

CASE 4649: MOTION OF OCC FOR THE  
AMENDMENT OF GAS WELL TESTING  
PROCEDURES PROMULGATED BY R-333-F.

Case Number  
4649

Application

Transcripts

Small Exhibits

ETC.

BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO  
January 19, 1972

EXAMINER HEARING

IN THE MATTER OF:

Application of the Oil Conservation  
Commission on its own motion for  
the amendment of the gas well  
testing procedures promulgated by  
Order No. R-333-F for Northwest  
New Mexico.

Case No. 4649

BEFORE: Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

1 MR. NUTTER: We will call the next case, Mr. Hatch.

2 MR. HATCH: The next case is the Application of the  
3 Oil Conservation Commission on its own motion to advertise  
4 procedures promulgated by Order R-333-F, Northwest New Mexico.

5 I am George Hatch, appearing on behalf of the Commission  
6 and the staff.

7 I just have one witness, Mr. Arnold.

8 EMORY ARNOLD

9 a witness, having been first duly sworn according to law, upon  
10 his oath, testified as follows:

11 DIRECT EXAMINATION

12 BY MR. HATCH

13 Q Would you identify yourself?

14 A I am Emory Arnold, supervision commission of District 3,  
15 Aztec, New Mexico.

16 Q Would you briefly describe the area covered by District 3?

17 A The San Juan-Rio Arriba-Sandoval and McKinley Counties.

18 Q Are you familiar with Case 4649 and what it proposes?

19 A Yes.

20 Q Are you familiar with the gas-well testing procedures  
21 required by the Commission, the Counties of San Juan, Rio  
22 Arriba, and Sandoval?

23 A Yes, I am.

24 Q Those are set forth in Order R-35-F?

25 A Right.

1 Q Would you turn your attention now then to Chapter 1 of  
2 Order R-33-F?

3 Do you have a copy of that order?

4 A Yes.

5 Q Explain to the Examiner the changes that are proposed in  
6 Chapter 1, the reasons for the changes.

7 A Actually, I am proposing three amended orders, R-3-33-F,  
8 the first is in Chapter 1; the second is in Chapter 2; and  
9 the third is in Chapter 1 again.

10 The first amendment would change the Chapter 1, Sec-  
11 tion 2, sub-section B and would change the first sentence  
12 on this sub-section to read as follows:

13 "All annual deliverability and shut-in pressure tests  
14 required by these rules must be filed with the Commission's  
15 Aztec Office and the appropriate gas transmission facility  
16 within sixty days following completion of the test."

17 Actually, the changes, the word changing portion is  
18 the last, which says sixty days following completion of the  
19 test.

20 At the present time the rule provides that these tests  
21 be submitted within thirty days after the end of the month  
22 during which the test is completed, and the reason I am  
23 proposing that this be changed is that it doesn't give the  
24 same period of time for the submission of all tests.

Obviously, if a well is complete tested early in the

1 month an operator has close to sixty days.

2 If it is completed late in the month, he has only  
3 approximately thirty days, so I think that should be  
4 changed to allow the same elapse of time between completion  
5 of the test and submission of the tests for all wells.

6 Q Before you go on to the next part, I notice you are  
7 recommending that all tests--what is the wording?

8 A I believe the question all annual deliverability tests, and  
9 was for most annual deliverability tests.

10 Q Could you question the Examiner perhaps on why that  
11 change was made?

12 A I discussed that with Mr. Nutter prior to the hearing, and  
13 he was pointing out that the wells, tested wells which have  
14 tests completed between December 1st and December 31 must  
15 be submitted no later than January 10th.

16 I am not recommending that the test be completed  
17 December 1st and December 31, be allowed sixty days before  
18 submission, so I think that he was accepting those wells  
19 which have tests completed between December 1st and  
20 December 31.

21 MR. NUTTER: That is the reason the ad said "Most."

22 THE WITNESS: Right.

23 MR. NUTTER: If we change the thirty to sixty, and  
24 leave the sentence provided however that any tests completed  
25 between December 1 and December 31 must be filed no later than

1 January 10, then the rule would serve, as you propose, would it  
2 not?

3 A Right, that would take care of that situation, and I don't  
4 propose that be changed.

5 Q (By Mr. Hatch) Go ahead with your other proposed changes.

6 A Yes, the second amendment would be to Chapter 2, Section 2,  
7 paragraph 9, which is a paragraph that we have been  
8 suspending yearly and substituting an amendment for during  
9 1969, 1970 and 1971.

10 The amendment I am proposing would be to the first  
11 two sentences, mentioned previously in the amendment, and  
12 would read as follows:

13 "To obtain the shut-in pressure of a well under the  
14 test, the well should be shut-in sometime during the annual  
15 testing season for a period of seven to fourteen consecutive  
16 days, such shut-in pressure shall be measured during the  
17 eighth and fifteenth day following the shutting-in of the  
18 well."

19 This is the exact wordage that we have used in order  
20 R-3673; R-3870 and R-4089, which amended annually this  
21 section.

22 During 1970 and '71--we felt that we know enough  
23 history on this change to recommend that the order be  
24 itself amended so that we wouldn't have to come back each  
25 year for amendments, special amendments.

1 Q Why were those--why was it suspended before?

2 A Well, it was suspended because of the fact that we were  
3 having a great deal of difficulty in shutting-in wells for  
4 seven days during periods of high demand, and upon  
5 recommendation of pipeline companies and operators in the  
6 area, we granted these exceptions to allow float tests  
7 during high demand periods from January through May, about  
8 the first of June. That is the way they have been doing it  
9 the last few years.

10 Mainly it has to do with meeting gas demands and also  
11 we have found that there doesn't seem to be anything  
12 detrimental insofar as test accuracy is concerned by taking  
13 these in pressures at other times during the year then  
14 following a flow period.

15 Q You got a third revision?

16 A Yes, the third revision would be to add a sentence at the  
17 end of Chapter 1, Section 3, sub-section A, paragraph 2.

18 The added sentence would read as follows:

19 "Notice to the Commission of shut-in pressure tests  
20 which are to be scheduled at a time other than following  
21 the flow test must be received prior to the time that the  
22 well is shut-in."

23 Actually, this is simply to clarify procedure insofar  
24 as separately scheduled shut-in pressure tests are  
25 concerned.



1           The way the thing has been working, sometimes the  
2           seven day shut-ins have to be re-scheduled during the  
3           summer, and sometimes an operator doesn't know very far  
4           ahead of time when he is going to be able to shut it in,  
5           and if we can get notification just prior to the time it  
6           shuts in, then the Commission will be on notice, so if they  
7           want to notice a test they can do so, or so can anyone else.

8   Q       In your opinion, will the changes recommended by you cause  
9           any undue or unnecessary burden upon any operators or  
10          transportation facilities?

11   A       Not that I am aware of.

12           MR. NUTTER: Are there any other questions of Mr.  
13   Arnold?

14           You may be excused. Do you have a twin copy of your  
15          proposed changes, Mr. Arnold?

16           THE WITNESS: Yes.

17           MR. HATCH: I have the original of the record.

18           MR. NUTTER: Anything further, Mr. Hatch?

19           MR. HATCH: No. That is all.

20           MR. NUTTER: Does anyone have anything they wish to  
21          offer in the case?

22           MR. MANGEL: I am Mr. Mangel from El Paso Natural  
23          Gas.

24           I have a written statement here I would like to make in  
25          this case, surprisingly, it is in support of the Commission

1 proposal.

2 We have no objection to what Mr. Arnold proposed for the  
3 end of the year. This would suit us fine. The timely filing of  
4 the tests will aid all parties concerned. Thank you, Mr.  
5 Examiner.

6 MR. NUTTER: Yes, sir, Mr. Manning.

7 Does anyone else have anything else to offer in Case 4649?


8 We will take the case under advisement and call Case 4637.  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

1 STATE OF NEW MEXICO )  
2 ) SS.  
3 COUNTY OF BERNALILLO)

4 I, RICHARD STURGES, a Certified Shorthand Reporter, in and  
5 for the County of Bernalillo, State of New Mexico, do hereby  
6 certify that the foregoing and attached Transcript of Hearing  
7 before the New Mexico Oil Conservation Commission was reported  
8 by me; and that the same is a true and correct record of the  
9 said proceedings to the best of my knowledge, skill and ability.

10   
11 CERTIFIED SHORTHAND REPORTER

22 I do hereby certify that the  
23 a transcript of the  
24 the foregoing hearing of Case No. 4649  
25 heard by me on 1/19, 1972.

24  Boardman  
New Mexico Oil Conservation Commission

dearnley-meier reporting service, inc.

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS  
209 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103  
FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87106

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

I N D E X

WITNESS

PAGE

EMORY ARNOLD

Direct Examination by Mr. Hatch

3



## OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO  
P. O. BOX 2088 - SANTA FE  
87501

February 2, 1972

GOVERNOR  
BRUCE KING  
CHAIRMAN

LAND COMMISSIONER  
ALEX J. ARMJO  
MEMBER

STATE GEOLOGIST  
A. L. PORTER, JR.  
SECRETARY - DIRECTOR

Mr. Bob Manning  
El Paso Natural Gas Company  
Post Office Box 1492  
El Paso, Texas 79999

Re: Case No. 4649  
Order No. R-333-G  
Applicant:  
OCC

Dear Sir:

Enclosed herewith are two copies of the above-referenced Commission order recently entered in the subject case.

Very truly yours,

A. L. PORTER, Jr.  
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC x

Artesia OCC

Aztec OCC x

Other \_\_\_\_\_

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. 4649  
Order No. R-333-G

APPLICATION OF THE OIL CONSERVATION  
COMMISSION ON ITS OWN MOTION FOR THE  
AMENDMENT OF THE GAS WELL TESTING  
PROCEDURES PROMULGATED BY ORDER NO.  
R-333-F FOR NORTHWEST NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on January 19, 1972, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 1st day of February, 1972, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

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

(2) That there is need for a number of amendments to Order R-333-F, heretofore entered by the Commission, said order outlining the testing procedure for gas wells completed in San Juan, Rio Arriba, McKinley, and Sandoval Counties, New Mexico.

(3) That the following amendments should be adopted, in the interests of conservation.

IT IS THEREFORE ORDERED:

(1) That Sub-Section B. of Chapter I, Section 2, Order No. R-333-F, is hereby amended to read as follows:

-2-

CASE NO. 4849

Order No. R-333-G

"All Annual Deliverability and Shut-In Pressure Tests required by these rules must be filed with the Commission's Aztec office and with the appropriate gas transportation facility within 60 days following the completion of each test. Provided however, that any test completed between December 1 and December 31 must be filed not later than January 10. Failure to file any test within the above-prescribed times will subject the well to the loss of one day's allowable for each day the test is late. No extension of time for filing tests beyond January 10 will be granted except after notice and hearing."

(2) That Paragraph 2 of Sub-Section A of Chapter I, Section 3, of Order No. R-333-F, is hereby amended to read as follows:

"The gas transportation facility shall be notified immediately by any operator unable to conduct any test as scheduled. In the event a well is not tested in accordance with the test schedule, the well shall be re-scheduled by the gas transportation facility, and the Commission and the operator of the well so notified in writing. Notice to the Commission must be received prior to the conclusion of the 14-day conditioning period. Notice to the Commission of shut-in pressure tests which are scheduled at a time other than immediately following the flow test must be received prior to the time that the well is shut-in."

(3) That Paragraph nine of Chapter II, Section 2 of Order No. R-333-F is hereby amended to read as follows:

"To obtain the shut-in pressure of a well under test, the well shall be shut in some time during the annual testing season for a period of seven to fourteen consecutive days. Such shut-in pressure shall be measured during the eighth to fifteenth day following shutting in of the well. The 7-day shut-in pressure shall be measured on both the tubing and the casing when communication exists between the two strings. The higher of such pressures shall be used as  $P_c$  in the deliverability calculation. When any such shut-in pressure is determined by the Commission to be abnormally low, the shut-in pressure to be used shall be determined by one of the following methods:"

-3-

CASE NO. 4649

Order No. R-333-G

1. A Commission-designated value.
2. An average shut-in pressure of all offset wells completed in the same zone.
3. A calculated surface pressure based on a measured bottom-hole pressure. Such calculation shall be made in accordance with the New Mexico Oil Conservation Commission "Back Pressure Manual," Example No. 7.

(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



*Bruce King*  
BRUCE KING, Chairman

*Alex J. Armijo*  
ALEX J. ARMILLO, Member

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

S E A L





## OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO  
1000 RIO BRAZOS ROAD - AZTEC  
87410

GOVERNOR  
BRUCE KING  
CHAIRMAN

LAND COMMISSIONER  
ALEX J. ARMijo  
MEMBER

STATE GEOLOGIST  
A. L. PORTER, JR.  
SECRETARY - DIRECTOR

December 27, 1971

Mr. George Hatch  
Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico

RECEIVED

DEC 28 1971

OIL CONSERVATION COMM.

Dear George:

When in Santa Fe the other day Elvis and I discussed proposed revisions to Order R 333-F which is the San Juan Basin Gas Well Testing Order. It was decided that I will put on the case and that we should advertise for January 19 if possible.

(1) The first amendment would be to Chapter 1, Section 2, Subsection B and would change the first sentence of this subsection to read as follows: "All annual deliverability and shut in pressure tests required by these rules must be filed with the Commission's Aztec office and the appropriate gas transmission facility within sixty days following the completion of each test" (underlined portion represents change from the present rule). The remainder of paragraph B would remain unchanged.

(3) The second amendment would be to Chapter 11, Section 2, paragraph 9 which is the paragraph which we have been suspending and substituting an amendment for yearly during 1969, 1970 and 1971. The amendment orders are R 3673, R 3878 and R 4089. The first two sentences of this paragraph would be amended to read as follows: "To obtain the shut in pressure of a well under test, the well shall be shut in some time during the annual testing season for a period of seven to fourteen consecutive days. Such shut in pressure shall be measured during the eighth to fifteenth day following shutting in of the well."

(2) The third revision would be to add a sentence at the end of Chapter 1, Section 3, Subsection A, Paragraph 2. The added sentence would read as follows: "Notice to the Commission of shut in pressure tests which are scheduled at a time other than following the flow test must be received prior to the time that the well is shut in."

Please contact me if you need further information in order to set the case for hearing.

Happy New Year.

Yours very truly,

*Emery C. Arnold*  
Emery C. Arnold  
Supervisor, District #3

ECA:mc

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

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

CASE No. 2695  
Order No. R-333-F

THE APPLICATION OF THE OIL CONSERVATION  
COMMISSION UPON ITS OWN MOTION FOR AN  
ORDER REVISING, AMENDING, OR DELETING  
CERTAIN PORTIONS OF ORDER R-333-C & D  
AS AMENDED BY ORDER R-333-E PERTAINING  
TO GAS WELL TESTING PROCEDURE APPLICABLE  
TO GAS WELLS COMPLETED IN SAN JUAN, RIO  
ARRIBA, MCKINLEY, AND SANDOVAL COUNTIES,  
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on  
November 8, 1962, 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 30th day of November, 1962, 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 there is need for a number of additions to and  
revisions of Order No. R-333-C & D as amended by Order No. R-333-E,  
heretofore entered by the Commission, said order outlining a test-  
ing procedure for gas wells completed in the Counties of San Juan,  
Rio Arriba, McKinley, and Sandoval, New Mexico.

(3) That the following rules and regulations should be  
adopted, and that said rules and regulations are in the interest  
of conservation.

through December 31 each year except as follows:

1. An Annual Deliverability and Shut-In Pressure Test will not be required during the current year for any well connected to a gas transportation facility after October 31. Such tests may be taken at the option of the operator of the well, however.
2. When the Initial Deliverability and Shut-In Pressure Test required by Section 1-B above has been taken in accordance with the annual testing procedure outlined in Section 2 of Chapter II of these rules, the initial test may be considered the annual test for the year in which the test was completed. Provided however, that if an operator intends to use such initial test as the first annual test, he must notify the Commission and the gas transportation facility to which the well is connected of his intent in writing prior to the conclusion of the 14-day conditioning period.

- Amend*
- B. All Annual Deliverability and Shut-In Pressure Tests required by these rules must be filed with the Commission's Aztec office and with the appropriate gas transportation facility within <sup>60</sup> ~~30~~ days after the end of the month during which the test is completed. Provided however, that any test completed between December 1 and December 31 must be filed not later than January 10. Failure to file any test within the above-prescribed times will subject the well to the loss of one day's allowable for each day the test is late. No extension of time for filing tests beyond January 10 will be granted except after notice and hearing.
- following completion of test*

### Section 3: Scheduling of Tests

#### A. Annual Deliverability Tests

By December 1 of each year, each gas transportation facility shall, in cooperation with the operators involved, prepare and submit a schedule of the wells to which it is connected which are to be tested during the ensuing January and February. Said schedule shall be entitled, "Annual Deliverability and Shut-In Pressure Test Schedule," and shall be submitted in triplicate to the Commission's Aztec office. At least one copy shall also be furnished each operator concerned. The schedule shall indicate the date of tests, pool, operator, lease, well number, and location of each well. At least 30 days prior to the beginning of each succeeding 2-month testing interval, a similar schedule shall be prepared and filed in accordance with the above.

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

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

CASE No. 2695  
Order No. R-333-F

THE APPLICATION OF THE OIL CONSERVATION  
COMMISSION UPON ITS OWN MOTION FOR AN  
ORDER REVISING, AMENDING, OR DELETING  
CERTAIN PORTIONS OF ORDER R-333-C & D  
AS AMENDED BY ORDER R-333-E PERTAINING  
TO GAS WELL TESTING PROCEDURE APPLICABLE  
TO GAS WELLS COMPLETED IN SAN JUAN, RIO  
ARRIBA, MCKINLEY, AND SANDOVAL COUNTIES,  
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on  
November 8, 1962, 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 30th day of November, 1962, 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 there is need for a number of additions to and  
revisions of Order No. R-333-C & D as amended by Order No. R-333-E,  
heretofore entered by the Commission, said order outlining a test-  
ing procedure for gas wells completed in the Counties of San Juan,  
Rio Arriba, McKinley, and Sandoval, New Mexico.

(3) That the following rules and regulations should be  
adopted, and that said rules and regulations are in the interest  
of conservation.

through December 31 each year except as follows:

1. An Annual Deliverability and Shut-In Pressure Test will not be required during the current year for any well connected to a gas transportation facility after October 31. Such tests may be taken at the option of the operator of the well, however.
2. When the Initial Deliverability and Shut-In Pressure Test required by Section 1-B above has been taken in accordance with the annual testing procedure outlined in Section 2 of Chapter II of these rules, the initial test may be considered the annual test for the year in which the test was completed. Provided however, that if an operator intends to use such initial test as the first annual test, he must notify the Commission and the gas transportation facility to which the well is connected of his intent in writing prior to the conclusion of the 14-day conditioning period.

- Amended*
- B. All Annual Deliverability and Shut-In Pressure Tests required by these rules must be filed with the Commission's Aztec office and with the appropriate gas transportation facility within ~~60~~ <sup>60</sup> days after the end of the month during which the test is completed. Provided however, that any test completed between December 1 and December 31 must be filed not later than January 10. Failure to file any test within the above-prescribed times will subject the well to the loss of one day's allowable for each day the test is late. No extension of time for filing tests beyond January 10 will be granted except after notice and hearing.
- following completion of test*

### Section 3: Scheduling of Tests

#### A. Annual Deliverability Tests

By December 1 of each year, each gas transportation facility shall, in cooperation with the operators involved, prepare and submit a schedule of the wells to which it is connected which are to be tested during the ensuing January and February. Said schedule shall be entitled, "Annual Deliverability and Shut-In Pressure Test Schedule," and shall be submitted in triplicate to the Commission's Aztec office. At least one copy shall also be furnished each operator concerned. The schedule shall indicate the date of tests, pool, operator, lease, well number, and location of each well. At least 30 days prior to the beginning of each succeeding 2-month testing interval, a similar schedule shall be prepared and filed in accordance with the above.

-4-

CASE No. 2695  
Order No. R-333-F

The gas transportation facility shall be notified immediately by any operator unable to conduct any test as scheduled. In the event a well is not tested in accordance with the test schedule, the well shall be re-scheduled by the gas transportation facility, and the Commission and the operator of the well so notified in writing. Notice to the Commission must be received prior to the conclusion of the 14-day conditioning period.

It shall be the responsibility of each operator to determine that all of its wells are properly scheduled for testing by the gas transportation facility to which they are connected, in order that all annual tests may be completed during the testing season. *Notice to the Commission etc.*

**B. Deliverability Re-Tests**

An operator may, in cooperation with the gas transportation facility, schedule a well for a deliverability re-test upon notification to the Commission's Aztec office at least ten days before the test is to be commenced. Such re-test shall be for good and substantial reason and shall be subject to the approval of the Commission. Re-tests shall in all ways be conducted in conformance with the Annual Deliverability Test Procedures of these rules. The Commission, at its discretion, may require the re-testing of any well by notification to the operator to schedule such re-test.

**Section 4: Witnessing of Tests**

Any Initial or Annual Deliverability and Shut-In Pressure Test may be witnessed by any or all of the following: an agent of the Commission, an offset operator, a representative of the gas transportation facility connected to the well under test, or a representative of the gas transportation facility taking gas from an offset operator.

**CHAPTER II PROCEDURE FOR TESTING**

**Section 1: Initial Deliverability and Shut-In Pressure Test Procedure**

- A. Within 60 days after a newly completed well is connected to a gas transportation facility, the operator shall complete a deliverability and shut-in pressure test of the well in conformance with the "Annual Deliverability and Shut-In Pressure Test Procedures" prescribed in Section 2 of this

-5-

CASE No. 2695

Order No. R-333-F

chapter. Results of the test shall be filed as required by Section 1 of Chapter I of these rules.

B. In the event it is impractical to test a newly completed well in conformance with Paragraph A above, the operator may conduct the deliverability and shut-in pressure test in the following manner (provided, however, that any test so conducted will not be accepted as the first annual deliverability and shut-in pressure test as described in Paragraph A-2 of Section 2, Chapter I):

1. A 7- or 8-day production chart may be used as the basis for determining the well's deliverability, providing the chart so used is preceded by at least 14 days continuous production. The well shall produce through either the casing or tubing, but not both, into a pipeline during these periods. The production valve and the choke settings shall not be changed during either the conditioning or flow period with the exception of the first week of the conditioning period when maximum production would over-range the meter chart or location production equipment.
2. A shut-in pressure of at least seven days duration shall be taken. This shall be the shut-in test required in Paragraph A, Section 1 of Chapter I of these rules.
3. The average daily static meter pressure shall be determined in accordance with Section 2 of Chapter II of these rules. This pressure shall be used as  $P_t$  in calculating  $P_w$  for the Deliverability Calculation.
4. The daily average rate of flow shall be determined in accordance with Section 2 of Chapter II.
5. The static wellhead working pressure ( $P_w$ ) shall be determined in accordance with Section 2 of Chapter II.
6. The deliverability of the well shall be determined by using the data determined in Paragraphs 1 through 5 above in the deliverability formula in accordance with Section 2 of Chapter II.
7. The data and calculations for Paragraphs 1 through 6 above shall be reported as required in Section 1 of Chapter I of these rules, upon the blue-colored Form C-122-A.

-6-

CASE No. 2695  
Order No. R-333-F

Section 2: Annual Deliverability and Shut-In Pressure Test Procedure

This test shall be taken by producing a well into the pipeline through either the casing or tubing, but not both. The production valve and choke settings shall not be changed during either the conditioning or flow periods except during the first seven days of the conditioning period when maximum production would over-range the meter chart or the location production equipment. The daily flowing rate shall be determined from an average of seven consecutive producing days, following a minimum conditioning period of 14 consecutive days production. The first seven days of said conditioning period shall have not more than one interruption, which interruption shall be no more than 36 continuous hours in duration. The eighth to fourteenth days, inclusive, of said conditioning period shall have no interruptions whatsoever. All production during the 14-day conditioning period plus the 7-day deliverability test period shall be at static wellhead working pressures not in excess of 75 percent of the previous annual 7-day shut-in pressure of the well if such previous annual shut-in pressure information is available; otherwise, the 7-day initial deliverability shut-in pressure of the well shall be used.

In the event that the existing line pressure does not permit a drawdown as specified above with the well producing unrestrictedly into the pipeline, the operator shall request an exception to this requirement on Form C-122-A. The request shall state the reasons for the necessity for the exception.

Instantaneous pressures shall be measured by deadweight gauge during the 7-day flow period at the casinghead, tubinghead, and orifice meter, and shall be recorded along with instantaneous meter-chart static pressure reading.

When it is necessary to restrict the flow of gas between the wellhead and orifice meter, the ratio of the downstream pressure to the upstream pressure shall be determined. When this ratio is 0.57, or less, critical flow conditions shall be considered to exist across the restriction.

When more than one restriction between the wellhead and orifice meter causes the pressures to reflect critical flow between the wellhead and orifice meter, the pressures across each of these restrictions shall be measured to determine whether critical flow exists at any restriction. When critical flow does not exist at any restriction, the pressures taken to disprove critical flow shall be reported to the Commission on Form C-122-A in the "Remarks" section of the form. When critical flow conditions exist, the instantaneous flowing pressures required hereinabove shall be measured during the last 48 hours of the 7-day flow period.



-7-

CASE No. 2695

Order No. R-333-F

When critical flow exists between the wellhead and orifice meter, the measured wellhead flowing pressure of the string through which the well flowed during test shall be used as  $P_t$  when calculating the static wellhead working pressure ( $P_w$ ) using the method established below.

When critical flow does not exist at any restriction,  $P_t$  shall be the corrected average static pressure from the meter chart plus friction loss from the wellhead to the orifice meter.

The static wellhead working pressure ( $P_w$ ) of any well under test shall be the calculated 7-day average static tubing pressure if the well is flowing through the casing; it shall be the calculated 7-day average static casing pressure if the well is flowing through the tubing. The static wellhead working pressure ( $P_w$ ) shall be calculated by applying the tables and procedures set out in the New Mexico Oil Conservation Commission Manual entitled "Method of Calculating Pressure Loss Due to Friction in Gas Well Flow Strings for San Juan Basin."

*Answer* To obtain the shut-in pressure of a well under test, the well shall be shut in immediately after the 7-day deliverability flow test for the full period of seven consecutive days. Such shut-in pressure shall be measured ~~within the next succeeding twenty-four hours~~ following the 7-day shut-in period. The 7-day shut-in pressure shall be measured on both the tubing and the casing when communication exists between the two strings. The higher of such pressures shall be used as  $P_c$  in the deliverability calculation. When any such shut-in pressure is determined by the Commission to be abnormally low, the shut-in pressure to be used shall be determined by one of the following methods:

1. A Commission-designated value.
2. An average shut-in pressure of all offset wells completed in the same zone.
3. A calculated surface pressure based on a measured bottom-hole pressure. Such calculation shall be made in accordance with the New Mexico Oil Conservation Commission "Back Pressure Manual," Example No. 7.

All wellhead pressures as well as the flowing meter pressure tests which are to be taken during the 7-day deliverability test period as required hereinabove shall be taken with a deadweight gauge. The deadweight reading and the date and time according to the chart shall be recorded and maintained in the operator's records with the test information.

Orifice meter charts shall be changed and so arranged as to reflect upon a single chart the flow data for the gas from each well

-8-

CASE No. 2695

Order No. R-333-F

for the full 7-day deliverability test period; however, no tests shall be voided if satisfactory explanation is made as to the necessity for using test volumes through two chart periods. Corrections shall be made for pressure base, measured flowing temperature, specific gravity, and supercompressibility; provided however, if the specific gravity of the gas from any well under test is not available, an estimated specific gravity may be assumed therefor, based upon that of gas from near-by wells, the specific gravity of which has been actually determined by measurement.

The 7-day average flowing meter pressure shall be calculated by taking the average of all consecutive 2-hour flowing meter pressure readings as recorded on the 7-day flow period chart. The pressure so calculated shall be used in calculating the wellhead working pressure, determining supercompressibility factors, and calculating flow volumes.

The 7-day flow period volume shall be calculated from the integrated readings as determined from the flow period orifice meter chart. The volume so calculated shall be divided by the number of testing days on the chart to determine the average daily rate of flow during said flow period. The flow chart shall have a minimum of seven and a maximum of eight legibly recorded flowing days to be acceptable for test purposes. The volume used in this calculation shall be corrected to New Mexico Oil Conservation Commission standard conditions.

The average flowing meter pressure for the 7-day or 8-day flow period and the corrected integrated volume shall be determined by the purchasing company that integrates the flow charts and furnished to the operator or testing agency when such operator or testing agency requests such information.

The daily volume of flow as determined from the flow period chart integrator readings shall be calculated by applying the Basic Orifice Meter Formula:

$$Q = C' \sqrt{h_w P_f}$$

Where:

- Q = Metered volume of flow Mcfd @ 15.025, 60° F., and 0.60 specific gravity.
- C' = The 24-hour basic orifice meter flow factor, corrected for flowing temperature, gravity, and supercompressibility.

-9-

CASE No. 2695

Order No. R-333-F

$h_w$  = Daily average differential meter pressure  
from flow period chart.

$P_f$  = Daily average flowing meter pressure from  
flow period chart.

The basic orifice meter flow factors, flowing temperature factor, and specific gravity factor shall be determined from the New Mexico Oil Conservation Commission "Back Pressure Test Manual."

The daily flow period average corrected flowing meter pressure, psig, shall be used to determine the supercompressibility factor. Supercompressibility Tables may be obtained from the New Mexico Oil Conservation Commission.

When supercompressibility correction is made for a gas containing either nitrogen or carbon dioxide in excess of two percent, the supercompressibility factors of such gas shall be determined by the use of Table V of the C.N.G.A. Bulletin TS-402 for pressures 100-500 psig, or Table II, TS-461 for pressures in excess of 500 psig.

The use of tables for calculating rates of flow from integrator readings which do not specifically conform to the New Mexico Oil Conservation Commission "Back Pressure Test Manual" may be approved for determining the daily flow period rates of flow upon a showing that such tables are appropriate and necessary.

The daily average integrated rate of flow for the 7-day flow period shall be corrected for meter error by multiplication by a correction factor. Said correction factor shall be determined by dividing the square root of the chart flowing meter pressure, psia, into the square root of the deadweight flowing meter pressure, psia.

Deliverability pressure, as used herein, is a defined pressure applied to each well and used in the process of comparing the abilities of wells in a pool to produce at static wellhead working pressures equal to a percentage of the 7-day shut-in pressure of the respective individual wells. Such percentage shall be determined and announced periodically by the Commission based on the relationship of the average static wellhead working pressures ( $P_w$ ) divided by the average 7-day shut-in pressure ( $P_c$ ) of the pool.

The deliverability of gas at the "deliverability pressure" of any well under test shall be calculated from the test data derived from the tests hereinabove required by use of the following deliverability formula:

-10-  
CASE No. 2695  
Order No. R-333-F

$$D = Q \left[ \frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right]^n$$

Where:

- D = Deliverability Mcfd at the deliverability pressure, ( $P_d$ ), (at Standard Conditions of 15.025 psia and 60°F).
- Q = Daily flow rate in Mcfd, at wellhead pressure ( $P_w$ ).
- $P_c$  = 7-day shut-in wellhead pressure, psia, determined in accordance with Section 2 of Chapter II.
- $P_d$  = Deliverability pressure, psia, as defined above.
- $P_w$  = Average static wellhead working pressure, as determined from 7-day flow period, psia, and calculated from New Mexico Oil Conservation Commission "Pressure Loss Due to Friction" Tables for San Juan Basin.
- n = Average pool slope of back pressure curves as follows:

Mesaverde Formation	0.75
Dakota Producing Interval	0.75
Fruitland Formation	0.85
Farmington Formation	0.85
Pictured Cliffs Formation	0.85
Other Formations	0.75

(Note: Special Rules for Any Specific Pool or Formation May Supersede The Above Values. Check Special Rules if In Doubt.)

The value of the multiplier in the above formula (ratio factor after the application of the pool slope) by which Q is multiplied shall not exceed a limiting value to be determined and announced periodically by the Commission. Such determination shall be made after a study of the test data of the pool obtained during the previous testing season. The limiting value of the multiplier may be exceeded only after the operator has conclusively shown to the Commission that the shut-in pressure ( $P_c$ ) is accurate or that

-11-

CASE No. 2695

Order No. R-333-F

the static wellhead pressure ( $P_w$ ) cannot be lowered due to existing producing conditions.

Any test prescribed herein will be considered unacceptable if the average flow rate for the final 7-day deliverability test is more than ten percent in excess of any consecutive 7-day average of the preceding two weeks. A deliverability test not meeting this requirement shall be invalid and the well shall be re-tested.

All charts relative to initial or annual deliverability tests or photostats thereof shall be made available to the Commission upon its request.

All testing agencies, whether individuals, companies, pipeline companies, or operators, shall maintain a log of all tests accomplished by them, including all field test data.

All forms heretofore mentioned are hereby adopted for use in the San Juan Bas'n Area in open form subject to such modification as experience may indicate desirable or necessary.

Initial and Annual Deliverability and Shut-In Pressure Tests for gas wells in all formations shall be conducted and reported in accordance with these rules and procedures. Provided however, these rules shall be subject to any specific modification or change contained in Special Pool Rules adopted for any pool after notice and hearing.

#### CHAPTER III INFORMATIONAL TESTS

- A. A one-point back pressure test may be taken on newly completed wells before their connection or reconnection to a gas transportation facility. This test shall not be a required official test but may be taken for informational purposes at the option of the operator. When taken, this test must be taken and reported as prescribed below:

##### ONE-POINT BACK PRESSURE POTENTIAL TEST PROCEDURE

1. This test shall be accomplished after a minimum shut-in of seven days. The shut-in pressure shall be measured with a deadweight gauge.
2. The flow rate shall be measured by flowing the well three hours through a positive choke, which has a 3/4-inch orifice.
3. A 2-inch nipple which provides a mechanical means of accurately measuring the pressure and temperature

-12-  
CASE No. 2695  
Order No. R-333-F

of the flowing gas shall be installed immediately upstream from the positive choke.

4. The absolute open flow shall be calculated using the conventional back pressure formula as shown in the New Mexico Oil Conservation Commission "Back Pressure Test Manual."
5. The observed data and flow calculations shall be reported in duplicate on Form C-122, "Multi-Point Back Pressure Test for Gas Wells."
6. Non-critical flow shall be considered to exist when the choke pressure is 13 psig or less. When this condition exists the flow rate shall be measured with a pitot tube and nipple as specified in the Commission's Manual of "Tables and Procedure for Pitot Tests." The pitot test nipple shall be installed immediately downstream from the 3/4-inch positive choke.
7. Any well completed with 2-inch nominal size tubing (1.995-inch ID) or larger shall be tested through the tubing.

B. Other tests for informational purposes may be conducted prior to obtaining a pipeline connection for a newly completed well upon receiving specific approval therefor from the Commission's Aztec office. Approval of these tests shall be based primarily upon the volume of gas to be vented.

(2) 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

EDWIN L. MECHEM, Chairman

E. S. WALKER, Member

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

S E A L

esr/

Docket No. 2-72

DOCKET; EXAMINER HEARING - WEDNESDAY - JANUARY 19, 1972

9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM,  
STATE LAND OFFICE BUILDING - SANTA FE, NEW MEXICO

The following cases will be heard before Elvis A. Utz, Examiner, or Daniel S. Nutter, Alternate Examiner:

ALLOWABLE: (1) Consideration of the allowable production of gas for February, 1972, from fifteen prorated pools in Lea, Eddy, Roosevelt and Chaves Counties, New Mexico;

(2) Consideration of the allowable production of gas from nine prorated pools in San Juan, Rio Arriba and Sandoval Counties, New Mexico, for February, 1972.

CASE 4645: Application of Acoma Oil Corporation for down-hole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle production from the Drinkard Pool and Wantz-Abo Pool in the well-bore of its S. J. Sarkeys A Well No. 1, a triple completion, located in Unit A of Section 26, Township 21 South, Range 37 East, Lea County, New Mexico.

CASE 4648: Application of Aztec Oil & Gas Company for an unorthodox well location, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the off-pattern unorthodox location for its Vasaly Federal Well No. 1-Y to be located 790 feet from the North line and 1795 feet from the West line of Section 31, Township 32 North, Range 11 West, Blanco-Mesaverde Pool, San Juan County, New Mexico.

CASE 4625: (Continued from the December 15, 1971, Examiner Hearing) Application of Texaco Inc. for downhole commingling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle production from the Paduca-Morrow and Paduca-Wolfcamp Gas Pools in the well-bore of its Cotton Draw Unit Well No. 65 located in Unit G of Section 2, Township 25 South, Range 31 East, Eddy County, New Mexico.

CASE 4642: (Continued from the January 5, 1972, Examiner Hearing) Application of Fluid Power Pump Company for special pool rules and a pressure maintenance project, Sandoval County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special rules for the Media-Entrada Pool, including a provision for 160-acre spacing and proration units. Applicant further seeks authority to

CASE 4649: Application of the Oil Conservation Commission on its own motion for the amendment of the gas well testing procedures promulgated by Order No. R-333-F for Northwest New Mexico. The Commission proposes to amend Chapter I of said Order No. R-333-F in such a manner as to provide that most annual deliverability and shut-in pressure tests required by said order be filed within 60 days following the completion of the test and to provide for notice to the Commission of any re-scheduling of shut-in pressure tests. The Commission further proposes to amend the ninth paragraph of Chapter II, Section 2 of said order to permit shutting in gas wells for the required shut-in test other than immediately following the 7-day deliverability flow test and to permit measuring the shut-in test pressure during the 8th to 15th day of shut-in of the well rather than on the 8th day as presently required.

CASE 4637: (Continued from the December 15, 1971, Examiner Hearing)  
In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Luttrell Oil Company and all other interested persons to appear and show cause why the following-described wells in New Mexico should not be plugged and abandoned in accordance with a Commission-approved plugging program:

Luttrell Oil Company State Well No. 1 -  
Unit M, Section 28, Township 2 South,  
Range 26 East, De Baca County;

Luttrell Oil Company Corn Well No. 1 -  
Unit A, Section 5, Township 8 South,  
Range 24 East, Chaves County.

CASE 4651: Southeastern New Mexico nomenclature case calling for an order for the creation and extension of certain pools in Lea and Roosevelt Counties, New Mexico.

(a) Create a new pool in Roosevelt County, New Mexico, classified as a gas pool for San Andres production and designated as the Baker-San Andres Gas Pool. The discovery well is the Cactus Drilling Corporation of Texas Kewanee State No. 2 located in Unit G of Section 9, Township 7 South, Range 35 East, NMPM. Said pool would comprise:

TOWNSHIP 7 SOUTH, RANGE 35 EAST, NMPM  
SECTION 9: NE/4



(Case 4651 continued)

(b) Extend the Bluitt-San Andres Associated Pool in Roosevelt County, New Mexico, to include therein:

TOWNSHIP 8 SOUTH, RANGE 37 EAST, NMPM  
SECTION 15: All

(c) Extend the Littman-San Andres Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 38 EAST, NMPM  
SECTION 20: SE/4

(d) Extend the West Sawyer-San Andres Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 9 SOUTH, RANGE 37 EAST, NMPM  
SECTION 27: SW/4

(e) Extend the North Vacuum-Abo Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 35 EAST, NMPM  
SECTION 18: W/2

(f) Extend the Vada-Pennsylvanian Pool in Lea and Roosevelt Counties, New Mexico, to include therein:

TOWNSHIP 8 SOUTH, RANGE 34 EAST, NMPM  
SECTION 36: NW/4

TOWNSHIP 9 SOUTH, RANGE 34 EAST, NMPM  
SECTION 17: NW/4  
SECTION 18: N/2

Statement of El Paso Natural Gas Company in Case ~~4487~~ 4649

El Paso Natural Gas Company supports the application of the Commission for an order amending the ninth paragraph of Chapter II, Section 2, of Order R-333-F. This would permit shutting in of gas wells for the required shut-in test at some period during the test season other than immediately following the seven day deliverability flow test and to permit measuring the shut-in pressure test during the eighth to the fifteenth day of shut-in of the well rather than precisely on the eighth day as presently required.

El Paso Natural Gas Company also concurs with the Oil Conservation Commission's proposal to amend Order R-333-F for Northwest New Mexico specifically Chapter I of the said Order in such a manner as to provide that <sup>new</sup> all annual deliverability and shut-in pressure tests required by said Order be filled within sixty days following the completion of the test and to provide for notice to the Commission of any re-scheduling of shut-in tests. The timely filing of tests will aid all parties concerned.

An exception was granted for the testing of wells in the San Juan Basin area for the years 1969, 1970, and 1971. El Paso considers that the tests taken during these years, in accordance with the exceptions, have given results comparable in accuracy and validity to those obtained for the testing method presently outlined in Order R-333-F. The same factors necessitating the exception for the years 1969, 1970, and 1971; namely, high and varying market demand for gas from the San Juan Basin area, are expected to prevail during the coming years consequently it is considered appropriate to modify the provisions of Order R-333-F in order to avoid the need for annual exceptions. El Paso urges the approval of the proposed amendments to the provisions of Order R-333-F.

*M. J. ...*  
*E. L. ...*

Case 4649  
AMENDMENT - Order R 333-F

1. Chapter 1, Section 2, Subsection B presently reads as follows: All annual Deliverability and Shut In pressure tests required by these rules must be filed with the Commission's Aztec Office and with the appropriate gas transportation facility within 30 days after the end of the month during which the test is completed .....

The proposed amendment would change the underlined portion to read "within sixty days following the completion of each test".

Reason for proposal:

The new wording would allow the same length of time to elapse between completion of testing and submission of the test for each well, whereas this time period in the present rule varies from 30 to 60 days depending upon whether a test is completed early or late in a given month. This makes it difficult for an operator to secure the needed information from the pipeline and submit the test in time, if the test was completed late in the month.

2. The second amendment is to Chapter 11, Section 2, Paragraph 9 and amends the section which states that a well must be shut in for seven days immediately following the flow test. This section has been <sup>suspended</sup> amended yearly by special orders during 1969, 1970 and 1971 because of the fact that it has been difficult, if not impossible, to schedule shut in pressure tests during periods of high demand. For that reason it has been the practice during these three years to schedule all flow tests possible during the winter and early spring and to schedule corresponding shut in pressure tests commencing about June 1 when the demand is lower. There has been no indication that this procedure adversely effects test accuracy. As it appears that the problem of being able to secure shut in pressures during high demand periods will continue indefinitely, it is proposed that R- 333-F be amended so that it will not be necessary to conduct annual hearings to provide yearly exceptions.

3. The third revision is to Chapter 1, Section 3, Subsection A, Paragraph 2. It is proposed a sentence be added to the end of Paragraph 2 which would read as follows: "Notice to the Commission of shut in pressure tests which are scheduled at a time other than following the 7 day flow test must be received prior to the time that the well is shut in".

The purpose of this sentence is to clarify notification procedures for shut in pressure tests. We have found that it is often necessary to change scheduled shut in pressure dates and the addition of the above sentence would allow changes in scheduling to be made on relatively short notice and still to insure that the Commission will be notified in time to witness any shut in pressure tests that it is desired to witness.

Will this foul up the prosation  
dept. in any manner?

George Don't think so  
JCS

DRAFT

GMH/dr

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:

APPLICATION OF THE OIL CONSERVATION  
COMMISSION ON ITS OWN MOTION FOR THE  
AMENDMENT OF THE GAS WELL TESTING  
PROCEDURES PROMULGATED BY ORDER NO. R-333-F  
FOR NORTHWEST NEW MEXICO.

CASE No. 4649

Order No. R-333-G

RECORDS  
CENTER

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on January 19, 1972,  
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this January day of January, 1972, the Commission, a  
quorum being present, having considered the testimony, the record,  
and the recommendations of the Examiner, and being fully advised  
in the premises,

FINDS:

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

(2) That there is need for a number of amendments to Order  
R-333-F, heretofore entered by the Commission, said order outlining

the ~~gas~~ testing procedure <sup>for</sup> gas wells completed in San Juan, Rio Arriba,  
McKinley, and ~~Rio Arriba~~ <sup>Sandoval</sup> Counties, New Mexico.

(3) That the following amendments should be adopted, in the  
interests of conservation.

IT IS THEREFORE ORDERED:

(1) That Sub-Section B. of Chapter I, Section 2, Order No. R-333-F, is hereby amended to read as follows:

"All ~~Annual Deliverability and Shut-In Pressure Tests~~ required by these rules must be filed with the Commission's Aztec office and <sup>with the appropriate</sup> ~~the appropriate~~ gas transportation facility within <sup>60</sup> ~~sixty~~ days following the completion of each test. Provided however, that any test completed between December 1 and December 31 must be filed not later than January 10. Failure to file any test within the above-prescribed times will subject the well to the loss of one day's allowable for each day the test is late. No extension of time for filing tests beyond January 10 will be granted except after notice and hearing."

(2) That Paragraph 2 of Sub-Section A of Chapter I, Section 3, of Order No. R-333-F, is hereby amended to read as follows:

"The gas transportation facility shall be notified immediately by any operator unable to conduct any test as scheduled. In the event a well is not tested in accordance with the test schedule, the well shall be re-scheduled by the gas transportation facility, and the Commission and the operator of the well so notified in writing. Notice to the Commission must be received prior to the conclusion of the 14-day conditioning period. Notice to the Commission of shut-in pressure tests which are scheduled at a time other than <sup>immediately</sup> following the flow test must be received prior to the time that the well is shut-in."

-3-

CASE NO. 4649  
Order No. R-

(3) That Paragraph nine of Chapter II, Section 2 of Order No. R-333-F is hereby amended to read as follows:

"To obtain the shut-in pressure of a well under test, the well shall be shut~~/in~~ in some time during the annual testing season for a period of seven to fourteen consecutive days. Such shut-in pressure shall be measured during the eighth to fifteenth day following shutting~~/in~~ of the well. The 7-day shut-in pressure shall be measured on both the tubing and the casing when communication exists between the two strings. The higher of such pressures shall be used as  $P_c$  in the deliverability calculation. When any such shut-in pressure <sup>is determined by the Commission</sup> to be used shall be determined by one of the following methods:"

1. A Commission-designated value.
2. An average shut-in pressure of all offset wells completed in the same zone.
3. A calculated surface pressure based on a measured bottom-hole pressure. Such calculation shall be made in accordance with the New Mexico Oil Conservation Commission "Back Pressure Manual," Example No. 7.

(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.

*shut-in pressure  
be abnormally low,*



By Hear, Jan 19, 1972

Newspaper

SF No.

Sanct

McK

35

R.A.

Case \_\_\_\_\_

Application of the Oil Conservation Commission  
on its own motion for the amendment of  
~~Order No. R-333-F~~ <sup>promulgated by Order No. R-333-F</sup> the gas well testing  
procedures for North-east New Mexico. The  
Commission proposes to amend Chapter I of  
said Order No. R-333-F in such a manner as  
to provide that all Annual, Delinquency  
and Shut-in Pressure Tests required by  
said ~~Order~~ orders be filed within 60 days  
following the completion of the test and to  
provide for notice to the Commission of  
any re-scheduling of shut-in pressure  
tests. The Commission further proposes to  
amend ~~Chapter II~~ the ninth paragraph  
of Chapter II, Section 2 of said Order No.  
R-333-F to permit shutting in gas wells  
for the required shut-in test other than  
immediately following the 7-day delinquency  
flow test and to permit measuring the shut-in  
test pressure during the 8<sup>th</sup> to 15<sup>th</sup> day of  
shut-in of the well rather than on the 8<sup>th</sup> day  
as presently required.

276  
278  
279  
280  
281  
282  
283  
284  
285  
286  
287  
288  
289  
290  
291  
292  
293  
294  
295  
296  
297  
298  
299  
300

- Called by a c c -

7 Revision R 333-F

1 Chapt 1 Sec 2 Sub sec B

Change ~~the~~ sentence to read as follows  
" All annual del. and shut-in pressure tests required by these rules must be filed with Com. after office and the approp. gas transmission facility w/in 60 days following the completion of each test.

II 2 Chapt 2 Sec 7 R 9

(3673; 3878 ~~44~~ 4089)

Final 2 sentences of R 9 to read as follows:

To obtain the shut-in pressure of a well under test the well shall be shut-in some time during the annual testing season for a period of ~~7 to 14~~ 7 to 14 consec. days. Such shut-in pressure shall be measured during the 8th to 15th day following shut-in of the well.

III 3

In scheduling section 2

add a sentence to end of Chapt. 1

Sec 3 Subsec. A

" Notice to the Commission of shut-in pressure tests which are scheduled at any time other than following the flow tests