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BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
October 14, 1970

EXAMINER HEARING

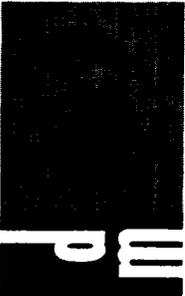
IN THE MATTER OF:

Application of El Paso Natural Gas
Company for the amendment of the
General Rules and Regulations govern-
ing the prorated gas pools of New
Mexico and the amendment of the
Special Rules and Regulations govern-
ing the Tapacito-Pictured Cliffs and
Basin-Dakota Gas Pools located in
Rio Arriba, San Juan, and Sandoval
Counties, New Mexico.

Case No. 4436

BEFORE: Daniel S. Nutter, Examiner.

TRANSCRIPT OF HEARING



MR. NUTTER: Hearing will come to order, please.

First case this morning will be Case 4436.

MR. HATCH: Case 4436, Application of El Paso Natural Gas Company for the amendment of the General Rules and Regulations governing the prorated gas pools of New Mexico and the amendment of the Special Rules and Regulations governing the Tapacito-Pictured Cliffs and Basin Dakota Gas Pools located in Rio Arriba, San Juan, and Sandoval Counties, New Mexico.

MR. MORRIS: I am Richard Morris of Montgomery, Federici, Andrews, Hannahs and Morris, Santa Fe, appearing on behalf of the Applicant, El Paso Natural Gas Company. At this time I would like to introduce to the Examiner Mr. David T. Burleson, an attorney with El Paso Natural Gas Company and member of the Oklahoma Bar and I ask he be permitted to participate with me in the presentation of the Applicant's case.

MR. NUTTER: Are there other appearances in this case?

MR. BUELL: For Pan American Corporation, Guy Buell.

MR. HINKLE: Clarence Hinkle, Hinkle, Bondurant, Cox and Eaton, Roswell, appearing on behalf of Atlantic Richfield and Humble Oil and Refining Company.

MR. KELLAHIN: Jason Kellahin, Kellahin and Fox, Santa Fe, appearing on behalf of Chevron Oil Company.

MR. RUSSELL: John F. Russell, Roswell, appearing on

behalf of Texas Pacific Oil Company.

MR. NUTTER: If there are no further appearances, you may proceed.

MR. MORRIS: Mr. Examiner, we probably will have just one witness, Mr. Norman Woodruff. I ask that he stand and be sworn at this time.

(Whereupon, the witness was sworn.)

MR. MORRIS: Mr. Examiner, before proceeding I would like to make one introductory comment. El Paso's Application in this case concerned the change of Order R-1670 only in so far as that Order relates to Northwest prorated gas pools. The Application as presented by El Paso did not extend to prorated gas pools of Southeast New Mexico. I notice on the Docket, the Notice of Hearing that was given in this case, that it is stated that the Application pertains to the prorated gas pools of New Mexico without restricting the Application to Northwest New Mexico. Now, El Paso's evidence that we intend to present in this case is directed to Northwest New Mexico. We have not prepared a case to present with respect to Southeast New Mexico. However, it would be possible to relate the amendments that we have proposed by our Application to all the prorated gas pools this date both in Southeast New Mexico and Northwest New Mexico if that is the Commission's desire. There is nothing in our

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Application that would not pertain, that is there is nothing in our proposed rules, that would not pertain to Southeast New Mexico if that be the Commission's desire.

As the testimony in this case will show the immediate need and the real problem that we are addressing ourselves to is in Northwest New Mexico rather than Southeast New Mexico. To make it clear, we have no objection to the Application of the proposed rules to Southeast New Mexico but we are not in a position at this time of actually advocating that the rules be extended to Southeast New Mexico. We are here to support our Application which was limited to the Northwest part of the State.

MR. NUTTER: Mr. Morris, while we recognize that the immediate problem as far as El Paso Natural Gas Company is concerned relates to Northwest New Mexico, the Examiner is under instructions from the Commission to consider the Application to apply to both areas. Any amount of testimony you can direct to both areas will be appreciated.

MR. MORRIS: Before proceeding, I also would like to state, Mr. Examiner, that we have made Exhibits that we intend to offer in this case available to those having entered an appearance in this case and also others in the audience that are in attendance in so far as they have been available. I think the Exhibits have been generally available. I think everyone

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has them except perhaps with respect to Exhibits that we have marked as Exhibits 2, 3 and 4. We will make those Exhibits available to anyone who did not get copies of those Exhibits following the Hearing today.

MR. HINKLE: Mr. Examiner, Clarence Hinkle. I think I should advise the Examiner at this time that we have no objection to going ahead and putting on the testimony but at the close of the testimony put on by El Paso we intend to make a motion to continue this case to give sufficient time to get together evidence and so forth to present to the Commission if we want to oppose it or object to it because we have not had sufficient time to really prepare for this Hearing.

MR. NUTTER: You have no objection to the hearing of the evidence at this time, though?

MR. HINKLE: No.

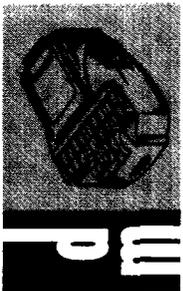
F. NORMAN WOODRUFF

called as a witness, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY-MR. MORRIS:

Q Mr. Woodruff, will you please state your name and where you reside?



A F. Norman Woodruff, El Paso, Texas.

Q By whom are you employed and in what capacity?

A I am employed by El Paso Natural Gas Company as their manager, Gas Proration Operations.

Q Mr. Woodruff, have you previously testified before the New Mexico Oil Conservation Commission and its examiners and had your qualifications established as a matter of record?

A Yes, I have.

MR. MORRIS: Are the witness' qualifications satisfactory?

MR. NUTTER: Yes, they are.

Q (By Mr. Morris) Mr. Woodruff, at the outset, would you state generally the purpose of this Hearing and the problem to which your Application in this case is addressed?

A The purpose of this Hearing is to request the Commission to adopt a revised basis for classifying wells as to marginal in an effort to minimize the assignment of allowables to marginal wells that cannot be produced and in turn assuring that currently this allowable go to the wells that are prorated which must produce that portion of the market demand. I think it may be well at this time since the operators did not receive any mailing from the Commission, a copy of our letter of Application, for me to read pertinent portions of it which set out

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the desired end to which our rule amendments were designed.

Q Is that Application to the Commission marked and presented to the Commission as Exhibit No. 1?

A Yes, it is. It is a letter dated September 22, 1970 to Mr. Porter over my signature. I would like to begin reading at the beginning of the second paragraph: " This Hearing is the culmination of the several meetings with operators and discussions with Commission staff that have been held during this year in order to determine the form of relief needed to deal with the particular problems encountered in complying with the proration rules applicable to the pools of Northwestern New Mexico.

Basically, we believe our proposal sets forth: 1. A preferable way for determining when wells should be classified as marginal, and, 2. A preferable means of determining that portion of the market demand which should be attributed to marginal wells.

These amendments will aid in accomplishing the over-all objectives of minimizing the assignment of allowables to marginal wells in volumes exceeding their producing capacity. This in turn will reduce the overproduction required of prorated wells in order to offset any excess apportionment of current market demand to marginal wells as allowable.

We believe the attached amendments to the rules to be

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self-explanatory and we further believe these amendments will accomplish the above objectives.

We would like to explain our reasons for excluding a portion of existing Rule 15 (B. This rule authorizes the Commission to permit a well to produce each month in order to avoid undue hardship. As we recall, this was specifically requested in order to avoid the question of loss of lease where production is judged to be necessary each month. We propose the deletion of the last clause which, as we interpret it, would require the Commission to shut-in a well ignoring the need for production to hold the lease in an instance where production during any month exceeded the specially authorized allowable. We believe the other portions of this rule clearly give the Commission the authority to control the production from the wells under the circumstances without the necessity of this clause."

Q Mr. Woodruff, in this letter you initially referred to this Hearing as being the culmination of several Hearings and meetings with operators and discussions with the Commission staff which have been addressed to this particular problem. Would you discuss the meetings that have been held and the Hearings that have been held dealing with this problem that are a prelude to this Application?

A Yes, I will. First, a Hearing was heard on August 14, 1968 in Case No. 3834 at which time El Paso asked for an excep-

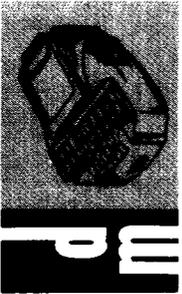
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tion to the balancing provisions of the rules applicable to San Juan Basin pools so as to have an additional year to bring wells into proration balance. This request was granted by Order Number R-3479 dated August 20, 1968. This Order gave the producers of wells until August 1, 1969 to make up the over production and under production status of wells existing as of February 1, 1968. This Order Number R-3479 provided that another Hearing would be held six months later so that the Commission could be made aware of the progress during the interim period and determine whether the Order should be continued for the remaining six-month period. This Hearing was held on February 19, 1969 and resulted in Order Number R-3479A dated February 28, 1969 continuing the exception to the balancing provisions.

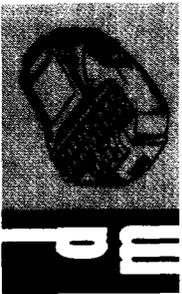
It became evident to El Paso that another exception would be necessary and we applied for a Hearing by letter dated January 13, 1970. At this time we also furnished a copy of our Application and a draft memorandum to San Juan Basin operators. This was transmitted by a memorandum dated January 13, 1970 which advised the operators of the Hearing and called a pre-hearing conference of the operators at 1:00 P.M. on February 3rd, 1970, the afternoon before the Hearing date. At the time of the pre-hearing conference we advised the operators that we would pursue at the time of the Hearing the



next day only the request for the exception for the balancing provisions of the rules and would defer our request for an amendment for the marginal-well-rules provisions to a later date. This whole matter was discussed in great detail at the time of the operator's meeting which was attended by a number of the Commission's staff personnel.

The next day, on February 4, the Hearing was held in Case Number 4302 and resulted in our Application being granted by Order R-3923 dated February 20, 1970. This Order granted producers of wells until February 1st, 1971 time to make up the overproduction or underproduction attributal to wells as of August 1, 1969. We are still operating under this exception.

At the time of the February 3rd operator's meeting it was agreed another meeting would be desirable. This meeting was called by the Commission by memorandum dated March 2nd, 1970 and was open to producers statewide for a 10:00 A.M. meeting on March 18, 1970. The Commission memorandum also transmitted a revised-proration procedure suggested by the Commission staff. Following study of the Commission proposal El Paso furnished a letter dated March 13, 1970 to gas producers in New Mexico in which we asked the proposal of the Commission and transmitted a revision and clarification of the



proposals made by El Paso at the time of the February 3rd meeting.

The March 18, 1970 meeting was held and well attended by operators from both the Northwest and Southeast areas of New Mexico. A decision on calling a Hearing to discuss this matter was deferred pending further study. In the interim El Paso personnel discussed this matter with Commission staff informally on several occasions and concluded that the Application for this Hearing that we are having today should be made.

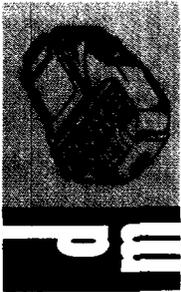
Q Mr. Woodruff, during your explanation of the events leading up to this Hearing you have referred to several Hearings and several conferences held with the Commission and with the operators. At this time, in that connection, would you identify for the record the material contained in Exhibits 2, 3 and 4?

MR. NUTTER: Mr. Woodruff, before you respond to that question I would like to recess this Hearing for three minutes. I have got another Hearing starting at 9:30. I have to go call that one in order to recess it.

(Whereupon, a short recess was held.)

MR. NUTTER: Hearing will come to order. Mr. Woodruff, will you proceed with your answer?

A Responsive to the request, Exhibit 2 will consist of



a January 13 memorandum to all operators in the San Juan Basin area over my signature to which was attached our January 13 Application to the Commission requesting an extension of the following provisions of Rule 14a, Rule 15a and Rule 15b of Order R-1670 and also including a memorandum pertaining to calculation of allowables in the San Juan Basin.

Exhibit 3 is a memorandum from the Commission to all gas producers and purchasers dated March 2nd, 1970 calling a meeting on proration procedures for March 18, 1970.

Exhibit 4 is a memorandum from El Paso Natural Gas Company dated March 13, 1970 for gas producers of New Mexico. Those are the pieces of correspondence that are not currently a part of previous records of the Commission. I would suggest that we also ask that the record of the two previous Hearings mentioned be made a part of this Hearing.

MR. MORRIS: Mr. Examiner, I would ask that the examiner and the Commission take administrative notice of the record proper, the transcript of proceedings, and the order entered in Case Number 3834 that Mr. Woodruff has referred to that resulted in Order Number R-3479 dated August 20, 1968 and in Order R-3479A dated February 28, 1969.

MR. NUTTER: Do you have the date of the Hearing preceding that Order Number?

MR. MORRIS: Just offhand I don't.

MR. NUTTER: I believe you mentioned it earlier.

A The second Hearing of the second Order was February.

MR. MORRIS: February 19, 1969.

MR. NUTTER: And that was the Case number reopened and the Order Number was 3479A.

MR. MORRIS: Right, also Case Number 4302, Hearing held on February 4, 1970 resulting in Order R-3923 dated February 20, 1970.

MR. NUTTER: The Examiner and Commission will take administrative notice of the contents of Cases 3834 and 4302 which resulted in Orders Numbers R-3479 and R-3479A and R-3923 respectively.

Q Now Mr. Woodruff, do the rules changes suggested by El Paso in its current Application, are these the same rule changes that were discussed and proposed in your various operator's meetings?

A We are proposing today an amended version of what was discussed during the operator's meetings. At the time of the operator's meetings we were suggesting a procedure which would have provided for a determination to be made monthly of a well's ability to produce and for it's allowable to be limited during any month that the allowable would have exceeded that producing ability. At the time of the operator's meetings we had concluded that that type of procedure was necessary and in order to make

proration as we know it work for the maximum length of time under circumstances where the market demand was approaching the time when it would be equally or in excess of the delivery capacity of wells in the pool. We are still of the opinion that this procedure is the most desirable for us in a prorated pool. However, we, as I stated, our Application has requested an amended version of this procedure.

Q If you are of the opinion that the original procedure is the most desirable for us in a prorated gas pool, why is El Paso proposing the amended version that is put forth in its Application in this Hearing rather than the original version?

A It is our belief that it is important to place into operation at the earliest possible moment an improved means for determining a marginal well classification. We have concluded that the time required for reprogramming of machine data processing operation to accomodate our original proposal as discussed during the operator's meetings is of such length that it could not be accomplished by the end of the current exception to the balancing provisions which will terminate on February 1, 1971. It is our belief and we understand in discussions with the Commission that our amended version is something that can be accomplished timely with a minimum of change. It does encompass many of the desirable features of our original proposal and we have concluded

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that it is important to go this step at this time so as to have a revised approach to classifying marginal wells in operation just as soon as possible.

Q Mr. Woodruff, before going into detail on the rule changes that we are proposing in this Hearing, would you state and perhaps state again if you have already covered this general concept of the present Application and also point out where it differs from the current practice being followed by the Commission in the treatment of over and under production.

A Very good, I think it would be --

Q And classifications?

A Briefly, the current practice for classifying a well marginal is to determine it's maximum producing ability during any one month of the preceeding proration period and to compare this maximum month's producing ability with the average month's allowable during that proration period. If a wells indicated producing ability is less than it's average allowable then the Commission currently would classify it as marginal. We are recommending that the determination of producing ability be made by requiring purchasers of gas to report to the Commission at the end of each proration period the average producing ability of the well reflected by it's performance during the three most recent months of operation. When I say "average producing ability" I mean it's actual full capacity to produce which would be

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determined by taking its total production during this three-month period and dividing that total production by the days per minute to produce. Since it is the practice of all operators, certainly of El Paso's and we understand of others, to open the wells without restriction when they are turned on, this would then reflect or give a very good reflection and an indication of a well's producing ability. So then we would in essence only substitute this three-month average producing ability reflecting the most recent evidence for the current practice of determining its capability to produce during the maximum month's production of the preceeding six-months' period, comparing that producing ability that we would determine with the average monthly allowable during the preceding six-month period. To me it's just that simple. All we are doing is changing the way of determining what the producing capacity of a marginal well is.

Q Now, in general, why is that change necessary in your opinion?

A It is necessary in order to minimize the assignment of allowable to marginal wells in excess of their ability to produce. When an allowable is assigned in excess of their ability to produce, it is necessary that that portion of the market demand represented by that allowable be produced by the wells that are capable of producing it, the prorated wells.

This results in overproduction of their current allowable and the difficulty that we have testified to in various Hearings and that we are trying to alleviate to the full extent that it is possible the accumulation of overproduction unnecessarily on wells because we have difficulty in bringing them back into balance.

Q In your opinion, will your proposed rules and regulations, amendments to rules as proposed by this Hearing, tend to meet this problem?

A Yes.

Q Will you now refer to Exhibit 5 which is the test of your proposed rule changes and discuss those proposed rule changes?

A I might state that those who received copies of Exhibit 1, our letter of Application, will find attached to that letter the proposed changes that we have now referred to as Exhibit 5 in case you want to review them and unless the Examiner would prefer me to do otherwise I will read these rules into the record.

MR. NUTTER: That will be fine, pointing out the difference with respect to the existing rules as you go, please.

Q (By Mr. Morris) Mr. Woodruff, would you go ahead and read the Rules into the record making any comments that you wish to make as you read them?

A Fine. I might state in doing this and in trying to respond to the Examiner's request that we have taken the rules and made amendments in those portions that we deemed necessary in the order that the rules occur and I believe it may be well for me to read these. For instance, Rule 98 refers to something which isn't explained until you get to 16A and B. I will go through this and I will make comments, if I think it is helpful as I go, but again reiterate to some extent what I have already explained, the intent of this, after I have completed it.

MR. NUTTER: That will be fine.

A These are proposed changes to Order R-1670. These are verbatim. "Proposed Changes to Order R-1670 - General Rules and Regulations for Prorated Gas Pools - New Mexico - Northwest New Mexico. C. Allocation and Granting of Allowables. Rule 9(B). The allowable to be assigned to each marginal well shall be the actual average monthly producing ability of said well as determined from said well's average daily producing ability as set but in Section E, Rules 16(A) and 16(B). D. Balancing of Production. Rule 15(B). If, at any time, a well is overproduced in an amount equaling six times its average monthly allowable for the last six months, it shall be shut-in during that month and each succeeding month until it has overproduced less than six times its average monthly allowable; provided, however, that special authority to produce up to 500 MCF per month may be assigned

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such shut-in well upon proper showing to the Secretary-Director of the Commission that such authority is necessary to avoid undue hardship."

I think, Mr. Examiner, it might be well to stop here and to read into the record that portion of the existing Rule 15(B) that we are amending that we are suggesting be deleted.

MR. NUTTER: This is the portion you mentioned in your letter of Application?

A That is right. The reasons for it I believe need no further explanation since they are explained in that and I shall read it into the record. Rule 15(B) has a last clause reading as follows: "Providing further that any well produced in excess of the monthly rate of production authorized by the Secretary-Director shall be shut-in until all over production is made up." I think it is well for me to state in addition to the explanation in the letter that we understand this applies to this special allowable of 500 MCF per month and would, as we interpret it, require the Commission to shut-in a well that produced in excess of this 500 MCF per month even if in doing so it may jeopardize the lease. Consequently, we are recommending this clause be deleted. I might say, in elaboration, we found this to be something which we thought was important to change in the Rules and in a real sense does not relate to the classification of marginal

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wells. Now I will continue with the printed portion of Exhibit 5 starting with "E Classification of Wells." "Rule 16(A). The Commission may classify as a marginal well any well which had an underproduced status at the beginning of the preceeding gas proration period and which at the end of said period, is not capable of producing its average monthly allowable. This capability shall be determined by comparing the average monthly allowable for the preceeding gas proration period with the average monthly producing ability for the most recent three months available (see 16(B) below). A well will not be classified marginal if, prior to the end of a gas proration period, the oprator or other interested party presents satisfactory evidence to the Commission showing that the well should not be so classified.

Rule 16(B). Each gas purchaser shall furnish to the Commission, prior to the 10th day of the month following the last month of each proration period, the actual average daily producing ability for the most recent three months available of each prorated gas well to which it is connected. Upon receipt of this information from the gas purchaser, the Commission will calculate the average monthly producing ability by multiplying the daily average producing ability by 30.4, which is the average number of days in a month for the entire year.

Rule 16(C). (Old Rule 16(B). The Secretary-Director may reclassify a marginal or non-marginal well at any time the

well's production data, deliverability data, or other evidence as to the well's producing ability justifies such reclassification.

Rule 18. If, at the end of a proration period, the most recent average monthly producing ability of a marginal well is greater than the average monthly allowable for said proration period (See Rule 16(A) and 16(B) above), the marginal well shall be reclassified as a non-marginal well and its allowable and net status adjusted accordingly.

Tapacito-PC - Special Pool Rules - Order R-1670, delete Rule 15(B) and Rule 16(A). Basin Dakota - Order R-1670C, delete Rule 16(A)."

Mr. Examiner, I believe that in my previous discussion of the purpose of our request I have pretty well covered why these changes from the original Rules have been offered. I will address myself to that again if you desire that I do so.

Q (By Mr. Morris) Mr. Woodruff, let me interrupt here by asking what I hope to be a few explanatory questions. The Rule 9(B) that you are proposing here differs from the existing Rule in that the existing Rule would use the high month, that is the maximum production from a well from any month of the gas-proration period, whereas your proposed Rule uses an average monthly producing ability?

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A For the three latest months for which production is available, that is correct.

Q Right. That is in effect the key to the whole change that we are proposing in these Rules?

A That's correct.

Q Do you consider that there is any need for elaboration on any other portion of these Rules or how they would actually be applied in practice by the Commission if adopted?

A I believe it would be well for me to elaborate on Rule 18 to explain what I would recommend be done in accordance with the last words there which would provide for reclassification as a non-marginal well and its allowable and net status adjusted accordingly.

Q Would you by illustration, if possible, explain how El Paso would recommend that this Rule be applied by the Commission if it is adopted?

A It is our recommendation that a marginal well that is being reclassified non-marginal naturally have reinstated all of the allowable that would have been available to it had it been a prorated well operating under the Rules applicable to prorated wells. It may be well for me to give what I hope will be a simple and understandable example of just what I mean by that. It may be easier for everyone to understand this if they will draw a little sketch with a straight line divided into

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three parts. Let's label the beginning of that line "1" the first division "2", the third division "3" and the end of the line "4". Let's consider 1, 2, 3 and 4 to be balancing dates and the periods between each number to be balancing or proration periods and let's assume for the example that on balancing date Number 3, the Commission determined that a well that has been marginal will be reclassified non-marginal to be prorated.

Now, if this well that is being reclassified during the proration period 2 to 3 produces more than it would have received as an allowable had it been a prorated well then we would think it correct to go back into the proration period between 1 and 2 and determine what allowable this well would have received had it been prorated during that period and would have accumulated as under production so that that under production during proration period "1" to "2" would offset any overproduction accumulated by the well during proration period "2" to "3". Now, this is exactly what would be permitted for a prorated well and we think a marginal well should be held -- I mean a marginal well that is to be reclassified as prorated should have the same opportunity to produce its full share of the market demand as indicated by its allowable as a prorated well would have had. I think there are some who consider that a marginal well is a penalized well. It is certainly not our intention to penalize

a marginal well. A marginal well classification denies it nothing under our proposal. It will be entitled and will receive everything that a prorated well would receive in the way of opportunity to produce its full share of the market demand.

Q Mr. Woodruff, does your proposal differ from the present Commission practice in this regard?

A I understand that in the instance of a well under the circumstances that I have just explained where it overproduced during the preceeding six-month period, that the present practice is not to go back and to determine whether there may have been underproduction that would have been accumulated and had it been non-marginal the preceeding six-month period so to this extent it will be a change from the present practice and we think it's appropriate because this is necessary to avoid penalty of a marginal well under circumstances when it overproduces the allowable that it would have received had it been prorated during the six-month period immediately preceeding the time it's reclassified.

I think it may be well to give one other example using our same graph and assume that this well that is to be reclassified did not overproduce its allowable during the immediately preceeding proration period between "2" and "3". Then this well would carry forward for production during the proration period "3" and "4" the difference between its production and what

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would have been allowed had it been prorated during the period "2" and "3" as underproduction which could be produced in the succeeding proration period the same as would have been true had it been prorated at all times. I believe, I hope, that is an understandable explanation.

Q May I ask another question which perhaps would clarify a change that is being proposed with respect to Rule 15(B). Your Rule, proposed Rule 15(B), in the second line refers to the average monthly allowable. Is it a correct statement that this is a change in that the present Rule 15(B) talks in terms of the current monthly allowable?

A Yes, it would be.

Q So here again when we are going from current-monthly allowable to an average situation which ties in with the same change that we previously discussed under Rule 9(B)?

A That is correct.

Q Mr. Woodruff, have you made a study and have you prepared Exhibits that will be of assistance in explaining the current status of operations in the San Juan Basin and which have led you to recommend these proposed Rule changes?

A Yes, I have and I might make introductory remark to state that you will find these Exhibits to be in some respects similar to those presented in previous Hearings and will serve

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not only to support our conclusions that we need the change in marginal rule classification, but will also bring those present up to date in terms of what has been accomplished in accordance with previous Orders of the Commission particularly as they pertain to exception of the balancing provisions in the Northwest New Mexico prorated gas pools.

Q Would you refer to Exhibits Numbers 6 and 7 together, 6 being the statistical information and 7 being the graphical representation of that same information?

A Yes, Exhibit 6 is the statistical record of the average daily production in millions of cubic feet per day for each month for the years 1964 through 1970 with the period September to December 1970 being the estimated. To be sure that we understand these figures I might refer you to the year 1970 and read this top figure for January. That is 1,305,000,000 cubic feet of gas per day and reflects the average daily volume for the month of January 1970 which El Paso took to the main line from the prorated pools of the San Juan Basin. At the bottom of each column you will notice an average for the year again expressed in millions per day, millions of cubic feet per day. I do want to state that these volumes include those acquisitions from Southern Union Gas Company from the San Juan Basin prorated pools which El Paso has taken to the main lines out to the San Juan Basin.

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Because this is a true reflection of our total market demand for gas from these pools and these do differ from some of the statistics filed on previous occasions where we did not include that portion of our demand which was acquired from Southern Union -- I said Gas Company, it should be Southern Union Gas Company and Southern Union Production Company -- it may be well, since it comes to mind at this time, to tell you that following the last time we testified we have received authorization from the Federal Power Commission, as we anticipated at that last Hearing, enabling us to purchase additional volumes of gas from Southern Union Gas Company. This purchase began a couple a months ago and Southern Union is now able to deliver additional volumes of gas to us which is having the effect of enabling them to make up underproduction accumulated to their wells in the San Juan Basin. Taking this data that I have just referred to and it's been plotted on the graph which we define as Exhibit Number 7 --

Q Mr. Woodruff, could I interrupt a moment to point out what is an error on the scale of the graph on Exhibit Number 7. At the upper-left-hand corner of the Exhibit 7 refers to the quantities shown in billions. That should be in millions of cubic feet per day.

A That is correct.

Q Please proceed.

A Exhibit 7 shows graphically the volumes of gas produced during the period since 1964 by months. It shows that a peak of demand was reached during the '68, early '69 period and since that time there have been substantial reductions in the volumes of gas purchased by El Paso Natural Gas Company from the San Juan Basin pools.

I think it well to explain that during the period of exceptions that have been granted by the Commission in an effort to aid in balancing wells, El Paso has operated its entire system so as to minimize the need for gas out of the San Juan Basin considering that decreasing our takes to the maximum possible was necessary in order to aid in the balancing of wells. The degree to which we have been able to accomplish this, I believe, is effectively reflected in this graph. The average lines drawn horizontally have values which were reflected on the statistical analysis, but I will give them to you for the year 1968 which is the high point. It was 1,359. The next average for '69 was 1,214, for 1970 1,141. I believe that completes my presentation on that Exhibit.

Q Mr. Woodruff, would you refer to Exhibit No. 8 showing a study of the overproduced wells that are not in balance in the San Juan Basin prorated pools?

A Yes, I will and here as I indicated in my previous remarks we are trying to show to those present what has occurred

during the most recent exception to the balancing rules in the San Juan Basin prorated pools. We started out in August 1st, 1969 with the wells overproduced in number and in volume shown under "Starting Status" columns. Under "Balancing Status" we show what has occurred since that time and as of the end of August 31, 1970.

I think it is pleasing for everyone to note as of the end of August 31 that there were only 35 of the 1,045 wells that were overproduced at the beginning that had not been balanced. I was able to get, after this Exhibit was prepared, information reflecting the status at the end of September's production and you may want to indicate on your Exhibit that there now remains only one well in Ballard, one well in South Blanco and three wells in the Basin-Dakota are only five wells of the 35 that still were unbalanced at the end of September. I think you would also be interested in knowing that none of these wells are overproduced at this time in excess of one month's allowable period. I think this in turn reflects that it has taken or will have taken by the time all wells are balanced 15 months to balance the overproduced status of the wells in the prorated pools of San Juan, New Mexico which existed as of February -- no, which existed as of August 1, 1969.

Q Mr. Woodruff, have you made a similar analysis concerning the underproduced wells in the San Juan Basin?

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A Yes, I have and this is entitled Exhibit No. 9. It reflects the same type of data as did Exhibit 8 so I think it is important mainly only to refer you to the totals, particularly to the balanced status which shows that there remains only 199 wells of the original 669 wells that were underproduced at the beginning that were underproduced as of August 1, 1969. It is interesting also to see these 199 wells only have still accumulated as underproduction 2.1 billion of the 10.2 billion that they started with, reflecting a makeup of eight billion cubic feet of gas during this period. I think this very clearly reflects the beneficial effects for the underproduced wells that have resulted from the exception granted by the Commission and also to some significant extent by the improved producing capacity resulting from the lowering pipeline pressure to San Juan Basin which has been accomplished by El Paso Natural Gas Company.

Q Mr. Woodruff, I think you covered this earlier but is it El Paso's practice to keep these underproduced wells turned on and on stream all the time in an effort to make up this underproduction?

A Yes, it is.

Q Would you turn next to Applicant's Exhibit No. 10 and explain the information shown there?

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A Exhibit 10 reflects the status of overproduction in San Juan Basin prorated pools as of 2-1-68, 8-1-69 and 8-31-70. These three times have been picked because they were the times at which El Paso came before the Commission requesting exceptions to the balancing provisions on previous occasions, this being true only of the first two columns, status 2-1-68 and status 8-1-69 with the status 8-31-70 being the most recent status available for us to show what the current situation is in the San Juan Basin. I am going to refer to the totals at the bottom which show the total condition for all prorated pools and to explain that to us, who maintain close vigilance on the proration status, that the factors on this page are very important criteria for determining whether proration is working or isn't working or whether we are getting wells in balance or are we going to have any problems in getting wells in balance and this is the purpose that we are showing this to you, to show you what has existed in the past during our periods where we analyze our problem to be particularly severe and what the condition is now after having almost completed the second of two periods of exception to the balancing provisions.

You will note that the aggregate cumulative overproduction as of 2-1-68 was 22.1 billion. As of 8-1-69 it was 21.3 billion. As of 8-31-70, it's 15.8 billion. It shows that since 8-1-69 and approximately a year's period of time there has been a

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reduction of about 5.5 billion. This reduction can be attributed to the exception granted by the Commission giving us additional time to make up overproduction. It can be attributed to the reduction in line pressure. It can be attributed to the great care being given by all parties to trying to bring wells into balance. I guess you might say to doing everything that was within our reasonable power, and when I say "we" I say that collectively, all parties, the purchasers, producers and Commission, to try to bring the prorated pools of the San Juan Basin back into balance. There has been a significant reduction but there still exists 15.8 billion cubic feet cumulative of overproduction. This is an amount still considered to be critical. This is an amount which we still will probably find difficulty in balancing within a six-month's proration period. El Paso considers it extremely important that we be able to live within the proration rules rather than by operating with exceptions because it is only under definitely prescribed rules that we can plan our operations for the future. That's what motivates us to try to devise means which will enable all interested parties in the San Juan Basin to be able to live within the existing Rules and that is the reason why we are before you today with a recommendation which we believe will minimize the problem of accumulating overproduction which will in turn minimize the problem of making it up. We think there

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has been a significant improvement reflected by this statistical data but we still believe that there is a problem that requires additional and continuing consideration in the San Juan Basin to make proration as we know it under existing Rules work.

Before leaving this Exhibit I think it will be well for us to look at the cumulative status as it applies to some of the areas. We have grouped the picture pools. You will see cumulatively that there has been little improvement in total but a significant reduction in average well over production. In the Blanco-Mesa Verde there has been a very decided improvement. The cumulative has reduced from 8.5 to 2.8 and the average per well from 22 -- I think for the record I should say what my figures mean because it's not clear, will not be clear in the transcript, that the 8.5 I referred to is billions of cubic feet which reflected the status as of 8-1-69 and the 2.8 referred to is in billions of cubic feet as of 8-31-70 and that the average per well figures of 22.7 are million and of 9.7 are million. The Basin-Dakota pool has a cumulative as of 8-31-70 of 8.9 billion which is greater than its status as 8-1-69 which was 8.9 billion. However, the average per well is now only 38 million as compared with 49 or 50 million a year ago. I think it's clear to all from the data presented here that the greatest problem for balancing exists in the Basin-Dakota pool. We believe that the Rules that we are recommending will significantly

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contribute to easing this problem and we feel confident that our purchases from Southern Union Gas Company that have just been initiated will tend to improve this circumstance since much of the gas we will be purchasing from them is gas produced from their Dakota well so hopefully this combination of action will bring this condition into more favorable circumstance in the future. I believe that completes my comments on this Exhibit.

Q Mr. Woodruff, the proration Orders that have been entered in the prorated gas pools, Northwest New Mexico, have been entered to prevent waste and protect correlative rights. In your opinion, will your proposal here today help the Commission to implement and maintain and administer those prorationing Rules in those prorated gas pools?

A I believe they will.

Q Would you at this time summarize your recommendations to the Commission?

A Our recommendations to the Commission -- it has taken quite a bit of time in making them, this testimony -- is to revise the procedure for determining when a well is marginal resulting in what we believe will be a more accurate recommendation of its producing ability and minimizing the assignment of market demand in the form of allowable to those wells that

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will be unable to produce. I would like to comment also at this time to say that the Rules that we have proposed are Rules that are an improvement, in our opinion, in any prorated gas pool, that a better determination or more accurate determination of a well's marginal is desirable in any prorated gas pool. My testimony has been addressed to the problem that we have been trying to resolve in the San Juan Basin of Northwest New Mexico for these many years but the application of these Rules to the prorated gas pools of Southeast New Mexico will have equally beneficial effects there as they would in the San Juan Basin not to relieve such an extreme current problem as we have in the San Juan because it does not currently exist in the Southeast, but with such Rules in existence in the Southeast, certainly we will be able and ready at the time such a problem would exist there. We would be better prepared to cope with similar problems in the Southeast should they occur. I believe that's all.

MR. MORRIS: Mr. Examiner, at this time we would offer El Paso Exhibits 1 through 10 into evidence.

MR. NUTTER: El Paso's Exhibits 1 through 10 will be admitted in evidence.

MR. MORRIS: We offer Mr. Woodruff for Cross Examination.

MR. NUTTER: Does anyone have a question to ask Mr. Woodruff?

CROSS EXAMINATION

BY MR. UTZ:

Q I am going to have to plead ignorance in trying to understand your proposal as to how you would reinstate under these wells that have been classified marginal. It's my understanding that you would reinstate underage to wells that have gone from marginal to non-marginal that have been accrued for any period of time?

A No, sir, that's not my recommendation. My recommendation was that you reinstate only the allowable which the well would have received and would currently have available to it had it been a prorated well.

Q For what period of time, one period, six-months period?

A Since our Rules applicable to prorated wells provide that a well may accumulate underproduction during one six-months period and may make it up during the succeeding six-months period that my recommendation was that in determining that a well was to be reclassified from marginal to non-marginal at the end of the second proration period that had it accumulated overproduction during the second proration period or the period immediately preceding its classification that that overproduction would be offset by any underproduction during the first proration period

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that it would have had had it been prorated so this well will not be penalized for overproduction which will have to be subsequently made up which would not have been true had it been prorated rather than marginal.

Q I think I understand you now. Now let me state it in my words and see if you agree. If a well has been marginal for one proration period and at the end of that proration period it goes non-marginal, you would reinstate the underages that have been cancelled at the beginning of the proration period?

A I would.

Q In other words, marginal one period?

A I would reinstate that underage only to the extent that it was necessary for use during the immediately preceding proration period to offset overproduction during that period.

Q You would zero the well out?

A Right, because a prorated well can only accumulate for six months and it would have it cancelled in your example at the end of the second period. We are not proposing that a marginal well carry underproduction forward beyond the time that a prorated well would be able to do so. You would go back into the first proration period in your example and pick up underproduction only if it was necessary to offset overproduction in the proration period immediately preceding your

reclassification.

Q Mr. Woodruff, in your classification scheme at present as well as your proposal, the only way a well can go up is to overproduce during the proration period, is that correct?

A The only way a well can go up?

Q The only way a marginal well can go non-marginal is to overproduce during the proration period?

A No, our Rules would provide, or do provide, that a well which indicates a producing ability based on the average actual production during the three most recent months of production which was in excess of its average allowable during the preceeding-six-month period would be reclassified as prorated or non-marginal whether it had overproduced or was underproduced.

Q Wouldn't you use the same set of data for wells going up as well as wells going down?

A Right. I believe it would be responsive to his question and helpful to say that we believe that this more current determination of producing ability is helpful under circumstances where the pipeline pressure is being lowered and we have wells that have improved producing ability resulting from it. It will enable us to catch those wells more currently and to change their category from marginal to non-marginal when

it is appropriate.

Q Mr. Woodruff, do you know what percent of wells in San Juan Basin are now marginal?

A I do not know. I may have some statistics available to me. It seems to me something in the vicinity of 60 percent. Do you have a figure you could give me?

Q I think it is 63 but I don't have the data right here. Now, using your proposal, how many more or what percentage increase of marginal wells would you anticipate?

A I have no percentage in mind. We did make a study analyzing the wells which we thought were in an underproduced category which might make them subject to reclassification from non-marginal to marginal and we came up with 260 something wells, 260 to 270 wells that would be reclassified under our proposal. We compared that with what would have been reclassified under the existing procedure and we had something like 150 wells that would have been reclassified under current procedure as compared to this other, to our proposal.

Q If I heard you correctly then, you don't anticipate much of an increase?

A No.

Q So the prorated wells under your proposal would be in the neighborhood of 35 percent, is that a fair figure?

A I think 35 to 40 percent, somewhere in that area,

very little difference what we now have where we have five to six thousand wells, is that right?

Q A little over 6,000. I am referring to Exhibit 10. 1117 wells you have overproduced represents about 18 percent of the wells in the Basin. Would you accept that figure?

A Yes.

Q So with that 35 percent of the wells that we will prorate, 18 percent of them are now overproduced and will have great difficulty getting balanced. Is that an erroneous assumption?

A I believe, Mr. Utz, that it is erroneous only to the extent that some wells will have difficulty and some won't. There is a great variety of overproduction, some very little, some more. This average reflects, of course, the average of all overproduced wells. Some wells will have difficulty. They will not be as difficult to balance as we have experienced on previous occasions when we asked for exceptions because we have a lower per well overproduction to make up but I believe my testimony was "we still foresee a problem in balancing wells in a six-month period." We can't assure you whether we can or can't in this current condition but we do believe that we still need to find and to utilize every means of refinement of the existing proration rules that are available

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so as to aid in balancing wells.

Q Would it be that your current allowables are too low or oscillate too much that cause this 18 percent to be so difficult to balance?

A No, I don't think so.

Q Do you think your method will allow you to balance this 18 percent of the wells by February 1st?

A By February 1st, 1971?

Q Right?

A It will help but, no, I don't think by February 1st, 1971 they will be balanced. This is a step in the right direction. It's a means of helping to balance wells, helping to balance because we currently will be assigning to the prorated wells allowables more in keeping with their true current share.

Q Let me put it another way. Do you think enough of these wells will be balanced to meet the market demand?

A As of what date?

Q February 1st, 1971.

A I believe that operating under the existing balancing Rules we will have no problems with having to shut-in wells this coming winter preventing us from meeting our market demand.

MR. UTZ: That's all I have.

CROSS EXAMINATION

BY MR. KENDRICK:

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MR. KENDRICK: A. R. Kendrick of Oil Conservation Commission, Santa Fe.

Q (By Mr. Kendrick) In line with Mr. Utz' questions I am a little confused because I understood you to say that Exhibit 8 reflected 35 wells out of August 31, 1970 as being underbalanced or their balance status was in jeopardy and as of September 30 only five wells had not balanced?

A That is correct. During this period of exception which terminates on February 1, 1971, producers were given the opportunity to balance the status which existed as of August 1st, 1969. Exhibit 8 reflects what has been done in balancing that status. It shows that, as I testified, there are only five wells that have not at this time balanced the status existing for those wells as of August 1st, 1969. Now, I think --

Q In other words, the 1117 wells shown as overproduced on Exhibit 10 are not required to balance by February 1st, 1971?

A That's correct.

MR. KENDRICK: Thank you.

CROSS EXAMINATION

BY MR. HINKLE:

Q Mr. Woodruff, under your El Paso proposal to the Commission for amendment of the Rules will a marginal well's production in the next proration period be limited to the last

three months' average regardless of its present capacity to produce?

A The answer is yes but I would like to explain if I may that the Commission would use as a criteria to determine how much of the current month's allowable should be set aside for marginal wells. The delivery capacity of that well and all other marginal wells is determined by the latest three months producing ability. They do that in order to determine the balance of the demand which goes to the prorated wells. Now this is what you might refer to as a tentative allowable for marginal well because ultimately it gets as its allowable when it finally evolves what it produced. I think it may be helpful when it finally evolves what it produced. I think it may be helpful, if I may Mr. Hinkle, to say that El Paso as a purchaser does not consider this tentative allowable as I have described it for a marginal well to be any restriction, that we produce the well 100 percent at the time because it is of a marginal category. It produces ^{whatever} what ever it can produce. We would never propose that its tentative producable be considered as a restriction on a marginal well.

Q The point I am trying to make is suppose a marginal well is reworked and its capacity is increased so it could produce more during the next period. How are you going to handle that and permit it to produce additional gas during the

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next proration period?

A Under the routine mechanism that we have described it would produce as a marginal well producing its full capacity. In doing that its characteristic to produce would be affected in this three-months average we would determine and it would then flag this well as a well that should be classified from marginal to non-marginal. Then at that balancing date when this was done, if this well after having been reworked, had over-produced the allowable that it would have received as a prorated well, we suggested that, we recommended, we proposed that you go into the preceding six-months period, calculated what its allowable would have been during that six-months period and offset the overproduction that it had and then from the balancing date on it would be a prorated well with whatever status it carried into that proration period.

Q A marginal well would not be restricted if it's reworked for the next proration period?

A My proposal would not restrict a marginal well during the balance of the proration period in which it was currently operating. This is not to say that the producer could not come in and have his well reclassified before the end of the period or the Commission, recognizing that a change had been made, would reclassify it, and in effect, it may be that Mr. Utz or others would like to help me in answering this in that I

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believe when you rework a well you have to follow certain forms and, I believe, it's the current practice to immediately classify this well as non-marginal when it's reworked so perhaps my explanation has been superfluous that the practice would be to classify it as to the time; however, we would still propose that the beneficial effects of looking back into the past be practiced for this well that was reworked.

Q If the ability of a well to produce goes up, does it stay marginal?

A In the example I presume you mean a well --

Q If the ability for a well goes up what its last three-months average was but the well is still marginal, are you saying the well will be produced at capacity?

A So long as it is a marginal well it is our operating practice to produce it at capacity.

CROSS EXAMINATION

BY MR. RUSSELL:

Q I just want a little bit of clarification of the mechanics of declaring a well marginal or non-marginal. Under your proposed Rule as I understand the purchasers will furnish to the Commission prior to the 10th day of the month following the last month of each proration the actual daily production for the most recent three months. That goes into the Commission

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by the 10th of the month preceding proration period. At that point the Commission then determines whether a well is marginal or a prorated well.

A The answer is yes but I need to correct one thing you said to be absolutely correct. It is required under our proposal that the purchaser provide the Commission by the 10th of the month succeeding the balancing date with the data.

Q Which would be the last day of the proration period, correct?

A Ten days, right, after the last day of the proration period, correct.

Q Then the Commission would determine from that information furnished by the purchaser whether an individual well was marginal or non-marginal?

A That's correct.

Q And then they would notify the producers as to whether those are classified one way or the other and you are getting into the tailend of the month before you know whether a well is marginal or non-marginal?

A That is correct. The actual practice is the same as you have now. You have to wait until the data is available before you can analyze the situation. And current reclassification of wells requires that type of procedure at this time.

Q Under your Rule 16(A) you say that a well will not be

classified marginal prior to the end of the gas proration period and until the operator or other interested party presents satisfactory evidence to the Commission showing the well should not be so classified. Assuming Mr. Hinkle's example of the reworking would be one such instance what other specific methods or fact situations do you have in mind when you said "presents satisfactory evidence to the Commission"? What other type of evidence?

A I think another type may well be the other I mentioned where the well for some reason or another other than rework improved its producing ability so that it no longer is properly a marginal well and then the operator could not come in and show that the reclassification of marginal was not proper.

Q But it seems you are pretty well limiting it to improved or increased capacity of a well?

A I believe those are the only circumstances where any consideration would be necessary.

CROSS EXAMINATION

BY MR. KELLAHIN:

Q Mr. Woodruff, I think I understand your answers to Mr. Hinkle in regard to reinstatement of cancelled allowable for the preceding period when a well becomes non-marginal. How far back would you carry that, one proration period or two or three?

A My recommendation and examples shown would only go back, I believe, two proration periods from the date of determination that it should be reclassified from marginal to non-marginal. It would go back and give the marginal well the same privilege of producing allowable that a non-marginal well would have had on any balancing date. A prorated well will have cancelled any underproduction accumulated at the previous balancing date which is the beginning of the last six months proration period.

Q Is that the allowable then that would be reinstated?

A Right.

Q One other question. You say this average daily production would be figured on the production during the last three months. Assuming that there has been no production for the full three-months period, how would that be handled -- a fraction of the period?

A I believe my statement was for the last three months for which production was available. The question is a good one. We would have to go back to when there was production.

Q If you had seven days production you would limit it to that?

A I think you have a special exception which probably requires special consideration. You have got a good example. Normally marginal wells would be producing all this period of

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time. I think what you have as an example would probably be a well which for one reason or another, for lack of market demand, failed to perform and whether going back to the last three months which it actually produced would be the best procedure or making some current determination I think might require handling this well as a special case because I believe your example is a special case.

Q It is not covered by your proposed Rules?

A It is covered by my proposed Rules in that we would go back to the last three months of production available and average that.

Q Even though it had been some time before?

A Right.

Q Now you have stated your company policy is to produce marginal wells at full capacity throughout the proration period, is that correct?

A That's correct.

Q Do you know whether that is the policy of other producers in Northwest and Southeast New Mexico?

A I cannot speak positively relative to the other purchasers of gas. I believe generally the practice is to produce marginal wells at all times. However, the right of the purchaser to produce or not produce any wells is within the agreement

between the producer and the purchaser.

Q You are talking about the producer as opposed to pipeline carrier?

A Right, and whether it is marginal or non-marginal and whether some purchaser does or does not think it is allowable. We are saying that if it should be reclassified as non-marginal that it should have the full benefit of past accumulated under-age that a prorated well would have had.

MR. BUELL: I have a few questions of Mr. Woodruff but since I understand that a motion for continuance will be made and if the Examiner grants that motion I will hold my questions in abeyance because I can find the answers in the interim period and not take the time of the entire group.

MR. NUTTER: Does anyone have any questions they wish to ask at this time?

Q (By Mr. Hinkle) Mr. Woodruff, if your recommendations are adopted by the Commission, would it not have the effect of reducing the production from the marginal wells in the long run?

A In my opinion it would have absolutely no effect on marginal well production. There would be no change in the way of operating marginal wells.

Q Would it reduce the allowable assigned to the marginal wells?

A Only in the sense that current -- what was the word I

used -- tentative allowable would be reduced because something in excess of that was not indicated as being something it could produce but what it didn't receive would always be available to it if subsequent performance indicated it was necessary for it to be granted during the period that it would have been entitled to it had it been a prorated well.

Q (By Mr. Hatch) Mr. Woodruff, if you have more than one purchaser in a pool, would each purchaser use -- they could possibly use different three months, couldn't they? In other words, the most recent three months for El Paso may not be the most recent three months for another purchaser?

A It's conceivable that could be the case.

MR. NUTTER: Any further questions?

MR. UTZ: I agree with Mr. Buell that if we are going to have a continuance we shouldn't ask more questions but I think I have a couple here which would clarify Mr. Woodruff's proposal and if you will allow me to ask them.

CROSS EXAMINATION

BY MR. UTZ:

Q Your proposal to determine the ability of a well to produce was to use only three months history, is that right, production history? What three months?

A The latest three months for which production is available.

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Q The end of the proration period, say, is the 31st of July. We get production data in the 15th of August and between the 15th of August and the 1st of September we must classify, balance and go all through this six-months procedure. Now, I believe you said that you would report this data, the purchaser reports this data, by the 10th of the month following the end of the proration period and this example would be the 10th of August?

A Correct.

Q Would July production be available to be reported at that time?

A It is my understanding that it would be. I have my experts with me. I want to be sure my answer is correct. Would we have July data? I am advised that our report would include the production through July.

Q Can you state for the rest of the purchasers?

A Only to the extent that we have reviewed this with the other major purchasers of gas in both Northwest and Southeast and they have indicated to us their ability to do the same thing.

MR. NUTTER: Mr. Hazeltine.

Q (By Mr. Hazeltine) Mr. Woodruff, I will have to say that under the example that we are using of April, May and June information be summarized by August 10 and made available we wouldnt commit ourselves to half of July production rate by the

10th of August.

A I think Mr. Hatch's question was very proper and my answer was correct.

Q (By Mr. Utz) The last available production might be the last three months or last four months where in my example you would not get July production but you would get June, May and April?

A Right.

In accordance with what Mr. Hazeltine has just indicated what he believes there ability to make data available by the 10th of the month following a balancing period that would be the case. Our suggestion was the 10th to try to place in the Commission's hands timely the information you would be using later in the month to make the determination whether a well was or was not marginal and whether a marginal well should be reclassified and we believe the latest data that can be made available to you would be the most meaningful for you to make that determination whether it be on May, June or July or April, May and June.

Q Would you propose some purchaser's report the last three months and other purchasers the first three months or last four months of the proration period or all report the same months?

A I am not proposing that all operators be required to

report the identical three months, but rather to report to you timely the latest three months for which production data is available to them and can be reported to you.

Q In other words, what you are saying is they could report either?

A That's correct.

Q I have almost decided what three months we are going to use. You said you would divide that by days permitted to produce. Would you define days permitted to produce?

A Those would be days turned on to the line and would not include any days the well was not permitted to produce.

Q The day the valve was opened on the line?

A That's correct.

Q And if a well did not produce gas due to the fact that the manner in which the pipeline was operated that day would be counted?

A If there is some action on the part of the pipeline company to deny that well access to the line, those days would be omitted.

Q Now, we are changing our definition?

A We are not changing the definition of permitted days. We certainly would not add a day in as permitted, a day where we did not permit it to produce.

Q In other words, a day that a valve was open and the

well was not produced would not be counted?

A I did not say that.

Q I don't understand what we are going to divide this 90-day period by?

A Let's assume that a well was turned on and produced for the full three-months period and assume the three-months period consisted of 90 days. The production during that 90-days period would be divided by 90.

Q Even if there was a number of days the well did not produce any gas?

A That's right. If that is a portion of the well's normal producing characteristic to produce spasmodically that would be included in there.

MR. UTZ: That's all the questions I have.

MR. NUTTER: Any other questions?

MR. SIMMONS: I am Jerry Simmons, Tenneco Oil Company out of Denver. What about intermittent operations like intermittent stop clock? That is not in your installation but in operators and at times I notice on reports that your company sends out the days off when the charge is integrated is taken into account the intermittent operation. Would this still be included as the time off or how would those days in a period of a month -- would that be counted in this division?

MR. NUTTER: Mr. Simmons, are you talking about a case

where an intermitter would have the well off a full 24 hours?

A Yes, in any case where the well is intermitted or stop clocked.

MR. NUTTER: For a full day?

MR. SIMMONS: Yes, sir, that would be an example.

A I am going to answer your question and I am going to ask confirmation by my experts but here again, as I visualize this, this well is being afforded the opportunity to produce and its lack of production is a reflection of the operator's choice to intermit the well and so if we had 90 days of intermittent operations, of operations where an intermitter created an intermittent operation, you will still divide the total production by 90 days.

MR. NUTTER: Any further questions?

MR. HINKLE: I think Mr. Woodruff has made a very able presentation to the Commission and I think clarified to some extent what they are driving at and what they want. However, one of my clients, Atlantic Richfield, says that they did not receive a Notice of this until about a week or ten days ago and, as you know, in a relatively large company it has to go through the hands of a lot of officials and departments to know how they are going to be affected so they haven't had an opportunity to know or determine whether or not they want to support the recommendations or oppose them and they are going to

need additional time and I think that is true of other companies. I would like to make a Motion on behalf of Atlantic Richfield that this case be continued for a reasonable period of time, preferably 60 or 90 days. Humble would also like to go on record as being in favor of the continuance.

MR. SMITH: Sid Smith, Ameradra Oil and Gas Corporation. We concur with Mr. Hinkle's proposal. As he said, we have just received the notice about a week ago and we have not had time to consider it.

MR. BUELL: Pan American supports the continuance. Thirty days would suffice. It is our intention to forward to the Commission staff and to the Applicant and to those parties who have made appearances here any recommended changes that Pan American might have in the El Paso proposal. I feel definitely sure there are interested parties here who have not entered an appearance and if they would state their name for the record we would be able to send our recommendations in order for them to evaluate them before the Hearing.

MR. RUSSELL: John F. Russell, on behalf of Texas Pacific Oil Company. We would concur in the Motion of Mr. Hinkle.

MR. LYON: I am G. P. Lyon with Continental Oil Company. Continental Oil Company would also like to concur in the Motion for continuance.

MR. WATTS: Frank Watts, with Aztec Oil and Gas Company. We would like to concur in the Motion for continuance.

MR. NUTTER: Mr. Hazeltine?

MR. HAZELTINE: Paul Hazeltine. I would like to enter an appearance for Southern Union for the record.

MR. NUTTER: Mr. Morris?

MR. MORRIS: Mr. Examiner, naturally El Paso is not in favor of a continuance but on the other hand we can understand the need for evaluation of this proposal by companies that have not had sufficient time to obtain the views of their management on these matters. We do believe that if the proposal that El Paso is making is received ultimately with favor by the Commission that an Order needs to be entered and necessary procedures need to be followed to adapt this method to operation by the next balancing date of February 1, 1971 in San Juan Basin because that exception we are operating under at this time will expire and balancing will occur on that date.

MR. NUTTER: Before you go any further, would the Order, the Commission Order, if they entered a favorable Order, affect the Southeast balancing procedure in any manner that would be required to be entered a month earlier because, of course, your February 1st is your balancing date in the Northwest, but January 1st in the Southeast.

MR. MORRIS: I would ask Mr. Woodruff to respond

directly to that.

A I would consider it even more important if it is applied in the Southeast but it be promptly acted upon because balancing applies on January 1 rather than February 1 in the Northwest.

MR. NUTTER: If the difference here, is balancing under your proposal as compared to the old one, would it make that much difference in the Southeast at this time?

A It would be appropriate to initiate a procedure on the balancing date. That is what we propose be done.

MR. MORRIS: For this reason, Mr. Examiner, we would have no objection to a 30-day continuance of this Hearing. We would urge the Examiner not to continue the matter longer than 30 days.

MR. HATCH: Mr. Utz has some information he has been working on and I think his question a minute ago was whether producers and other purchasers were interested in hearing any proposal other than El Paso's if this were continued at a later date?

MR. UTZ: Yes, if they were interested in hearing a tentative proposal I have been working on and I haven't had an opportunity to complete. I would be happy to throw it out so they can think about it to the next continuance if it is continued.

MR. HATCH: Do you mean at this time or by letter?

MR. UTZ: I would be happy to take the stand and give it at this time.

MR. NUTTER: We will take a five-minute recess.

(Whereupon, a recess was taken.)

MR. NUTTER: The Hearing will come to order. Are there further questions of Mr. Woodruff? He may be excused subject to recall if necessary, Mr. Buell.

MR. BUELL: Yes, sir, thank you.

MR. NUTTER: Does that conclude your case, Mr. Morris?

MR. MORRIS: Yes.

MR. KELLAHIN: Jason Kellahin, appearing for Chevron Oil Company. We would like to present one witness.

JOHN T. CAMERON

called as a witness, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q State your name?

A John T. Cameron.

Q By whom are you employed and in what position?

A Chevron Oil Company, supervising proration engineer, Chevron Oil Company's Western Division in Denver.

Q Have you ever testified before the Oil Commission and made your qualifications as an engineer a matter of record?

A Yes, I have.

Q Have you had an opportunity to study the proposed rule changes that have been submitted to us by El Paso Natural Gas Company?

A I received copies of these proposed Rule changes last Tuesday and I have had some opportunity to go over those proposals but in particular how those Rule changes would affect our operations particularly in Southeast New Mexico where we operate.

Q And did you make a study of the effect of those Rules on wells operated by Chevron Oil Company?

A Yes, I have.

Q Have you prepared an Exhibit showing the affects of that?

A Yes, sir. I have prepared an Exhibit labelled Chevron Oil Company's Exhibit No. 1. This Exhibit is our analysis of the effect of one well operated by Chevron Oil Company in the Indian Basin Upper Pennsylvanian Gas Pools in Eddy County in Southeast New Mexico had the El Paso's proposed Rules been in effect during the year 1969. I should say that we operate, Chevron operates, in three prorated gas pools in Southeast New Mexico. We do not operate in any gas pool in Northwest New

Mexico. Our concern primarily is the effect of these Rules in Southeast New Mexico prorated gas pools. The three pools that we operate in Southeast New Mexico before I get into this Exhibit are the Indian Basin-Upper Pennsylvanian, the Atoka-Pennsylvanian Gas Pool and the Eumont Gas Pool. In the Indian Basin we operate nine wells, all of which are and have always been non-marginal in classification. In the Atoka-Pennsylvanian Pool we operate three wells, two of which are non-marginal and one of which is a marginal. In the Eumont Pool we operate two wells, one marginal and one non-marginal. I have examined the effect of El Paso's proposed Rules on our operations in all three pools had they been in effect for the year 1969. As it happened, our non-marginal well in the Eumont Pool would have been reclassified to marginal at the end of the first proration period under El Paso's Rules. One of our two non-marginal wells in the Atoka Pool would have been reclassified to marginal at the end of the second proration at the end of '69 and as it happens nine of our wells in the Indian Basin-Upper Pennsylvanian Gas Pool would have been reclassified from non-marginal to marginal at the end of the first balancing period at the end of 1969, this in spite of the fact these wells have more than adequate deliverability to produce their share of the non-marginal allowable in any of those six months of that proration period.

On Exhibit 1 I have shown how this would have happened

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for our Bogle Flats Unit Number 2 well in Indian Basin-Upper Pennsylvanian Gas Pool. The columns shown are the allowable shown in production as they actually were for this well for the first half of 1969. As would be expected, the production fluctuates some from month to month, this depending on Indian Basin and other prorated pools on purchaser's demand for gas. The purchaser tell the operator how much gas he wants in any month and the operator delivers that volume of gas. The allowable during this six-months period also fluctuated based on combinations and on actual production from the second previous month in the normal adjustment system that the Commission uses to set the pool allowable. As it happened, during this first six-months production the purchaser who in this case is Natural Gas Pipeline reduced his takes of gas from the field during May and June so that this well and all of our wells reduced their production during May and June. These reductions were not made by shutting the valve of these wells and closing the wells entirely. These reductions were made by choking the well back so that the demand that the purchaser had asked for was delivered each and every day. This well produced each and every day of this balancing period, 91 days. However, because of reduced takes during this last three months its average monthly production as it is defined by El Paso was and would have been 105,974 MCF per month. This is just what the purchaser asked for during

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that period. Had it happened the average monthly allowable for the entire six-months period was 117,897 MCF per month. This well, incidentally, entered that balancing period in a slightly underproduced status some ten million feet underproduction simply because of reduced takes on the part of purchaser during the latter part of 1968. So by El Paso's definition of a marginal well, this well satisfied every criteria. It entered the period underproduced and its average monthly production for the last three months of this proration period was less than the average monthly allowable for the entire six-months proration period. Therefore, the well would have been reclassified to marginal. This well had, as I said, more than sufficient capacity to produce its allowable, its share of non-marginal allowable. This well and most of the wells in the Indian Basin pools are delivering whatever demand the purchaser asks for with a choke and in this case the wellhead pressure is in the order of 2000 PSI compared with line pressure of about 1000 PSI. So there's plenty of available draw-down by which this well's production capacity could be greatly increased just by increasing the choke.

We estimate this well and all of our wells could deliver as much as 200 million feet a month, not the 106 million feet that was actually delivered during the last three months of this balancing period. When this well was classified to

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marginal, had El Paso's Rules been in effect, all existing underproduction at that time would have been cancelled and that would amount for this well to 5632 MCF. That would have been immediately cancelled. In the future the well would be assigned a marginal allowable of 105,974 MCF per month. It would not have been allowed to accumulate any underproduction while it was in a marginal classification and we have figured for the rest of the year the well would have lost 51,170 MCF of allowable during the rest of 1969 due to its being in a marginal classification just because it was first assigned an erroneously low marginal allowable and, second, because it was unable to accumulate underproduction.

We looked at all nine of these wells and made a similar calculation and as it happened all nine wells were in very similar situations to this well shown in Exhibit 1. That is, all of them entered the period slightly underproduced and in each case the well's production during the last three months average was less than the month's allowable for that well so that all nine wells would have been classified to marginal at the end of that period. All nine wells had a total underproduction at the end of the period of some 51 million cubic feet of gas that would have been cancelled. Strike that 51 million, I'm sorry, it was 35 million during all of 1969. The total loss of allowable due to cancellation, reclassification and due

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to the fact these wells were assigned low marginal allowables and were unable to accumulate underproduction, the total loss of allowable during 1969 was 472,857 MCF or about \$78,000 worth of gas. From the discussion this morning I am still not exactly sure how much of this allowable would have been restored had the wells been reclassified to non-marginal in the future. As it happened, the purchaser's takes during the last three months of '69 increased so that the wells average monthly production during the last three months of the year did exceed the average allowable for that period and by El Paso's definition they would have been classified to non-marginal. From Mr. Woodruff's testimony, I gather part of this underproduction, if not all of it, would have been restored. This would not have to have been the case had these wells been in marginal classification in more than one period. It is my understanding of the Rule it would not have been restored. The purchaser could just have easily have reduced his takes during the last three months of 1969 and these wells could have just as easily stayed in marginal classification for another period in which case this underproduction would have been lost to Chevron as operators.

Q In that connection, do you understand the Rule to provide that the last three month's productive history covers the status of the well?

A Yes, sir, the last three month's productive history

is assumed by El Paso to indicate the well's capacity.

Q And on the basis of your experience the Indian Basin that producing history for the three months is governed solely by the pipeline takes?

A That's absolutely correct.

Q If you carry forward your underproduction to the next proration period, assuming the well were reinstated as a non-marginal well, you would pick that up?

A It's my understanding it goes back for the last period it was marginal and if it had underproduction at the beginning of that period at least part of that underproduction would be restored sufficient to balance any underproduction that accrued during that period.

Q But if the proposed Rule 18 provides that the well would be reclassified on the basis of the most recent three months productive history, could not the same thing occur that occurred in the previous proration period?

A Yes, it very easily could.

Q So the well would continue in a marginal status although actually physically it was a non-marginal?

A Yes, sir. You define a non-marginal as one which is capable of producing its non-marginal allowable. These wells should all be non-marginal.

Q If the allowable, for the purposes of determining a

non-marginal well, is based on the average allowable for the six months, would the average production for the last three months period accurately reflect the ability of a well to produce?

A No, sir.

Q That is the conclusion you would reach on the basis of your analysis of your one well?

A That's correct. I have made no judgement and I am unable to make a judgement how this would operate on all Northwest New Mexico pools because we do not operate in them. If the wells in Northwest New Mexico are operated without chokes and if the non-marginal wells are produced into the line either wide open or shut-in completely then it is conceivable that the rule would work but only under those circumstances would they work even in Northwest New Mexico.

Q You did hear Mr. Woodruff testify this morning to the effect it was their policy to produce marginal wells wide open?

A Yes, sir.

Q Would that have any effect on the situation you have outlined here?

A In the first place, while it may be El Paso's policy, it is not something Chevron can enforce. We can't force them to open marginal wells wide open unless it's in our contract.

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As Mr. Woodruff pointed out, the amount of gas that a purchaser takes from an operator is a matter of contract between purchaser and operator so we couldn't force them to produce marginal wells wide open. Furthermore, El Paso is not the only purchaser in the State. It is not our purchaser in Southeast New Mexico and all of the purchasers may not have this same policy and finally, this is something that sometimes often cases beyond the control of the purchaser. In many cases, the purchaser simply tells the operator how much gas the purchaser demands for that month or for that day. The operator determines which wells to get it from and how to produce them and I wouldn't want it any other way. In some wells it is my understanding El Paso physically operates the well. In those cases El Paso could control this, but this is not always the case.

Q You testified that in your opinion some of your wells have a capacity of two hundred million?

A Two hundred million feet per month, that's correct.

Q And they were classified as marginal and if El Paso's policy is followed by your purchaser you would be putting two hundred million into the line?

A That's correct.

Q Which would probably exceed the demand, would it not?

A If we did it from all nine wells, I am sure it would, Yes, sir.

Q Now, you mentioned the provisions of the contract. In your opinion, would the proposal made by El Paso have any effect on your gas-purchase contracts?

A Yes, sir, it would and that's one of our primary concerns in El Paso's Rules. It might disrupt the contractual arrangement between the operator and the purchaser. In most cases the purchaser is required to take a certain minimum volume of gas or to pay for that minimum volume of gas if he fails to take it. These take-or-pay provisions are valuable to the operator and we are afraid that the Rule that is proposed here would place those take-or-pay provisions in jeopardy. At least in our pools the Rules proposed would place almost absolute control over whether a well is given a marginal or non-marginal classification in the hands of the purchaser because all he has to do, in essence, is to get a well classified marginal is to reduce his takes during the last three months or even during the last month of a balancing period. If he is able to classify a well as marginal, we are not sure but we think that a marginal classification may relieve him of his obligation to take-or-pay for the gas. Most contracts, ours in particular, generally have in addition to the take-or-pay provision another provision which relieves the purchaser of his take-or-pay obligation if he has taken a certain percent of deliverability, commonly 75 to 80 percent of the deliverability. He takes that much of

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deliverability, he is relieved of his take-or-pay obligation. While a well is in a marginal classification, its deliverability is officially defined as its allowable and so the purchaser might very well claim that while the well is in marginal classification the purchaser is obligated to take no more than 75 or 80 percent or whatever the contract calls for of the well's marginal allowable. We are afraid this particular power could be used by the purchasers to set aside take-or-pay obligations.

Q Do you have any other observations on the proposed Rules?

A Not on the proposed Rules. We have a suggested alternative to them.

Q Turning to what has been marked as Chevron Oil Company's Exhibit No. 2, would you identify that Exhibit?

A Yes, sir. Chevron Oil Company's Exhibit No. 2 is Chevron's suggested revisions to the Rules for Northwest New Mexico. As I stated in the beginning, we do not operate in Northwest New Mexico and for that reason we had not taken an interest in this particular matter until it was brought to our attention that it had been expanded to include Southeast New Mexico. We are now concerned that the Commission will want eventually, if not now, to adopt uniform Rules over the State of New Mexico and if they do we want the Rules in Northwest New

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Mexico to be something we can live with in Southeast New Mexico also.

We are taking this opportunity to present a different alternative to El Paso's proposed Rules. This alternative is designed to more precisely define marginal wells in the same attempt that El Paso has done so that less allowable will be assigned to marginal wells which are incapable of producing them. For this purpose we are suggesting that the deliverability requirements that are already existing in Northwest New Mexico Rules and in Order No. R-333F be used along with the current requirements to determine a well's capabilities to produce. What I have done is take the existing Rules 9(B), 16(A), and 18 of Northwest New Mexico and revised them as little as possible so as to more precisely define a marginal well. I would like to change Northwest New Mexico Rules as little as possible because I think, basically, they are good Rules. We suggest that they be used as best they can and marginal classification be somewhat more precisely defined by using deliverability test.

In Rule 9 -- incidentally, the red underlined portions of this Exhibit shows the changes Chevron is suggesting to the existing Rules. This Rule 9(B) we are suggesting that the allowable assigned to each marginal well be the lesser of the maximum monthly production for the preceding period or the most

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recent deliverability test multiplied by 30.4 days. Now, all this did is add the deliverability test as an additional requirement. Currently the Rule requires that the marginal well be assigned the maximum production during any month of the preceding balancing period and we would assign the lesser of that volume or more recent deliverability test.

Rule 16(A) says that any well which is non-marginal will be reclassified to marginal if it appears incapable of producing its non-marginal allowable and the same test would be made, the same criterion would be checked to determine whether this well's capability exceeds the non-marginal allowable, that is to say you would first determine the well's producing ability as the lesser of the maximum production for the preceding period or the latest deliverability test. You would then compare that capacity to the non-marginal allowable for the preceding period. If the capability were less than the allowable it would be reclassified to marginal.

Rule 18 simply sets out the mechanism for taking a well out of marginal classification and back into non-marginal and it is the same as the existing Rule except that there is the additional criterion of the latest deliverability test that is to be used.

Q As to the use of deliverability test you are only

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proposing that to determining a well's ability to produce, is that correct?

A That's correct.

Q You are not proposing to use it in any way as an allocation purpose?

A No, sir, these deliverability tests, it is my understanding, were required for the purpose of determining the deliverability for allocation purposes and we propose that the same deliverability test be used in classifying wells, whether marginal or non-marginal.

Q Does that complete your testimony?

A I will say that we have had very little time to make a complete study of how these proposed Rules would solve El Paso's problem or not, but I did compare the September San Juan Basin proration schedule for the Basin-Dakota Pool simply to see how these Rules would have worked. I looked at all of the wells in the Basin-Dakota Pool which had an underproduced status as of June 1970 and those that were underproduced as of that time I compared their latest allocated allowable to their latest deliverability which is shown on September 1970 Proration Schedule and I found in the Basin-Dakota Pool 76 wells presently classified non-marginal and presently were underproduction were assigned more allowable in September than they were capable of producing based on their deliverability test so that in my

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opinion all 76 of those wells should probably be reclassified to marginal and I added up the underproduction which those 76 wells had as of June 1st and, of course, if those wells were classified to marginal that underproduction would be cancelled and redistributed to non-marginal wells where it is needed and that underproduction amounted to three and a half billion cubic feet of gas. In other words, if those 76 wells were reclassified to marginal some three and a half billion cubic feet of gas underproduction would be cancelled and would be redistributed to non-marginal wells. I believe this would go a long way toward solving the problem of more prompt and more precise classification of wells from non-marginal to marginal.

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

A They were prepared by me.

MR. KELLAHIN: At this time, I would like to offer in evidence Exhibits 1 and 2.

MR. NUTTER: Exhibits will be admitted in evidence. Any questions of Mr. Cameron?

CROSS EXAMINATION

BY MR. MORRIS:

Q Mr. Cameron, if you have had little chance to study our proposal, we have had even less chance to study yours. However, I would like to ask just a few questions with, I hope,

the opportunity to ask some additional questions if this matter is continued. You mentioned that in the Indian Basin Field your production practice is to choke back the wells, is this also true in the other fields, the Atoka-Penn and Eumont?

A It's true in the Atoka. I do not know about the Eumont. I have been unable to determine in the time available.

Q Your practice in the Atoka-Penn is approximately the same as in the Indian Basin?

A It's slightly different. We do have some excess capacity in those wells, much less than in the Indian Basin. In Atoka-Penn the wells are operated by the purchaser there, Transwestern. In Indian Basin the wells are not operated by purchasers.

Q Does your purchaser in the Indian Basin follow the practice of allowing marginal wells to produce at capacity?

A I don't know -- what field is that?

Q In the Indian Basin?

A We don't have any marginal wells there so I am unable to determine that. There are five -- I think six, marginal wells in the field and I don't know how they are operated. We don't operate them.

Q In the Atoka-Penn does Transwestern follow that practice?

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A It's my understanding they do.

Q In the Eumont does your purchaser follow that practice?

A I don't know.

Q Who is your purchaser in the Eumont?

A I don't know that either.

Q Would it be a fair statement that the situation that you find yourself in in the Atoka-Penn with that type productivity of wells -- excuse me, in the Indian Basin, that in the Indian Basin there being few low productiivity wells comparatively that you would expect to find anamolous results in this particular pool by application of El Paso's proposal?

A Well, you certainly would find anamolous results there. I am not sure it's all that unique in other fields. Any pool that's prorated by definition has greater capacity to produce than market demand so the takes from non-marginal wells are going to vary from month to month with the purchaser demand.

Q There is more excess producing capacity probably in the Indian Basin than any other prorated gas pool in Southeast New Mexico at this time?

A I am not sure of that, Mr. Morris, but it does have a large excess capacity. I don't know the status of the other pools.

Q If this is determined to be an anamolous situation,

would it be possible to take care of that anomaly and any other anomaly discovered by making exceptions or applying special pool Rules in those cases?

A No, sir, I don't think it is. It would not relieve all of my objections to El Paso's proposed Rules. The very method proposed by El Paso to me is unworkable in that it simply compares average production to average allowable. Average production and average allowable is proved for different periods of time, but average production to average allowable is supposed to be very close to production. That is what the system is designed to give you, an allowable that is equal to production for the total pool so fluctuation from month to month is bound to reclassify wells to marginal that should not be reclassified as marginal. If you compared average production over any period to average allowable you are going to have wells erroneously classified to marginal. It is just a poor system. In stating that opinion, are you following the same definition of actual average daily producing ability that was testified to by Mr. Woodruff?

A Yes, sir, you are comparing actual average daily production. It is true for a three-month's period rather than a six-month's period. You are comparing that daily production to average monthly allowable for a slightly longer period, for a six-month's period. It's too easy for wells allowable in

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production to fluctuate sufficiently to classify wells to marginal.

Q Let me ask you, Mr. Cameron, under your Exhibit 2, your suggested revised Rules, if instead of using the maximum production of the well during any month of the preceding gas proration period, if instead we use the average actual producing ability for the most recent three months available and still left in your second proposition measured by the actual deliverability test on the well, would that revision of your revision be more palatable to you?

A To me?

Q To your company?

A We would rather have the maximum production used as the marginal well's allowable simply because there are changes in a well's producing ability from month to month based on changes in pipeline pressures and any other factor and we want the marginal well to be assigned the maximum allowable that it could possibly produce because we want the well to be given an opportunity to produce a non-marginal allowable if it's at all capable of doing so. That's the reason I think the existing maximum monthly production that's in the Rules now is a good Rule.

Q Your idea there is based on the proposition that assigning a lower allowable to a marginal well is actually

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going to penalize the production from that well?

A I certainly do, a marginal classification is the worse thing that can happen from an operator's standpoint. It may not be so from a purchaser's but it is from an operator's. If we could entirely rely on the purchaser to take from the wells wide open that would not be the case but that is not always true and we try all we can to keep wells from being classified as marginal. We want them not to have their underproduction cancelled. We want them to accumulate underproduction in the future and we do not want to have take-or-pay clauses placed in jeopardy by marginal allowables.

Q Under actual practice, such as El Paso has testified to, if it is practiced, of keeping marginal wells on the line, the assignment of a marginal allowable would not be a penalty to a well?

A If that were true of every purchaser and every operator, that's true. It is not always true.

CROSS EXAMINATION

BY MR. BUELL:

Q Mr. Cameron, I think it is patently obvious that the Bogle well used on your Exhibit No. 1 is anything but a marginal well. Let me ask you this, if the El Paso recommendation was amended to also require and provide that the purchaser would mail identical data to the operator that he mailed to the

Commission, do you think that would make their recommendation any more workable?

A I think I would still object to it. The Rules that are being proposed here are being proposed for the Commission to adopt for some indefinite period in the future and they are supposed to work on their own. We are not supposed to have to re-examine our situation at the end of every balancing period to make sure our wells aren't classified to marginal accidentally. We don't want to have to re-examine our production and allowable every month or so to make sure the wells aren't automatically reclassified.

Q Based on your Exhibit No. 1, it is obvious that their recommendation would not be self-executing, so-to-speak, in a fair and impartial way. Do you think that it would be a heavy burden for an operator to examine the data in the case like the Bogle simply write the Commission and say this is definitely not a marginal well?

A Yes, sir, I think that would be a heavy burden.

CROSS EXAMINATION (Continued)

BY MR. MORRIS:

Q Just one other question more or less along the lines of Mr. Buell's question to you. Mr. Woodruff's example that he stated as to how El Paso as one particular purchaser would go about computing this actual daily average producing ability is

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not, I suggest to you, the only way that a purchaser might do this or that a producer itself might do this. Let me call to your attention the provision of proposed Rule 16(A) at the end which says that a well will not be classified marginal if prior to the end of the gas proration period the operator or other interested parties presents satisfactory evidence to the Commission that the well should not be so classified. Wouldn't that give you the relief that you are suggesting that you need here and so that if a particular purchaser was not following a satisfactory practice you could protect yourself?

A It was just as I was discussing with Mr. Buell, we do not want to be placed in the position where we have to make sure that our wells aren't erroneously classified marginal. We think it's too great a burden for the operator to have to keep track month to month that somebody that knows about gas well proration and makes sure his well is in balance and be sure his well is not going to be erroneously classified. We think a Rule should be adopted that will work of its own, work automatically without creating all these problems.

Q Do you operate any gas wells in Northwest New Mexico?

A No, sir.

Q Are you familiar with market conditions in Northwest New Mexico in the natural gas business?

A Only from what Mr. Woodruff has testified to and previous handouts.

Q From your knowledge, would the difference in market conditions between the Northwest and Southeast possibly justify different Rules to be applied to prorated gas pools in the Northwest as opposed to the Southeast?

A It's possible that different Rules could be applied to Northwest and even should be applied to Northwest. It's different now. My concern is that if the Commission wants uniform Rules we want them to be something that is satisfactory to Southeast operators also.

MR. NUTTER: Any other questions of Mr. Cameron?

CROSS EXAMINATION

BY MR. HATCH:

Q When additional wells in a pool are classified marginal, does that increase the allowable for non-marginal wells?

A Yes, sir, eventually, not that day.

Q If wells are incorrectly classified as marginal, does that mean that excess allowable is assigned to non-marginal wells?

A Yes, sir.

Q Is it possible to ever take that excess allowable away?

A I don't know. I would imagine not. I would imagine that is impossible to take that allowable away. I don't really know, though.

MR. NUTTER: Any other questions of Mr. Cameron?

He may be excused. Do you have anything further Mr. Kellahin?

MR. KELLAHIN: That's all.

A I didn't mention these proposed Rules as the title shows are for Northwest New Mexico only. We are not proposing these Rules for Southeast New Mexico for two reasons: First, we don't think there is any real need for them at this particular time and, second, there is no deliverability test presently required for Southeast New Mexico so they would be unworkable from that standpoint. If these should ever become necessary, these identical Rules would work in Southeast New Mexico once they required a deliverability test. If you require a deliverability test though, we don't think it's necessary, at least in the Indian Basin, to have a 21-day test.

MR. NUTTER: Thank you. Does anyone else have a suggested revision of Rules for Northwest or Southeast New Mexico or wish to offer any testimony as to the effect of the El Paso proposal.

ELVIS A. UTZ

called as a witness, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. HATCH:

Q Would you state your name and position for the record?

A Elvis A. Utz, Engineer for the Oil Conservation Commission, supervisor of the Gas Department.

Q And you have been present this morning during the entire Hearing?

A Yes, I have.

Q And you heard the testimony of all witnesses?

A Yes, I have.

Q Mr. Utz, do you agree with El Paso, the Applicant in this case, that problems do exist in the assignment of allowables in the prorated gas pools of New Mexico?

A Yes, I do.

Q Do you agree with the Applicant that the way they have suggested is a proper way of correcting those problems?

A No, I don't agree with them at this time. I think there is another method that should be given an ample opportunity to work.

Q I gather from that that you have begun a study in an attempt to find a better method of solving these problems than the one offered by the Applicant?

A Yes, I have.

Q Would you like to present that study as far as you have gone to the Examiner at this time?

A Yes, I will be happy to if I can sort out what few Exhibits I've got here. I think at the outset perhaps that I

should clarify the manner in which it is done now. That is, I am referring to classification of wells and the reinstatement of underage due to reclassification of wells. I have noted in some recent days telephone conversations that there is some confusion as to the present manner and I think this probably would be an Order in order to set the record straight.

At the present time we compare the wells highest month's production of the last available proration period to the average allowable for the same period. Now in the past we have had a percentage cushion, I choose to call it. In the past years we started at 70 percent of the high mark which, of course, made fewer marginal wells. Because of objection to this method we have consistently and assuredly increased from 70 percent to 80 percent to 90 percent and now we are at a 100 percent so the current method of classifying wells is a high month's production compared to the 100 percent or 100 percent of the highest month's production compared to the average of six-months allowable. That is non-marginal allowable. The manner in which allowable is reinstated to wells that are classified, I'd say classified up from marginal to non-marginal, if a well has only been marginal for one period, one six-month period, and at the end of that six months period he has overproduced the total allowable versus the total production then he is reclassified up to non-marginal and his entire cancelled underage which was cancelled at the beginning

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of that period is reinstated. I think this is the basic difference between the way we do it now and the way, if I understand it correctly, Mr. Woodruff suggested, if I understand his suggestion, he would just balance the overproduction with whatever underage it took and start the well out non-marginal at zero status. In this connection from time to time we have requests for reinstatement of underage on wells that have been classified two periods. We have not allowed this. I'm not too sure but that we have been wrong. We have also had reinstatement of underage for other reasons which we have denied and I'll say here and now that I'm coming to the point where I believe almost any underage that's requested to be reinstated ought to be reinstated. The premise of that being that allowable in the first place assigned to a well based on the formula and a formula is purported to protect correlative rights and the well ought to have an opportunity, if it is possible, to produce that underage. I might state here that the reason for the high month was selected because it is so simple a figure to arrive at. That figure is in our machine. The machines arrive at that figure, calculate an average allowable and it's an internal operation. It requires no further reports, no more card punching and it's simpler than the proposed suggestion.

The reason I think the high month is a good index of a well's ability to produce is purely and simply that if the

well has the ability to produce "X" amount of gas one month out of the six-months period I see no reason why it wouldn't have that ability to produce it six months out of the six-months period. That's the premise of using high month's allowable.

MR. NUTTER: High months production you mean?

A Highest month's production. Did I say allowable?

MR. NUTTER: Yes.

A Another objection I have to the proposal is administrative work. I have cited some of the administrative work. As an example, the last period we had 271 wells that went from marginal to non-marginal in the San Juan Basin. I have not yet issued 271 supplements. I am trying to figure a way not to but I may have to issue 271 supplements and unless I can figure a way out of it then that's going to increase my paper work 271 pieces of paper, seven copies of each whereas if we can arrive at a method of assigning current allowables without that current allowable being affected by underage carried in the pool why then it seems to me the underage carried to some wells becomes much less important and on these 271 wells I used as an example if we had not cancelled that underage I wouldn't be worried about having to issue 271 pieces of paper.

I think that probably covers my objections to the proposal. Now to go ahead with my proposal, I will refer to Exhibit 1 and bear in mind that I have tried to do this by

myself and in about two days and it is very limited, but I think I have gone far enough that I feel it has some merit and as stated a few minutes ago, the premise is simply to assign current allowables as close to anticipated production as possible. When I started looking for a way to do this I suddenly discovered that production in the Blanco-Mesa Verde Pool has been extremely erratic and why I can't figure out but facts are facts. Exhibit 1 shows the relationship between nominations, production, and allowables. I present that simply to show you that except for the last four months, the months of April, May, June, July of this year the allowables assigned and the production have varied from month to month. One of the things this does it puts our six times rules in jeopardy. When we have a low beginning net in the pool balancing procedure, it decreases the current allowable. With low allowables well then more wells are shut-in due to six times which should not be shut-in. As a matter of fact, under our present pool balancing procedure it's not at all uncommon for a pool to have negative allowables. Therefore all the wells in the pool have negative allowables and therefore under the Rule every well in the pool is shut-in because they are six times overproduced for that month. So if my proposal will work, and I think it would, there would never be any negative allowable. All allowables would always be positive and all allowables would be assigned to a pool that is close to

anticipated production as possible.

What I actually propose is to change our balancing procedure. Now so that you will be informed as to how we do it as the present time and bear in mind that as near as I can find this procedure is not spelled out in the Rule, we just decided here many years ago to do it this way and it's been carried on. We will say that we are working on the current month's allowable. We have current months nomination. We have adjusted those nominations in two ways under our present Rule. I am going to suggest in a little bit that we adjust those nominations in another way but to go ahead with how we do it now, we adjust those nominations by taking the second previous month's production versus the beginning net allowable for the pool. That is the allowable that the pool has coming to it at the beginning of the production month. If the pool has less allowable coming to it than the production, well then we adjust positively to the production but bear in mind that that beginning net allowable has all the underage in it too that is carried in the pool so if there is an excess amount of underage carried in the pool then this adjustment's going to be terrific. The first previous month's adjustment is an adjustment purely and simply based on the nominations for that month versus the allowable assigned that month. If the nominations are greater than the allowable assigned then the adjustment

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is positive. In the sum of those three figures is the pool allowable. Then the non-marginal anticipated non-marginal allowable or estimated non-marginal allowable is subtracted from that figure, which, of course, gives us the non-marginal allowable for the pool.

I think possibly while I am on the subject of marginal allowables, the marginal allowables used is the total of the average six-months production of all the non-marginal wells. That is a tentative allowable and it is good only for two months and it comes right out. In other words, the second month after that allowable is assigned and production is in the marginal production is the marginal wells allowable for the production month and that difference, whatever it is, positive or minus and mind you it's both ways, we are coming pretty close the way we are doing it, is dropped so that the marginal allowable becomes equal to the marginal production.

Now, in regard to marginal allowable, marginal production, since the proposal was made here that the marginal allowable be assigned equal to the 90 days well's ability and in defense of the way we are doing it now and as a matter of information to those present I would like to state a few figures. This is just for the Blanco-Mesa Verde Pool. The first figure will be allowables, the second figure will be production. January, 5.1, 5.0; February, 6.7, 6.3; March, 6.7, 6.6; April,

6.7, 6.5; May, 6.7, 6.4; June, 6.7, 7.0; July, 6.7, 6.0; and August, 7.9 and 7.1. I think that's a pretty close estimate myself and I might show and to back up my statements that sometimes we actually assign less. I'd like to go over here in 1969 and cite some figures of the same type. I think I'll start here probably with July. I believe this is July 1969 where we assigned 4.2 production, 4.2. You can't get too much closer than that. Allowable 5.1, production, 5.2; allowable, 5.1, production, 5.4; 5.1, 5.6; 5.1, 5.6; and 5.1 and 5.1. I take no credit for this but I'll just have to say the average allowable is not too bad.

Now for the proposal that I have and I would like for you to bear in mind that this is not refined and I think it can be refined and I believe it can be made workable toward one end and one end only that is try to equal the month's production, pool production, to the month's allowable. Exhibit 2 simply shows a comparison and it actually starts in June 1969 and ends in July 1970. The curve showing the present method shows the pool overage and underage on a monthly basis. Of course, the purpose of trying to have production equal allowable is to zero the pool every month. If you will recall, I made a proposal here some time ago that we use the second previous month for production to assign current allowables and that way the pool could be zeroed every month so then the only problem

you would have would be to balance the wells internally and I think as long as overages and underages in a pool are oscillating as under our present balancing Rules that it makes it most difficult to balance wells in the pool and I can certainly see where El Paso has a problem.

You will notice that in June and July the overproduction was pretty high, around six billion. Then in September it went to underproduction, fell way down to over three billion, started back up and in January it was pretty good. For January and February it was pretty close and then in March way down again, April back up to overproduction again.

Now, the red line -- you people don't have the red line which is the proposed method. I have to admit that is not perfect. I think it can be improved on but the way I assign allowables to the wells in the Blanco-Mesa Verde for this period under the proposed method ucrve was using a three month's history one year ago and comparing it to the last three month's production available.

MR. NUTTER: This proposed method is not El Paso's, this is the proposed method that you are going to throw out?

A I am going to throw it in. I think with some study and if this Hearing is continued, I propose to spend a lot of time on it and if I can possibly do so I will have a machine run made on this same period for at least two pools and then I will be in a

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position to tell you what it did to the wells in the pool rather than just the pool and I think one refinement to what I have shown here that I would like to try is to use the pool status, last available pool status. In other words, trying to offset the last available pool status you have in the current allowable. At any rate, purely and simply, I think this method will assist El Paso and I am quite sure that it will level out allowables instead of having allowables oscillate which they do and way too much and many times in our current pool balancing procedure two adjustments go the same way so if we make two mistakes then we have a double adjustment and this is what causes our allowables to oscillate like they do.

I believe that this method should be given, after study, of course, an opportunity to work prior to any other method. Now, if this method does not work and we would have to go or should go to a method similar or the method that El Paso proposes here then as near as we can estimate the marginal percent of marginal wells which is now right at 63 percent in the San Juan Basin, and these vary among pools considerably, we estimate that it will probably go to 70 percent. Now, this is strictly a judgement estimate. We have not made any actual runs. Mr. Arnold did take a sampling of two or three hundred wells in two pools, Meson-Dakota and Mesa Verde and that showed

that there would be an increase of close to 10 percent. Now, if we are going to go through all this red tape to prorate 30 percent of the wells in San Juan Basin I am not too sure but that we are spending money unwisely and I am not too sure but whether we are at the end of the road as far as proration is concerned. At least what I am trying to do is simplify proration rather than complicate it and the proposal does complicate it. I think that's all I have.

MR. NUTTER: Any questions of Mr. Utz?

CROSS EXAMINATION

BY MR. MORRIS:

Q Mr. Utz, as I understood your testimony at the outset, this is an idea that you have spent a few days working out and it's not at this point a staff proposal of the Commission, is that correct?

A No, it's not a staff proposal. It's my proposal.

Q For the sake of my understanding and maybe others that don't completely understand the method that you are proposing here, would it be possible to have the proposal prepared in writing as to how it would turn out as a proposed Rule change so it could be studied before another Hearing on this matter?

A Actually there would be no Rule change. This is what we do now, is strictly administrative Rule.

Q Excuse me?

A And the Rules as they are now as far as well classification, I am happy with so I wouldn't suggest a change there. If you are asking me would I object to this being in the Rule, no.

Q Maybe we are not -- I know I am not understanding you, Mr. Utz. Your Exhibit shows how your proposed method would work compared with the present method and some change of method is obviously indicated. I don't understand what your proposed method is or how it compares with the present method and I was wondering if that could be formulated in writing and possibly distributed to the interested parties?

A I am sure it can. As a matter of fact, if anyone wants to look at any proration, the present method is shown in the front of every proration schedule.

Q You mean present method? This is actually the current Commission practice?

A Right.

MR. MORRIS: I have no further questions.

MR. NUTTER: Any further questions?

CROSS EXAMINATION

BY MR. ARNOLD:

Q Why would you say that we flow a well 21 days in order to secure deliverability in the San Juan Basin rather

than 24 hours?

A I think you know the answer to that. The area up there is tight. You don't even get -- if you want to get into how accurate the deliverability tests are, I could go some ways with that. If the area is tight and --

Q You haven't answered the question.

A I'm getting around to it. The area is tight. The well will not stabilize even in the 21-day-flow period. Many wells won't.

Q If you propose that the high month's production is the best way to represent a well's producing ability, wouldn't it be better to take the high day's production in calculating the deliverability?

A I wouldn't object to it.

Q You think that we should calculate deliverability by using the high day?

A What I am trying to say is that the deliverability formula is inherent in the accuracy of the seven-day-shut-in pressure or shut-in pressure or whatever it might be in. If the shut-in pressure is not 100 percent built up or true reservoir pressure then the error is tremendous as far as the deliverability is concerned.

Q Don't you think if we defined the producing ability of a well we should relate it to a stabilized producing ability?

A I think if a well produces 30 days it ought to be pretty well stabalized.

Q Do you think that if we produced a well 30 days, shut it in for five months and then you produce it for six months and took an average that the two figures would be comparable?

A It's possible that you shut-in a well for a long period of time and open it up it will produce very good for the first 30 days.

Q Which isn't representative of its producing ability over a period of time, is it?

A Well, I think the condition you state is probably very rare most of the time and we have had testimony here, Mr. Arnold, that all marginal wells are left on 100 percent of the time. You wouldn't have that condition with marginal wells if you were making a comparison for them. You would only have that condition with some non-marginal wells, probably very few.

MR. NUTTER: Any further questions of Mr. Utz? You may be excused. Are you offering these Exhibits, Mr. Hatch?

MR. HATCH: Yes, I would like to offer these Exhibits.

Q (By Mr. Hatch) Did you prepare these Exhibits 1 and 2?

MR. UTZ: Yes, I did, such as they are.

MR. NUTTER: OCC Exhibits 1 and 2 will be admitted in evidence. Does anyone have anything further to offer in this case at this time? In as much as we have had El Paso's proposal and a Chevron proposal and an Utz proposal here and I don't fully understand any of them I want to continue this Hearing for 30 days so I can think about it. This case will be continued and you will get a chance to Cross Examine your witness later, Mr. Buell.

MR. BUELL: Thank you.

MR. NUTTER: To the Examiner Hearing which is scheduled to be held at 9:00 o'clock A.M. in this room on December 2. We would also like to make this provision at this time. Mr. Cameron, we would request you be available to further explain your proposal on December 2. Also, would you enter your company's address in the record so that anyone here that may want to write to you can do so and obtain the proposal from you?

MR. CAMERON: Chevron Oil Company, Box 599, Denver.

MR. NUTTER: Did everyone get that? Chevron Oil Company, Box 599, Denver, Attention: Mr. Cameron, and a copy of his proposal will be available. Mr. Utz will also be requested to reduce his proposal to the form of writing and this will be available from the Oil Conservation Commission Office here in Santa Fe. How long is that going to be?

MR. UTZ: One page will do it, Mr. Nutter. One

thought occurs to me. I don't have a specific proposal of how to adjust the nominations at this time. I know what I have used here but I will be working with it for sometime.

MR. NUTTER: If you can reduce this to writing because people want to see what you are doing, if that could be reduced to writing we will have them available on request as soon as possible. It will be some time before we will be sending the Docket. The Docket goes out 10 days prior to the Hearing so we will try to have it available, say, two weeks from today on request.

MR. SIMMONS: Would it be in order, the last time we had only one proposal to consider but we had an operator's meeting to clear a lot of the air on the question. Would it be in order to have something like that at this time where we have free time to consider?

MR. NUTTER: The operators can have a meeting if they wish. I don't know if we want to sponsor the meeting or not.

MR. SIMMONS: I don't think you sponsored the last one.

MR. NUTTER: If there is nothing further in Case 4436, the Case will be continued as noted before and this Hearing is adjourned.

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STATE OF NEW MEXICO)
)
COUNTY OF BERNALILLO)

I, SOVEIDA GONZALES, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me and that the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.

Soveida Gonzales
Notary Public

My Commission Expires:

3-26-74

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I do hereby certify that the foregoing is a complete record of the proceedings in the examiner hearing of Case No. 4436 heard by me on 10/14 19 70.
[Signature] Examiner
New Mexico Oil Conservation Commission