one purchaser. As a lawyer I can say yes, there is a very valid reason even though there is only one purchaser; and I don't think it's a proper question for this witness.

MR. MORRIS: If the Commission please, the witness stated on direct examination and made his recommendation to the Commission that prorationing be instituted, and I'm sure that opinion was looking on down the line to where there would be two purchasers in the pool; and he has stated that in his opinion prorationing is necessary. My question here is, so long as there is just one purchaser, aren't we premature in considering prorationing, and I think in view of the opinion previously expressed by the witness, it's a proper question.

MR. COUCH: The witness previously testified that the ability of the wells to produce in this field is substantially in excess of the market demand Southern Union testified it would be. The conclusion as to whether prorationing is proper is a conclusion for the Commission. I think the question is not proper.



GOVERNOR CAMPBELL: Can you answer the question? .

MR. UTM: I would be happy to.

MR. PORTER: The objection is overruled. We feel that's a proper question.

MR. COUCH: Note our exception to the ruling.

MR. PORTER: Your exception will be noted.

MR. UTZ: I think it's just as necessary to prorate one purchaser as it is two purchasers, as far as protection of correlative rights is concerned, and in granting of ratable allowables in accordance with the formula, it's just as effective in protection of correlative rights of one purchaser as it is a dozen.

MR. COUCH: Will you strike our objection, please. GOVERNOR CAMPBELL: I was just going to ask you if you wanted to strike that answer.

WITNESS: The only way one purchaser would protect correlative rights any more than another, is that he just has more control.

MR. MORRIS: We have a number of large gas pools in the State of New Mexico that are not subject to proration, do we not, Mr. Utz?

We have some that I think should be prorated, Mr. Morris.

That wasn't my question, Mr. Utz. We have a number

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of gas pools in New Mexico that are not prorated?

- A Yes, we do.
- O Is it your understanding of the situation that the rules concerning ratable take and common purchasing can apply in those pools, without the actual institution of proration in those pools?
- A It can--could; but some of the studies I have made indicate that it isn't. We have tried in one instance issuing a ratable take order ordering the purchaser to take the ratable from two small pools. I suddenly found myself, as far as my administration of ratable take, dehorned, because I didn't have the rules to enforce it. And when I discovered that the take wasn't ratable, I recommended that we prorate it, and we did; and now we are able to enforce those rules.
- Q Previous to prorationing in the instance you referred to, had any application been made to the Commission or to you by any of the producers in the field, concerning ratable take?
 - A Which instance?
- Q The one you just referred to, when you found that prorationing helped you to enforce ratable take.
 - A Had any of the operators and purchasers--
- Q Yes--had any operators or producers or purchasers ever availed themselves of the ratable take or common purchaser



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statutes, to your knowledge?

I think they tried to. I don't recall whether they made any specific formal request to us, but if they didn't make it official, they did unofficial.

Mr. Utz, has it been the Commission's practice and custom to treat unconnected wells as wells that are not actually completed?

No, I don't think we treated them as uncompleted wells. The wells are completed--in other words, in our nomenclature when you set a wellhead the well is completed, whether it's connected or not. We don't assign allowables to wells until they are physically connected to the purchaser, under our present procedure.

Did I understand you, that in some of your exhibits and studies you have made, you did actually contemplate assigning allowables to tracts within the productive area of the pool upon which wells have not been drilled?

No, sir. You misunderstood the recommendations, if you came to that conclusion. Only completed wells.

Where a tract is an immediate offset to a producing well that is connected to Southern Union or is committed to Southern Union, it would be equally logical, would it not, to assign an allowable to that tract, as well as it would to a tract upon which there were a shut-in well committed to Natural?



A I don't think so. There has been no expenditure of money he needs a return from, or any correlative rights he has proved he owns, until he hits the drill bit.

MR. MORRIS: I think that's all I have.

MR. PORTER: Does anyone else have a question of Mr. Utz?

MR. COUCH: May I inquire, with respect to your four alternatives and particularly with regard to Number 1--I believe you stated that that was a lawyer's way of saying that the Commission do nothing at the present time with regard to unconnected wells. Is that your understanding of the interpretation of Number 1?

- A That's correct, yes, sir.
- Q And that alternate Number 1, if followed by the Commission, would leave the Commission free at some future date to grant relief in some other way, perhaps, than assigning underproduction to the wells after they become connected, if some other means were devised; you're not saying alternate Number 1 would be assigned to underproduction, are you?

A No. Did you say assigned underproduction after they become connected?

- Q Yes, sir. That's the way I see Item 1.
- A I don't visualize Item 1 as meaning you assign any underproduction. You merely start assigning allowables at

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- Q You would recognize still a fifth alternative, that the Commission do nothing at this time and doing what is established as being necessary at a future date, if it became necessary?
- A Yes. I don't really consider that a fifth alternative--I think that's what Number 1 says.
- Q If I happen to consider it a different alternative, you wouldn't take exception to the fact that it is an alternative, would you?
 - A No, not at all.
 - MR. PORTER: Does anyone else have a question?
- MR. MUNDELL: You stated that you recommend 100% acreage in the consideration of an allowable?
 - A That's correct.
- Q I refer you to Exhibit 7. Referring to the absolute open flow column in that exhibit, under the Upper Pennsylvanian, those figures given for absolute open flow are correct to the best of your knowledge, with what has been supplied you by the operator?
 - A That's right.
 - Q And they contain no typographical error, et cetera?
 - A After finding those fives for S's I wouldn't guar-



antee it, but I think they're correct.

On There's quite a variation in that absolute open flow from a low of 3,150,000 CF up to 264,379 cubic feet a day. Is that right?

A Well, there's a 3150. It's lower than 3240, if you're establishing range.

- Q 3150 is low; 264,879 is high?
- A That's correct.
- Q And that column was also considered in the 100% acreage recommendation?
- A You mean were absolute open flows considered in my recommendation for the 100% acreage formula?
 - Q Yes, sir.

A Well, I don't really know whether I can say they were considered or not. I knew they were there; I didn't think they meant anything as far as assigning allowables is concerned.

MR. MUNDELL: Thank you. That's all.

MR. SPERLING: Jim Sperling. Mr. Utz, turning to your alternative Number 4 in your exhibit, would you explain for me how it would work under this situation: Assume both of the prospective purchasers are connected, and assume that six months from now or a year from now, total nominations for both purchasers equals 120 million a day. Would you explain how you would allocate those nominations, as to underproduction and

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current allowable?

The underproduction, Mr. Sperling, would be a figure assigned to a well as of the date--actually it would be assigned to the well as of the date of completion or instigation of proration, and would be accrued as a well figure or a beginning net allowable figure. After the wells were connected, then it is my recommendation that balancing procedures be suspended, if we're going to assign them to unconnected wells, and that allowables be assigned to all connected wells on the basis of nominations -- the first previous month's data and the second previous month's data, as we do now. This would assign the allowables to the wells on exactly the same basis as we assign them now--not in relation, as I see it, to underproduction accrued on each individual well. He would merely have the allowable assigned against that underproduction, and be able to make up that underproduction over a considerable period of time.

You are assuming then, that production would exceed nominations by whatever figure was selected for the purpose of making up the underage, is that what you're saying?

I'm saying that as I see it, we would adjust production against net pool allowable, as we do now. If that figure completely eliminated the original nomination figure, there wouldn't be any allowable that month. If it was a positive figure we would divide the allowable up on a 100% acreage



- Q Where do you make up the underage or accumulated production, or whatever you wanted to call it?
 - A Where do I make it up?
 - Q Yes--how is it made up? How is it recouped?
 - A By producing more than the allowable.
 - Q And you would expect that to exceed the nominations?
 - A On the present well basis, it very well might.
 - Q Where does it go--the gas?
 - A You mean where does the figure go, on gas?
 - Q The gas.
 - A Down the pipeline.
- Q How can it be in excess of the market demand, assuming nominations are realistic?
- A Well, Mr. Sperling, if they produce in accordance with their nominations--
 - Q I can't hear you.
- A I say, if they produced on a pool basis in accordance with nominations, on a pool basis, then on a pool basis the allowables would be equivalent to production on a pool basis, unless Southern Union's nominations changed that figure. Of course when you prorate a pool and calculate allowables for the pool, you take all nominations and all production and put them together, so what happened to allowables as far as what Natural Gas wants to buy or does take as a matter of fact, would

depend on what Southern Union did in the way of nominations and and production. In other words, what I'm trying to say, and probably very awkwardly, is that if Southern Union's market demand was lower than Natural Gas, Natural Gas would have an allowable lower than what they wanted, and they would make more gas than what is produced.

- What you're saying is that you are forcing the Q purchasers to submit unrealistic nominations?
- No, I don't believe so. Anyway, if they did submit unrealistic nominations the same thing would happen as happens now--when they submit a nomination that they think is realistic and it so happens it turns hot in California, and they only produce half that much gas. We adjust back to production, so in reality nominations don't mean a darn thing--they just kind of clutter the figures up by having two dead months there before we get back to production. We can prorate without it.
- Nominations are supposed to have some relation to market demand, are they not, under our system?
 - That's right. A
- Getting back to my original illustration of 120 million a day, I don't believe you answered me on how much of that 120 million actual production would be credited to accumulated allowable, and how much to current allowable.
 - That 120 million was what -- nominations or production?

Q Nominations. I'm assuming nominations have some relation to production.

A Well, Mr. Sperling, if they nominated 120 million and they took 120 million, and that was assigned to the wells on that basis, right down the row, then they wouldn't be able to make up any of their underproduction. But it doesn't necessarily hold that that's the way they will produce the wells in order to make up underproduction. They have that latitude, as any pipeline does, and they can shut in half the wells this six months, and produce enough to make up the underage, and the still have the next six months to balance. In this case they could shut in the wells and on a monthly basis—that's the way it's determined—produce the other 50% of the wells in excess of what the allowables were, and make it up.

- Q Don't they have that same opportunity now?
- A Yes.
- Q So what have we accomplished under your alternative Number 4?
- A Well, you understand I'm not really recommending

 Number 4. If the pipelines did--I guess my attorney wants me

 to answer this question; I haven't heard any objection. If

 the pipelines take in accordance with the way you're proposing

 here, and taking all the allowable and nominating for all this

 underproduction, and also taking it--and, like I say, they're

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going to have to produce it or it won't do any good to nominate it—the end result in the absence of non-balancing would be the same. But we have no assurance—the operators have no assurance that they're going to take it.

MR. PORTER: Since you're not going to make any recommendations, and the Commission is going to have to decide this, I want to clear up a point or two. In our proration system production actually is the allowable, in the final analysis?

- A Yes, sir.
- Q We have testimony in the record that one purchaser in all probability will be connected a minimum of six months prior to the time the other one is connected.
 - A That's correct.
- Q So that brings up the question how to protect correlative rights. Let me ask this question, and see if you agree with this statement: Regardless of the amount of underproduction that might accrue during this six months, Natural Gas can only take so much gas after they are connected?
 - A Yes, that's true.
- Q Then if the Natural Gas demand is too low--it's lower than Southern Union's--then the underproduction would never be made up?
 - A That's right.

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q Then my question, in connection with correlative rights and our duty to protect them, is, would the assignment of allowables to the unconnected wells at this time serve any purpose? I believe that's the thing we're all trying to arrive at here.

A I think I can answer your question in this way: If
Natural Gas produces it, it would serve a purpose as far as
protecting unconnected wells against connected wells. If the
Commission decides that unconnected wells' correlative rights
are not being protected by the non-assignment of allowables-I'm not making that decision, but if they produce the underage
it will be of some avail. If they don't produce it, no--if
it's cancelled. It won't do any good to assign it and cancel
it.

Q Wouldn't that underproduction we're talking about be produced, regardless of whether we assign it and call it underproduction?

GOVERNOR CAMPBELL: If they have the market.

A Like I answered Mr. Sperling's question, yes, if they choose to take in that manner, it will; but you wouldn't have any guide lines as to whether they ever caught up or not.

MR. PORTER: I believe I have no more questions.

MR. DURRETT: That will conclude the Commission's case, Mr. Chairman and Commissioners.

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MR. UTZ: I think I might have a couple points I might want to get in the record, which I neglected to do on direct. These two small points are in regard to procedures if we should prorate or assign allowables to unconnected wells.

MR. DURRETT: You're referring to Exhibit -- what?

- A Exhibit 9.
- Q Exhibit 9 would be in connection with the four alternatives. All right, sir.

suspended if we are going to do the job as we are trying to.

Next, I think we should classify wells during this period, not suspend classification rules. After six months production, after we have some history and know it cannot produce the allowable, there's no sense in carrying it on—it should be cancelled. This could help the marginal wells that can't produce the marginal allowables. The next point I would like to get in the record as part of the recommendations is that I think we should observe the "six times over-produced" rule, so that during this period the wells cannot get so far out of balance that they will be shut in for a long period of time when balancing rules go into effect.

- Q What is the "six times over-produced" rule?
- A That means the well has over-produced six times its current allowable.



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Is that all, Mr. Utz?

Yes.

MR. DURRETT: That will conclude the Commission's case.

MR. PORTER: If there are no further questions of the witness, he may be excused. Does anyone else desire to present testimony in this case? Are there any statements to be made in the case?

MR. SMITH: If it please the Commission, at this time I should like to state Pan American's position.

We have no objection to the instituting of prorationing in this pool. If the New Mexico Oil Conservation Commission finds that unconnected wells have not been denied access to a market, such wells are entitled to no consideration and must wait for a connection before being assigned allowables. If the Commission finds that unconnected wells have been unreasonably denied access to a market, then the only relief such wells are entitled to is the statutory relief of being included in the proration schedule and being subject to the regular New Mexico Oil Conservation gas balancing provisions.

That, essentially, is our position. We think this pool should not be treated any different than any other gas pool in the State of New Mexico has been treated. I

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in the statute, to consider if the Commission has any authority to give allowables to unconnected wells. Based upon Mr. Utz' testimony, if the manner in which he contemplates it would be handled is followed, then it would be a violation of the statute insofar as the definition of waste is concerned. I'd like to direct the Commission's attention to Article 6533, which defines waste, and particularly to paragraph E: "Production in this state of natural gas from any gas well or wells or from any gas pool in excess of the reasonable market demand from such source of natural gas of the type produced or in excess of the capacity of gas transportation facilities for such type of natural gas is waste." By being able to produce the underproduction over a period of years in excess of the nominations, the nominations of course relate directly to market demand, so such production would be in excess of the market demand and contrary to the provisions of the statute which defines waste.

would like to strongly urge you, under the definition of waste

I suggest that the Commission does not have the authority to handle this in that particular manner--no statutory authority, and will have no jurisdiction of the subject matter. This proceeding reminds me of the trial of a personal injury suit before the accident occurs. I think the Commission should wait until such time as you have sufficient history in the field to make a determination as to whether or not correlative



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right have been impaired, and at that time do whatever the Commission feels is just and right, based upon actual facts and not upon assumptions.

GOVERNOR CAMPBELL: Just for the record, does pan American have acreage in the area?

on Exhibit 2--it's Section 11. I'm glad you mentioned that.

It's Section 11, and you may recall in my interrogation of Mr.

Stamets I was trying to establish Section 12--we also have that under lease, and I'd like to suggest to the Commission that under lease are assonable to assign an allowable to proven acreit's just as reasonable to assign an allowable to proven acreit's not been drilled yet, because gas is going to occur, and correlative rights does relate to drainage. And therefore if you decide to grant this allowable, we request that we be granted an allowable on Sections 11 and 12, based upon evidence now before the Commission.

MR. PORTER: Does anyone else have a statement to make at this time?

MR. MORRIS: Just very briefly, concerning the unconnected wells and the assignment of allowables to unconnected wells. We would concur with Mr. Smith's statement to the ed wells. We would concur with Mr. Smith's statement to the commission in that regard, that the Commission should not and perhaps cannot handle the problem in this way. Under the statutes governing the Commission's action, allowables are to



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be assigned only to wells that are actually connected to and producing into a pipeline facility, and there is a specific exception in that regard set forth in the statute, which provides for the assignment of allowables to unconnected wells in the event the Commission finds that they are being unreasonably denied access to a facility. Now, in this regard, we're talking about correlative rights of these other operators. I'd just like to make the observation that the correlative rights which an operator starts off with can be altered by what that operator docs -- the contract he makes with the purchaser is a voluntary act that affects his correlative rights. I think it is evident to the Commission without my having to point it out in great detail, that a producer's correlative rights and his opportunity to produce is largely, if not entirely, governed by the purchaser with whom he contracts, and what that purchaser's market is. I think it's obvious that if Natural wants to come after it is connected and raise its takes, then allowables can be provided to wells connected to Natural's system to make up whatever they are behind. If Natural doesn't have a market to adjust that, assigning of allowables to unconnected wells is going to have no effect, and this problem can adequately be handled by the nomination Natural chooses to make. In that regard, I suggest that the correlative rights of the producers are title to what Natural's market and takes

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will be. Now, in the contract that these producers committed to Natural have, yesterday we saw and I read to Mr. Ramsey on the stand a provision of that contract, which provides that under certain conditions, in order to prevent undue migration or drainage from under the producer's tracts, they can sell gas to others if they feel that that is necessary; and Southern Union -- and anyone taking gas in this pool -- is certainly bound by the common purchaser statutes in effect. In other words, what I am suggesting is that there are other ways for these operators to protect their own correlative rights without this Commission having to assign allowables to those wells. Certainly the prorationing of gas, I think we would all agree-even those much more familiar with it than I -- that this is an extremely complex area. This Commission has well-established rules for proceeding in this area. I think it would be extremely imprudent for the Commission to alter those procedures where no real need exists to do so; and I think it has been . amply demonstrated here that no need exists in this case to alter the established procedures for this pool.

GOVERNOR CAMPBELL: Mr. Morris, I couldn't tell from your line of questioning, and would like to ask now, whether Southern Union is taking the position whether this pool should be prorated at all at this time--your only comments have related to assigning allowables to unconnected wells.

MR. MORRIS: From my questions, Mr. Chairman, I was merely seeking the witness's observation in this regard. Certainly if the pool is not to be prorated at this time, this would eliminate all consideration of what formula we're going to have, and any consideration concerning assignment of allowables have no objection to prorationing of the pool at this time, we have no objection to but it does seem premature to us--but we have no objection to

MR. PORTER: Are there any other statements?

MR. HOWELL: Ben Howell, representing El Paso

Natural Gas. We have neither acreage in this pool nor are we
a purchaser in the pool. The principle involved, however, is
one that deeply concerns us. With that statement, may I inquire
if the Commission will permit a reflection of views of a

if the Commission, that isn't directly interested.

GOVERNOR CAMPBELL: Why don't you come on in?

MR. HOWELL: I would like to state that we feel that this principle, if applied to other pools in the state, would have chaotic effects, because traditionally not all wells in a pool are drilled at the same time. In fact, I remember in a pool are drilled at the same time. In fact, I remember evidence in the Jalmat case in which completion dates of wells evidence in the Jalmat case in which completion dates of wells were as much as twelve to fifteen years apart. It seems to me, as a legal matter, that the statute simply does not allow the allocation of allowables to unconnected wells. I am reading



from Article 65-3-13, and I'm sure the Governor remembers some of the negotiations that went on at the time that section was proposed by the legal committee of the association. It directs the Commission what to do--it says you shall determine reasonable market demand; it doesn't say to determine reasonable market demand plus an allowance for something else that may occur in the future. "It shall determine reasonable market demand and make allocations of production during each such period upon notice and hearing at least thirty days prior to the beginning of each proration period. Insofar as is reasible and practicable, gas wells having on allowable in a pool shall be regularly produced in proportion to their allowables in effect for the current proration period. Without approval of the Commission or one of its duly authorized agents, no natural gas well or pool shall be allowed to produce natural gas in excess of the allowable assigned to such source during any proration period, providing that during an emergency affecting a gas transportation facility, a gas well or pool having a high deliverability into such facility under prevailing conditions may produce and deliver in excess of its allowable for a period of emergency not to exceed ten days, without penalty."

That language was put in after much discussion, pro and con, and it has always been construed by the Commission and the industry to apply to a well when completed and connectdearnley-melei

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ed -- that its right to an allowable then commences.

With these few remarks, if it would be any help to you, I'd be very happy to try to file comments upon the legal question involved, and its possible effect upon other pools in the state.

MR. PORTER: Mr. Howell, in connection with your suggestion, the Commission will allow a period of ten days for anyone to file any comments they may have. Are there any other statements to be made?

MR. COUCH: May it please the Commission, Marathon's recommendations in connection with this case will be as follows:

First, we definitely thing the evidence presented here has shown a sound basis for instituting prorationing, effective with the commencement of taking of gas from the pool. Mr. Utz has stated that in his opinion the wells in each pool can produce substantially in excess of the market demand if no restriction is imposed on these wells. We think it is also clearly shown as far as the evidence in the record is concerned that so far as can practicably be determined, in the words of the statute, as a temporary measure both pools should be prorated on a 100% acreage, and we so recommend as of this time.

With regard to the choice of alternatives as indicated by Mr. Utz, it is Marathon's recommendation to the Commission that at this time the Commission follow what Mr.



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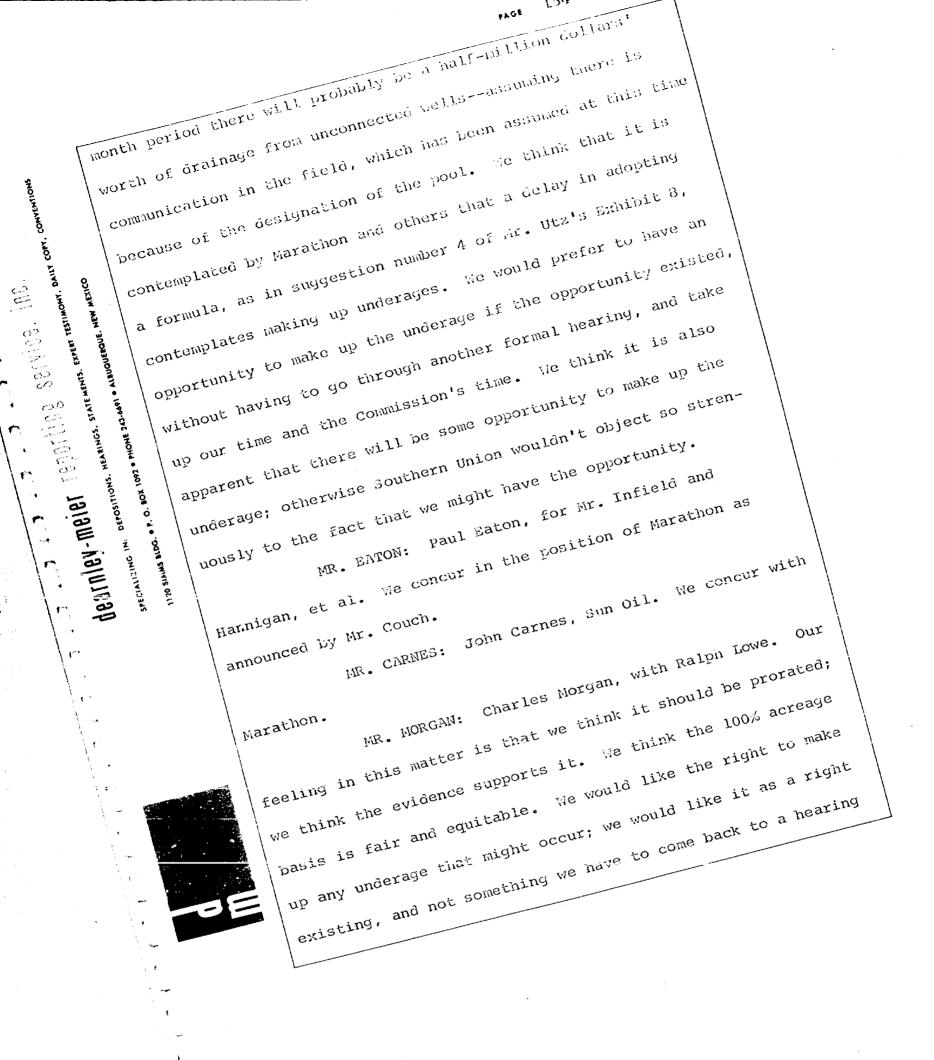
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The construed to be within his first alternative but what I regard as a fifth alternative—that on the unconnected well situation the Commission take no action other than to include in the order a specific finding that it will continue to observe the situation, and in the event it becomes apparent that there will be substantial injury to correlative rights which the Commission would have authority to protect against, at that time, on its own motion or upon application of any interested party, the Commission could consider the true facts then, and make a determination of what, if anything, it should do with respect to unconnected wells.

MR. SPERLING: I'd just like to say that I concur with Mr. Couch.

MR. NEWMAN: Kurt Newman, for California Oil Company. To the extent that the Commission made recommendations, we would like to endorse those recommendations; and with reference to the 100% acreage formula for allocation of allowables, we wholeheartedly endorse the prospect that that will go, because there is not sufficient data to make an allocation on a reserve basis.

We would like to make a recommendation where the Commission staff was silent—that is, as to allocation of an allowable to unconnected wells. We feel that the testimony which is before the Commission would indicate that in each six-



and yet.

MR. KRAUF: Jim Krauf, of the United States Geological Survey. I would like to present a statement by Mr. Anderson.

"The Geological Survey is not convinced that the establishment of deferred allowables for non-connected wells in the Upper Pennsylvanian and Morrow pools in Indian Basin is a practicable or necessary means of protecting correlative rights in these pools.

"We recommend that the Commission establish gas prorationing in each pool on an acreage basis with production limited to market demand and capacity of gas transportation facilities. We further recommend that no special rules, such as deferred allowables with make-up provisions, be adopted for wells not connected to a gas transportation facility."

MR. WILLIAMS: Mr. Chairman, Bud Williams for Kerr-McGee. Kerr-McGee has 100% working interest in one well and partial working interest in five other wells in the Indian Basin.field. Kerr-McGee believes there will be a need for gas prorationing in the Indian Basin Upper Pennsylvanian and Indian Basin Morrow gas pool. We believe there should be a proration formula; we have no objection to 100% surface acreage.

We think unconnected wells could become a real problem. We think the Commission should recognize this as a ĝ

possible problem of correlative rights, and leave the door open for future action if the problem does develop.

As to the problem of diversity of pipeline connections within a proration unit, we are inclined to feel that this problem, if at all possible, is something that should be worked out by the producers within such unit; but if an equitable solution cannot be worked out, we would want to reserve the right to seek whatever relief we can get from the Commission.

GOVERNOR CAMPBELL: I'd like to concur with the portion of that statement that refers to the responsibility for working out the problem lying with the producers.

MR. CUNNINGHAM: Douglas Cunningham, Sinclair Oil & Gas. It is the opinion of Sinclair Oil & Gas that provationing should be instituted in the Indian Basin gas pool. Sinclair recommends 100% acreage as the method for allocating allowables. Sinclair believes that an allowable should be assigned to unconnected as well as to connected wells, and recommends Mr. Utz's alternative number 4 as the method of accomplishing these allowable assignments.

MR. TOMLINSON: Phil Tomlinson for Atlantic Refining Company. We concur in the position of California Company, Ralph Lowe and Sinclair on the point of getting proration in the field with allocation by 100% acreage, and

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on the point of making up accrued underage at such time as the well will become connected.

As to the effect of setting a precedent, this point has never come up before in several years in this state. It doesn't seem that there was a real need in the past. This is the time to set a precedent. If we're going to set a precedent this is a good time to set one, because there is a real problem in existence.

MR. MUNDELL: Jack Mundell, with John Trigg. We agree with Kerr-McGee and Marathon, with the exception that we don't agree with the point of 100% acreage.

MR. NESTOR: E. W. Nestor, Shell Oil Company. We own an interest in one well completed in the field and we contracted to Natural Gas Pipeline, and our interest will not be marketed until they are able to tie us in. We believe that Mr. Utz's recommendations for instituting prorationing in the two pools at the time takes commence is sound, and we further agree with his recommendation that the allocation be based on 100% acreage.

We foresee considerable difficulty here in the underage problem, and a possible impairment of correlative rights, but even though we are on the outside looking in, we don't like the prospect of setting a precedent which might affect us all in making allocations to unconnected wells. We



desirable. We do believe that it would be well for all of us to keep our eyes open and watch what develops, to see how much impairment of correlative rights there is, and we would like also to reserve the right to come before the Commission in the future and discuss the matter further. We would not want anything to be done now, in granting allowables to unconnected wells.

MR. PORTER: Does anyone else have a statement?

MR. HUNKER: George Hunker, representing Monsanto.

Monsanto has no objection to prorationing of this pool at this time; but would like to reserve the right to come in and ask the Commission at a future date for some relief with respect to unconnected wells. Monsanto has one well to drill in the field, and has over one net well at the present time.

MR. PORTER: Does anyone else have a statement to make?

GOVERNOR CAMPBELL: I think it's really refreshing that we have a case of this magnitude involving the production of gas in New Mexico, and a little competition over buying it, and apparently expanding markets for it. I'm sure all of us can remember that a relatively few years ago in New Mexico, and elsewhere to some extent, this would really have been a drug on the market. And I just hope for the Commission that we



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can get this gas in the line as quickly as possible, and that the Commission can assist in protecting correlative rights of all the producers in the field. It looks like it's going to be a very fine field, and I'm glad there are so many here that are interested in it.

MR. FORTER: I certainly hope that somebody can influence the Federal Power Commission to move at a little faster pace in their deliberations on this matter. I made this statement up at Farmington—drew this analogy, rather, in talking to the AMIE. I told them about the incident where my brother bought a mule one time for fifteen cents, and we named the mule Nicodemus. He had three gaits—start, stumble and fall; and my brother stated that if that mule were living today, we'd probably call him the FPC.

We have an invitation which we can't act on at this time, to hold a hearing in Hobbs next April in connection with the automation symposium. The Commission would certainly like to cooperate. I understand the symposium is the 21st and 22nd of April, and the hearing of course would be on the 20th, if that could be worked out. But we'll notify the proper authorities, and we certainly appreciate the invitation.

If there is nothing else to come before the Commission, we will take the case under advisement. The hearing is adjourned.

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STATE OF NEW MEXICO COUNTY OF BERNALILLO)

I, ELIZABETH K. HALE, Notary Public and Court Reporter, do hereby certify that the proceedings in the foregoing case were taken and transcribed by me, and that the foregoing is a true and correct transcript of proceedings to the best of my knowledge, skill and ability.

IN WITNESS WHEREOF, my hand and seal of office this 30th day of April, 1965.

My commission expires May 23, 1968.

