NEW MEXICO OIL CONSERVATION COMMISSION

COMMISSION HEARING

SANTA FE, NEW MEXICO

Hearing Date MARCH 10, 1994 Time: 9:00 A.M.

NAME	REPRESENTING	LOCATION
W. Kellahin	Kellahin & Kellahin	Santa Fe
Mike McKinney	Phillips Petroleum	Farmington
Maurice Brunner	Byram Co.	SF
VICTOR LYON	GAS CO. / N.M	SF
T. J. SAVAGE	TEXACO TRADING & TRANSP.	MIDLAND, TX.
Robert E. Green	Chevron USA	Midland, TX
Alan W. Bohling	Chevron USA	Midland, TX
Brian H. Hazzard	Chevron USA	Midland, TX
J.B. FRAKER	Meridian Oil Inc.	Farmington, NM
William F. Carr	Campbell, Carr, Berge & Sheridan	Santa Fe
Jerry Hoover	Conoco Inc.	Midland
DAMIAN BARRETT	PONCO INC	MIDLAND
Rod Steward	Marathon Oil	Midland
James Bruce	Atwell Law Firm	SF
Donna Bauer	Exxon	Midland
Tom Strickland	ORYX ENERGY CO	Dallas
Rick Hall	Oryx Energy C.	Dallas
RAMSEY FAHEL	ORYX ENERGY CO.	DALLAS
PAUL D MOLLO	GAS COM.	ALB

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NAME	REPRESENTING	LOCATION
Curt D. Smith	Santa Fe Energy	Midland, Tx.
Gene Dan	Santa Fe Energy	"

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION COMMISSION

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

HEARING CALLED BY NMOCD

CASE NO. 10,933

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

COMMISSION HEARING

BEFORE: WILLIAM J. LEMAY, CHAIRMAN
WILLIAM WEISS, COMMISSIONER
GARY CARLSON, COMMISSIONER

APR 13 1994

March 10th, 1994

Santa Fe, New Mexico

This matter came on for hearing before the Oil Conservation Commission on Thursday, March 10th, 1994, at Morgan Hall, State Land Office Building, 310 Old Santa Fe Trail, Santa Fe, New Mexico, before Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

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I N D E X

March 10th, 1994
Commission Hearing
CASE NO. 10,933

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E X H I B I T S

E X H I B I T S (Continued)

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A P P E A R A N C E S

FOR THE NMOCD:

ROBERT G. STOVALL
Attorney at Law
Legal Counsel to the Division
State Land Office Building
Santa Fe, New Mexico 87504

FOR AMOCO PRODUCTION COMPANY; ARCO OIL AND GAS COMPANY (ARCO PERMIAN); CHEVRON USA, INC.; and TEXACO EXPLORATION AND PRODUCTION, INC.:

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By: WILLIAM F. CARR

FOR ORYX ENERGY COMPANY; MERIDIAN OIL, INC.; PHILLIPS PETROLEUM COMPANY; MARATHON OIL COMPANY; and CONOCO, INC.:

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By: JAMES G. BRUCE

* * *

WHEREUPON, the following proceedings were had at 9:06 a.m.:

CHAIRMAN LEMAY: We shall call Case Number 10,933, which is the Oil Conservation Division Application on its own motion to accept nominations and other evidence and information to assist in determining gas proration allowables for the period of time April, 1994, through September, 1994.

At this time I shall ask for appearances in Case 10,933.

MR. STOVALL: Robert G. Stovall of Santa Fe, appearing on behalf of the Division as the Applicant, and I have two witnesses.

CHAIRMAN LEMAY: Thank you, Mr. Stovall.

MR. CARR: May it please the Commission, my name is William F. Carr with the Santa Fe law firm Campbell, Carr, Berge and Sheridan.

I'd like to enter an appearance in this case for Amoco Production Company; Arco Oil and Gas Company, now called Arco Permian; Chevron USA, Inc.; and Texaco Exploration and Production, Inc.

I have statements for Arco and Texaco and Amoco.

I will put on three witnesses for Chevron.

CHAIRMAN LEMAY: Thank you, Mr. Carr.

Mr. Kellahin?

MR. KELLAHIN: Mr. Chairman, I'm Tom Kellahin of the Santa Fe law firm of Kellahin and Kellahin.

I am appearing on behalf of Oryx Energy Company; Meridian Oil, Inc.; Phillips Petroleum Company; Marathon Oil Company; Conoco, Inc.

And I have a total of five witnesses.

CHAIRMAN LEMAY: Thank you, Mr. Kellahin.

Mr. Bruce?

MR. BRUCE: Mr. Chairman, Jim Bruce from the Hinkle law firm in Santa Fe, representing Exxon Corporation. I have one witness.

CHAIRMAN LEMAY: Thank you, Mr. Bruce.

Additional appearances?

At this time will those witnesses who will be giving testimony please stand and raise your right hand?

(Thereupon, the witnesses were sworn.)

CHAIRMAN LEMAY: We shall begin. Mr. Stovall?

MR. STOVALL: Call first, Mr. Jim Morrow.

JIM MORROW,

the witness herein, after having been first duly sworn upon his oath, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. STOVALL:

Q. Would you please state your name and current place of residence?

A. My name is Jim Morrow, and I'm living in Santa Fe.

Q. Mr. Morrow, how are you employed?

A. I work for the Oil Conservation Division as Chief Petroleum Engineer.

Q. And do your responsibilities include managing gas proration, the rules and regulations and application of those to operators?

A. Yes, sir.

Q. And how long have you done that?

A. I came back to work for OCD in November of 1993, and prior to that time I worked here from -- part of 1990 and 1991, so I guess nearly two years.

Q. And in 1991 you were actually the first chief engineer that got involved in a six-month proration; is that correct?

A. Yes, sir.

Q. Welcome back. And things have changed a lot, haven't they?

A. Yes, sir. They continue the changes.

Q. Mr. Morrow, have you prepared some exhibits today with respect to gas proration?

A. Yes.

Q. And let's just -- You're not actually offering any specific recommendations, but rather providing the

basis for the initial tabulations; is that correct?

A. That's correct.

Q. Would you start out by explaining Exhibit Number 1?

A. All right. Exhibit Number 1 is what we call the Market Demand and Allowable Determination Schedule. Exhibit 1 is for the prorated pools in southeastern New Mexico.

This is the same format we've used for previous hearings concerning six-month allowables, and what it does is begin with the average monthly production for April through September of the previous year for each pool. We add up production and get average monthly for each pool, and then use that. We assume that will be the allowable for the upcoming April-through-September period.

We have a column in the table for pool adjustments, which would provide a place for any adjustments which this group would make after they hear the testimony here today.

The math for coming up with an F1 factor, which determines the allowable that will be assigned to a nonmarginal well, is to take the marginal production from each pool and subtract that from the total production from each pool for the 1993 period, and then assume that the remainder of the allowable would be assigned to the

nonmarginal wells.

And if you look at the top line, the Atoka Penn, after we subtract the amount that the marginal wells produced from the total amount, we get 47,000 MCF per month for nonmarginal wells.

We have in Atoka Penn only two nonmarginal acreage factors left. So each well with a nonmarginal acreage factor of one would receive an allowable of 23,000 MCF per month.

Q. Now, let me interrupt you here for just a moment, Mr. Morrow. Looking at this Exhibit 1, it is just simply a mathematical calculation; is that correct? The column one, the average monthly pool sales, is real numbers from Division records; is that correct?

A. Yes, sir, they're from Division records.

Q. And then when you go to get the monthly pool allowable, that's not a recommendation; that just carries over that number, correct?

A. That's right.

Q. And then when you add the -- you take the marginal pool allowable, that's based on what the marginal wells produce during the period for which these sales records are reflected; is that correct?

A. Yes, on the average that's what they produce.

Q. Okay. So it's all just simply -- Anybody who's

got a calculator could make these calculations with the base data; is that correct?

A. That's correct.

Q. Okay. And what about the rest of the pages of that?

A. Okay, the other -- The two pages attached to the top page are allowable determination schedules from the two previous periods, and they're just put there for a reference if somebody wanted to look back and see what was assigned six months ago and a year ago.

I might point out a couple more things about the exhibit. Three of the pools listed have minimum allowables: Eumont, Jalmat and Justis Glorieta.

The mathematics would actually have assigned lower allowables to those three pools than what we've shown here, but we entered the minimum because orders signed by the Commission have set up minimum allowables in those pools.

Q. So each of these three pools, the allowable is actually based upon the minimum rather than the previous like period?

A. Yes, that's right.

Q. Now, with respect to that, it's -- I know there's some parties here that would like to see those allowables boosted up a little bit.

Is it possible that there's if some factor that's affected that because some of the previously nonmarginal wells have gone marginal so their production has gone into that column, yet there are some new wells that have been drilled since the last period, which would conceivably be nonmarginal and which would have to share this allowable and --

A. Yes, sir, that's right. This is just a schedule to give us a starting place for the allowables, to give us what we in previous hearings have called a preliminary estimate, something to pick at and change.

I might point out too, that the four pools that have no nonmarginal units or wells in the pools at this time, we've assigned F1 factors there, and those are based on previous experience and what we feel should be set as a cap in those pools.

Q. So that would be a cap on -- Should a well get to that level, it would kind of cap the production; is that what you mean?

A. It would give us a way to monitor it. If somebody went into one of those pools and found a well through workover that was capable of making more than just a marginal amount, this would be what they could shoot at for top allowable.

Q. And that really wouldn't take effect till those

wells reclassified to nonmarginal; is that correct?

A. That's right, that's right.

Q. Have you done a similar effort for the northwest pools?

A. Exhibit 2 is a similar schedule for the four prorated pools in the northwest, and it uses the same method of coming up with an allowable. It's based on April-through-September, 1993, production, to come up with a starting place for an allowable for April-through-September, 1994.

The difference in the northwest is that allowables in the northwest are based not just on -- Back up just a minute. The nonmarginal allowable is distributed, not based only on acreage, but there are two factors that come into play in the northwest pools.

Part of the nonmarginal allowable is distributed based on acreage, and part of it is distributed based on acreage times deliverability for the individual wells.

In the Basin Dakota Pool, 60 percent of the allowable is based on acreage and 40 percent is based on acreage times deliverability.

In the other three pools, the basis is 75 percent for acreage times deliverability and 25 percent for acreage.

The two columns at the end of the table, the

monthly acreage allocation factor is what we call the F1 factor, and it's similar to the F1 factor for the southeast pools, and the acreage-times-deliverability factor is what we call the F2 factor.

After those factors are set, to determine a well's allowable, a well with an acreage factor of 1 would receive the -- in the case of the Basin Dakota, the 6819 MCF per month, plus 8.57 times the acreage factor, times the deliverability.

So if a well there had an acreage factor of 1 and a deliverability of 1000, the total allowable would be 6819 plus 8570 for a monthly allowable.

Q. Again, it's a little bit more complicated formulas, but it's still just a mathematical calculation to get from the first column to the last two columns; is that correct?

A. Yes, sir, that's right.

Q. And again, you've attached some other pages to Exhibit 2. Are they the same, the previous periods, to kind of show a history?

A. Right, they just show history for the previous two six-month periods.

Q. Have you looked at proration overall and the proration system to determine if there is a trend with respect to the, if you will, the impact on proration and

how many wells -- When we talk about wells, we're really talking gas proration units, right? One or more wells?

A. It's really more accurate to talk about gas proration wells, because some wells don't have a full spacing requirement assigned to them, and --

Q. And other GPUs may have more than one well; is that correct?

A. Yes, five or six wells.

Q. Whenever you say the term "well", that's really what we mean just for semantics' sake on the record?

A. Yes, you'd use the two terms more or less interchangeably, but "gas proration units" would be more accurate than to say "wells". It would be roughly the same but not exactly the same.

Q. Now, again, I started to ask you, have you looked at a trend to see if there's a trend in the impact of the proration system upon GPUs in the system?

A. Yes, sir. With the increased allowables and the increased market that the State's enjoyed, the significance of gas proration has rapidly declined over the last few years.

You could look in the columns on the first two exhibits that says a number of nonmarginal acreage factors. And in the southeast, as you can see, there are very few that would add up to less than 100 nonmarginal acreage

factors in the southeast. And in the northwest on the order of 200 nonmarginal acreage factors are left.

So there's not much proration going on.

Q. That's less than ten percent of the wells are affected; would that be a safe estimate?

A. I think that would be -- Yes, it would be less than ten percent.

Q. Have you graphically depicted how this has worked in any way? Have you got an exhibit?

A. Yes, we took the pool in the southeast and the one in the northwest, in each of those sections of the State, the pool that had the largest number of nonmarginal units in the pool, and did a series of graphs.

Exhibit 3 is three graphs from the Eumont Gas Pool. It shows how monthly average production has increased over the last five years.

And if you look at the top graph on Exhibit 3, this shows the allowable and production on a monthly average basis, and these -- what's shown is the production for the April-through-September period. It leaves out the October-through-March period, since this hearing is concerned with April through September.

But you can see on that graph that production and allowable have increased. The F1 factors we've assigned in the Pool have increased. And the acreage factors, which is

the bottom graph, have declined from 150 in 1989 to 22 at this time.

Exhibit 4 is a similar series of plots for the Blanco Mesaverde Pool. The top graph shows increasing production and allowables, the middle graph shows the F1 factors that were assigned, and the bottom graph shows the decline in nonmarginal acreage factors in the Blanco Mesaverde Pool.

Point out that -- Back to Eumont for a minute. In early 1990, the Commission assigned the minimum allowable in Eumont. Operators came in and -- in early 1991, instead of 1990.

Operators came in and requested this minimum allowable so that they would know what they could rely on to calculate the economics of their -- for their workovers and drilling projects. The Commission assigned that, and there has been significant workover and drilling activity. We heard about that in a recent hearing last month.

And that's resulted in, of course, an increased producing ability in the Pool, and the markets have been better. So both the allowables and the production have increased in that Pool.

But both these graphs do show the declining significance of gas proration in New Mexico.

Q. And it's really the bottom of the three on each

page that's important from that aspect in that that's the number of GPUs that are affected, and it's a pretty constant trend downward, or it appears to be; is that correct?

A. Yes, sir, that's right.

Q. Now, with respect to the Eumont, the hearing you referred to was to make permanent the rules in the Eumont and Jalmat; is that correct?

A. Yes, that's correct.

Q. It appears that there was a dip in the F1 factor in the Eumont. Could that be attributed to more wells going marginal?

A. Ask the question again, Bob.

Q. As far as the dip in the F1 factor, I'm sorry, on the Eumont, Exhibit 3, there appears to be a dip in the last --

A. Oh, that's the one that we projected for 1994. That's the 18,300, the minimum that's shown on Exhibit Number 1. That will probably be addressed later by other witnesses, I'm sure.

But it's again, just the mathematics of -- Well, it's not the mathematics; it's the minimum allowable. The mathematics -- in other words, a table would have assigned a lower than 18-million-per-month allowable, and so we put the minimum in there.

Q. Again, that's probably a reflection of the fact that more GPUs are marginal now than were previously because of the higher allowables; would that be correct?

A. Yes, sir. I think as the number of nonmarginal wells declines, the accuracy of this method of determining allowable is not as good. As you get just a few nonmarginal wells, any little fluctuations in the production from those will affect what happens when you try to come up with an allowable from this table.

Q. Now, again at this time, you're not making a recommendation that the Commission adopt these allowables but merely presenting this as an informational base upon which parties can recommend adjustments to any pools to which they wish; is that correct?

A. Yes, sir, that's correct. However, we do recommend it as a starting place. In the past it's turned out that what we've come up with here for most of the pools is what we wind up with. In some of them, we'll hear from other people that have reasons to request changes.

MR. STOVALL: I have nothing further of this witness, and I'd offer Exhibits 1 through 4, Division Exhibits 1 through 4.

CHAIRMAN LEMAY: Without objection, Exhibits 1 through 4 will be admitted into the record.

Questions of the witness?

COMMISSIONER CARLSON: No questions.

CHAIRMAN LEMAY: Commissioner Weiss?

EXAMINATION

BY COMMISSIONER WEISS:

Q. Yes, you say it's becoming -- the significance of proration is less today than it was before and that it's more difficult to set the allowables because of this lower number of wells?

A. Well, I didn't really mean that. The first part of that, the significance is declining because the number of wells that proration actually affects is declining.

Because of the increased markets, we've set allowables at levels that not too many of the wells in the pools can produce. So that has caused a decline in the significance in the number of wells affected.

Now, what I meant by the difficulty in determining an allowable by this method is that if you just have one or two wells in there that are nonmarginal wells, and one of them is down for a couple of months, then you don't show much nonmarginal production. You may -- On the average, you won't show much. You may come up with a factor that won't be really the right factor for the future. Whereas, if you had a large number in there, averages would help you get it right.

Q. Well, in view of this, do you think proration of

this current -- is valuable?

A. I think we need to look at it as we move along, and we have done that. The minimum allowables have been a way to adjust the system.

In the past year, I believe, or maybe the past couple of years, one pool has been deprorated, and over the years pools have been deprorated in -- you know, throughout the years, and in both parts of the state.

So I think it's something we and the operators need to review and come up with recommendations for changes when we see that that's appropriate.

COMMISSIONER WEISS: Okay, thank you.

CHAIRMAN LEMAY: I don't have any questions.

Additional questions? If not, the witness may be excused. Thank you, Mr. Morrow.

Does he need to be qualified, Counselor? I don't know if we did that.

MR. STOVALL: No, he's not offering an opinion, really, he's just giving you factual information, so I don't think we need to...

We know he's an expert but we don't need his expert opinion in this case.

THE WITNESS: I've been qualified in here before.

MR. STOVALL: That's true, that's true.

I call Dan Hall at this time.

DAN W. HALL,

the witness herein, after having been first duly sworn upon his oath, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. STOVALL:

Q. Mr. Hall, would you please state your name and occupation?

A. My name is Dan W. Hall, and I'm a natural gas marketing specialist/economist.

Q. And who are you employed by?

A. I'm employed by the State of New Mexico; Oil Conservation Division; Energy, Minerals and Natural Resources Department.

Q. Have you previously testified before the Commission and had your qualifications as an economist accepted?

A. No, I have not.

Q. Would you summarize your educational background post-high school?

A. Okay, I earned a master of arts degree in economics, with a specialization in public utility regulation from New Mexico State University. I also have undergraduate degrees in agricultural economics and business management from NMSU.

Q. What about your professional experience?

A. I've worked with OCD in the current capacity for slightly over five years. Prior to that, I was a senior rate analyst for the Public Utilities Commission in New Mexico.

Q. Would you just describe briefly what -- particularly with respect to the OCD, what your duties entail as respects natural gas marketing and the movement of gas through New Mexico?

A. Within the Natural Gas Marketing Bureau and Office of Interstate Natural Gas Markets, I act as the economist to provide economic/financial policy analysis on all regulatory issues involved with interstate movement of natural gas, also provide market research on behalf of the Bureau.

Q. And in the course of those duties you look at the market trends, if you will, in natural gas to see what the markets are and --

A. Yes, sir.

Q. -- all the economic -- economist evaluation of that; is that correct?

A. Certainly, all the economic, financial and policy-type analysis to not only identify issues but barriers to the marketing of New Mexico's natural gas.

Q. And have you made a specific evaluation in preparation for today's hearing?

A. Yes, I have.

Q. And based upon that evaluation, are you prepared to offer some opinions with respect to the impact of gas marketing from an economist's point of view on the ability to market natural gas in New Mexico?

A. Yes.

MR. STOVALL: I would offer Mr. Hall as an expert economist.

CHAIRMAN LEMAY: His qualifications are acceptable.

Q. (By Mr. Stovall) Now, Mr. Hall, before we get into the details of it, why don't you just briefly state what is your opinion, what are you hear to tell us with respect to the proration system?

A. Well, today the purpose of my testimony is really to provide a brief review of the natural gas production in New Mexico and through illustrations examine trends in prorated and non-prorated natural gas production in the state.

The data and graphic illustrations and representations that I make today included in my exhibits support my conclusion that OCD system of natural gas prorations is successful in allowing prorated gas pools in New Mexico to react to the economic conditions of the natural gas market and further compete for incremental

markets or demand for the natural gas.

Q. Stated another way, are you saying that the proration system does not impose an artificial restraint on the supply of natural gas to the market?

A. Through my analysis, I believe that New Mexico OCD's proration system does not inhibit or preclude natural gas production from prorated pools to participate in the natural gas market.

Q. Now, you've prepared some exhibits to support your conclusions; is that correct?

A. Yes.

Q. Why don't we just start through those and start with -- We've designated your exhibits as Exhibits A, I believe, through D; is that correct? Through F, I'm sorry.

A. A through F.

Q. And why don't you just start with Exhibit A and explain the significance of those and how they support your conclusion?

A. Okay. Exhibit A is a tabular chart of data compiled from OCD records, and it shows natural gas production in MCF through a period from 1985 through 1993, and it's broken out in prorated, non-prorated, northwest, southeast, and statewide.

This data includes gas well gas only, and it also shows the average producing -- the number of average

producing wells in each category. This is the basis for the following graphic representations.

Q. So when we go to look at the remainder of the exhibits, which you say are graphic, you could go back to this and find out how you got the numbers, is really what it's in there for; is that right?

A. Correct.

Q. All right. Let's move on to your graphs, and why don't we, again, explain what they say and what their significance is.

A. Exhibit B, which is -- depicts prorated and non-prorated natural gas production throughout the state. And the line across the top of the graph depicts statewide production. You can see we've seen a dramatic increase in natural gas production in New Mexico from the low of 1986.

The dark bars across the bottom of the graph represent the prorated production statewide, while the light-colored bars indicate non-prorated production through this nine year period.

On closer examination, both prorated and non-prorated production has increased since the low of 1986, although reacting to the market differently in volatility and growth patterns. They're both having an increasing and positive slope.

Exhibit C, to get to a closer analysis, I broke

out southeast New Mexico production. In this case, the darker bars again indicate the prorated production.

It indicates an annual growth in the production from prorated pools since 1986, while non-prorated production, shown by the lighter-shaded bars, shows a similar increase on the average, but highly volatile on an annual basis.

Q. Mr. Hall, looking at these first two exhibits -- Now, all your exhibits -- they plot time on the -- I guess that's called the X axis; is that correct? The horizontal axis?

A. Correct.

Q. And volumes on the vertical axis?

A. Correct.

Q. The first exhibit, just for the record, I note that the volume is in TCF, trillion cubic feet. Is that --

A. Trillion cubic feet. And Exhibit C is in BCF, because this is where I broke it down into a producing region, working with smaller volumes.

Q. Now, have you done the same thing in the northwest?

A. Yes, I have. And then -- Clarification: This Y axis, the volumes are in TCF increments.

And Exhibit D is for the northwest. It's similar to Exhibit C in showing prorated/non-prorated production.

Production in the San Juan has increased dramatically over this time period, due to several factors, including the coal-seam gas development and gathering/processing capacity increases and interstate pipeline capacity expansions.

A. Now, in the northwest the discovery and development of coal-seam gas has had an impact on production on that basis; is that not correct?

A. Yes, in a first glance at this graph the prorated production looks to be almost flat and -- However, the prorated production does show some growth since the low of 1986.

And also the non-prorated production, by the lighter-shaded bars, includes the coal-seam gas production, and this skews the interpretive value of the graph. Although I've cured this problem on the following exhibit, I left this thing to show the influence coal-seam developments had on the natural gas supplies from the San Juan Basin.

Q. Now, would you turn, then, to Exhibit E, and this again shows your breakout, so you've got so-called traditional and then coal-seam gas shown by separate bars on your bar graph; is that correct?

A. Correct. The addition to this graph is coal seam, which appears in 1988, and it's shown by the hollow

bars.

Q. And once you break coal seam out, then, am I reading this correct, that the traditional non-prorated gas is actually a fairly low portion of northwest production?

A. Yes, a very low portion of northwest production. And taking the coal seam out of the non-prorated category, that more accurately depicts the trends for each.

In the northwest, prorated and nonprorated production rose modestly from 1986, with only a positive slope to this period. The coal-seam gas production, however, has enjoyed tremendous growth since 1988, capturing most of the increment market.

Q. Is this -- In your opinion, is this due to the proration system restricting the ability of prorated gas to get to the market, or is it due to increased development and availability of non-prorated gas?

A. I think -- What these five exhibits show is that the prorated/non-prorated natural gas production in New Mexico compete equally for market share, and prorated gas pools can react sufficiently to capture incremental demand and react to market conditions, as you can see by the volatility and growth patterns in it.

The coal-seam gas, I set that out from this to more clearly depict non-prorated gas production. But coal-seam gas, from an economic standpoint, really could be

viewed as a substitute, a perfect substitute, with lower priming costs, tax credit, different processing and costs of processing, although it's methane, it's -- and once it's at market, it's a homogeneous commodity in the ground, it can be looked at as a perfect substitute with some advantage, which is shown by the speed in which it's been able to enter the market and capture incremental demand.

Q. But that's a function of economics and market activity, rather than a function of the system; is that correct?

A. Correct, it has nothing to do with proration.

Q. How long have you been making productions -- or, excuse me, predictions, Mr. Hall?

A. Since the first year I came to work at OCD, I developed a model, a linear regression model, and in subsequent years have modified it only slightly to project natural gas production out 12 to 18 months.

Q. And have you made any projections for 1994?

A. In 1994 -- in fact, the Exhibit F, the last exhibit, shows the actual production from 1991, 1992, 1993, and the projection for New Mexico natural gas production statewide for 1994, at one point, 461 trillion cubic feet.

Q. Now, have you done an analysis to determine whether your previous projections have -- how have they done?

A. The regression model in these natural gas production levels uses historical production levels and prices, and NYMEX, New York Mercantile Exchange, natural gas futures prices to project future production levels.

These projected levels that are shown on the graph -- For instance, 1991, the projected level of 1.025, was not a projection done in hindsight. I have retained the data from previous forecasts or projections, included it in this graph, just to show that this model has been sufficiently closely or accurately predicting.

Q. Pretty good at this, huh?

A. Pretty good.

Q. Yeah. Just -- In other words, quite seriously, what you're saying is that history has shown that your ability to do this, given no drastic changes in the forces that would affect your model, that you have some confidence in the reliability of it?

A. Yeah, I do. It's a simple model, although more elaborate or sophisticated models could be developed and are used elsewhere. For our purposes within the Natural Gas Marketing Bureau, for planning or other internal uses, this model has been very sufficient.

Q. Now, I think it's implicit, but just to make it clear on the record, I meant to ask you this earlier: With respect to the prorated pools that you've identified, you

have looked at pool production rather than looking at marginal/nonmarginal. It's the total production from the pool; is that correct?

A. Total gas production from the prorated pools, correct.

MR. STOVALL: I have no further questions of Mr. Hall and would offer Exhibits A through F.

CHAIRMAN LEMAY: A through F --

MR. STOVALL: Oh, I'm sorry, Mr. Hall has one more statement he'd like to make. I forgot to ask him if he had anything else.

THE WITNESS: On this last graph, Exhibit F, the only other thing I wanted to mention was, from an actual production level of 1.019 TCF in 1991, the State and the natural gas industry in New Mexico enjoyed an almost 22-1/2-percent growth in 1992 and 11.9, almost 12 percent, growth in 1993 production volumes.

What I'm seeing now through the model and through my knowledge of the natural gas industry and current events in the industry are consistent with the model results in that New Mexico will continue to see growth in natural gas production throughout 1994, however at a slower rate, looking at around 5 percent increase in production in 1994.

Q. (By Mr. Stovall) One follow-up question to that, then. Is it -- In the days when proration was created, it

was done when there was a limited demand and an excess supply and a regulated price and transportation system, conditions which no longer exist; is that correct?

A. That's correct.

Q. And so what is happening in natural gas marketing today is that it is more of an economic function and less of a regulatory function?

A. And the natural gas market is certainly more competitive and less regulated.

Q. And therefore it is important that a regulatory system designed in the old ways must adapt and respond and allow gas to function in this more competitive market?

A. Certainly.

Q. And it is your opinion that the New Mexico system permits that, or at least doesn't inhibit that participation?

A. The New Mexico OCD proration system does not inhibit that market participation of gas produced and prorated.

MR. STOVALL: Well, this time I have nothing further, and I still want the exhibits --

CHAIRMAN LEMAY: Without objection, Exhibits A through F will be admitted into the record.

Questions of Mr. Hall?

Gary?

EXAMINATION

BY COMMISSIONER CARLSON:

Q. Yeah. Dan, I understand you didn't take marginal and nonmarginal production into account. But if you did, do you have any idea what these graphs and numbers would look like?

For example, on your Exhibit A, where you -- Let's do the southeast. You have 995 wells that are subject to proration, producing 106 -- whatever that is, BCF, I guess. If we would look at just the wells and production that are actually affected by proration -- in other words, the nonmarginal -- do you know what those numbers would be?

A. Well, the nonmarginal wells would see the increase. The marginal wells, by definition, would be the flatter or declining wells, with lower production.

Q. Well, but your 995 here, for example, that includes all the marginal wells; probably 90 percent of that figure is marginal wells, don't you think?

A. Correct.

Q. So we can assume that --

A. They are producing at capacity. They are entering the market and can -- their operators can make whatever economic decision is necessary.

Q. My point is, it would be interesting to see -- at

least for me, I don't know about the other members of the Commission but -- how much effect -- how much production and how many wells are really affected by prorationing. And this really doesn't show that; it just shows the production from prorated pools.

A. It does not show that, right.

COMMISSIONER CARLSON: Maybe when we do this again in six months it would be interesting to see those figures.

MR. STOVALL: Commissioner Carlson, if you go back to Mr. Morrow's Exhibit Number 1 --

COMMISSIONER CARLSON: Uh-huh.

MR. STOVALL: -- you can kind of get an idea of that if you take the -- You can look at it either way. You take the monthly pool allowable column, the third column on either of the -- and then you can take -- you can look at both the breakout of the nonmarginal and nonmarginal pool allowable.

Just roughly, in my head, it appears that the nonmarginal appears to be anywhere from less than 10 to about 40 percent of the total pool production in any given pool.

But if you look at the absolute numbers, it's -- they're -- The higher pool, the lower the percentage that the nonmarginal wells have in those pools, generally

speaking.

So I think that if you look at the two exhibits together, you can get a sense for it. Not graphically depicted, but that might help you to get a feel.

I think Mr. Morrow -- and Mr. Hall, would you agree, that the marginal wells are less and less significant in this picture?

THE WITNESS: Yes, I would.

COMMISSIONER CARLSON: Well I'm just beginning to wonder why we go through this exercise every six months, that the effect we're having is so small that it -- I just wonder if we shouldn't look at the whole allowable system and maybe structure something else.

I mean, if a company feels that their correlative rights are being violated, maybe they can bring a case before us, rather than go through this six-months allowable thing when the effect we're looking at is just almost minuscule now.

MR. STOVALL: I can -- We've had the discussion at the Division level, and of course, you know, I will -- probably wouldn't be involved in the future.

But two things that would come up is the -- Proration does two things which are potentially beneficial.

One is put a cap on some superstar wells, if you will, wells that are capable of draining a large area and

producing substantially higher volumes than any other well in the pool.

The second thing it does is where you've got a prorated pool, it's much easier to come up with an infill drilling program and to recover some additional gas, and what the value of that is I'm not sure. And there might be other ways to address it, such as a superstar allowable, if you will, a max for a pool or something like that.

I think it's worth looking at because I think you raise a valid question.

COMMISSIONER CARLSON: Well, how many of these wells are overproduced?

Maybe I should ask Jim this.

MR. MORROW: How many are overproduced?

COMMISSIONER CARLSON: Yeah.

MR. MORROW: I don't have that figure.

MR. STOVALL: Well, perhaps a more significant question -- and I think -- I would speculate, you know, I don't have the answer -- is that in the old days of production there were lots of wells that were production-restricted because they'd reached their six-times and twelve-times cap.

COMMISSIONER CARLSON: Uh-huh.

MR. STOVALL: And maybe when some of the operators are on the stand you can ask them.

I think there are very few wells that have reached that shut-in level of six- or twelve-times overproduction, because with the allowable levels, even the bigger wells are only producing by a fraction of the allowable rather than two or three times the allowable.

COMMISSIONER CARLSON: Right.

MR. STOVALL: So I think it's a valid question, and perhaps the operators can tell you when they get on the stand.

COMMISSIONER CARLSON: Okay, that's it.

CHAIRMAN LEMAY: Commissioner Weiss?

EXAMINATION

BY COMMISSIONER WEISS:

Q. Mr. Hall, I don't think this is a fair question to ask you, but I'm going to anyways.

On Exhibit B, if New Mexico had no gas proration system, what would this exhibit look like?

A. Well, other than a separation of prorated and non-prorated, I think the production levels would be virtually the same.

Q. So the solid line would be approximately the same?

A. Uh-huh.

COMMISSIONER WEISS: Thank you. I have no other questions.

EXAMINATION

BY CHAIRMAN LEMAY:

Q. Again, I'm probably going to ask you an unfair question, but in terms of Mr. Carlson's questions, are you familiar with some of the other prorated -- or the ways the Division and the Commission can use proration to apply penalties to wells that crowd lease lines and things like that?

A. Not really.

Q. I was afraid I was getting off -- The discussion went a little bit that way.

A. Yeah.

CHAIRMAN LEMAY: I think at the risk of testifying myself, we'll probably just leave that there and look at proration on a six-month basis, and possibly other witnesses can shed light on that.

Are there additional questions of the witness?

If not, he may be excused. Thank you, Mr. Hall.

MR. STOVALL: And that's all I have, Mr. Chairman.

CHAIRMAN LEMAY: Thank you, Mr. Stovall.

Let's just go off the record for a second here.

(Off the record)

CHAIRMAN LEMAY: Okay, we can go back on the record.

We will take the northwest prorated pools first and begin with the Basin Dakota Pool. And let's see, I think it's -- Basin Dakota would be probably you, Mr. Kellahin?

MR. KELLAHIN: Yes, sir.

CHAIRMAN LEMAY: Thank you. You may proceed.

MR. KELLAHIN: I have two clients with presentations on Basin Dakota. Meridian has a combined presentation where Mr. Fraser is going to talk about the Basin Dakota and Mesaverde, and it might expedite it to just let him do --

CHAIRMAN LEMAY: Fine.

MR. KELLAHIN: -- that together.

And then the Phillips Petroleum Company presentation is with regards to the Dakota.

CHAIRMAN LEMAY: Okay.

MR. KELLAHIN: I'd like to call Mr. Fraser at this time.

JAMES B. FRASER,

the witness herein, after having been first duly sworn upon his oath, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q. Please state your name and occupation.

A. My name is James Fraser. I'm a production

superintendent with Meridian Oil in Farmington, New Mexico.

Q. Are you a petroleum engineer by education and degree?

A. Yes, sir, I am.

Q. What are your current responsibilities for your company, insofar as this particular topic is of concern?

A. I review the OCD-recommended allowables for the pools in the northwest portion of New Mexico and then do some analysis as concerns Meridian Oil and the pool in general, see if those recommendations are applicable.

Q. In the past, have you made similar reviews and testified before this Commission and provided your opinions with regards to the adjustments of any of the prorated gas pools in the northwestern part of New Mexico?

A. Yes, sir, I have. This is the fourth time, I believe, I've been before this Commission.

Q. Have you studied the preliminary schedule that has been circulated by the Division, examined your own records, and reached any opinions and conclusions about what to do with the schedule as we move into the next proration period?

A. Yes, sir, I have.

MR. KELLAHIN: We tender Mr. Fraser as an expert witness.

CHAIRMAN LEMAY: His qualifications are

acceptable.

Q. (By Mr. Kellahin) Mr. Fraser, let me have you turn, sir, to what we've marked as Meridian Exhibit Number 1, identify that and describe what you're showing.

A. Certainly. This is a table that has the NMOCD-recommended pool allowable in MCF per month for the three largest pools in the northwest portion of New Mexico, those being the Basin Dakota, the Blanco Mesaverde and the Blanco PC South.

The first line I have listed there is labeled NMOCD-recommended value for the Basin Dakota. That is 9.548 BCF per month. For the Blanco Mesaverde, 16.5 BCF per month. And for the Blanco PC South, 1.22 BCF per month.

The second line is Meridian's recommended adjustments. And, as everyone can see, on that exhibit I have no adjustments, recommendation to make at this hearing.

If you add those two columns together you get what Meridian would recommend as the monthly pool allowable, and it's simply the same as the OCD-recommended value.

I think this is reflective of how the system has worked in the past, and I applaud the Commission for taking their revisions that they had in there the last few years,

and I think the system works very well now as far as the northwest pools.

Q. Have you prepared a display to see how the allocation or the allowables are handled in the Blanco Mesaverde Pool?

A. Yes, if everyone would please turn to Exhibit Number 2, this is a historical plot of Blanco Mesaverde Pool production in the northwest portion of New Mexico with BCF per month on the vertical or Y axis, and then the historical from January of 1991 through December of 1993 as the horizontal or X axis.

The solid line represents the monthly pool production for that time frame. The last two months, November and December of 1993, I have estimated based on Meridian's percentage of the pool and our internal records as to what the pool produced during that time frame.

The horizontal line that is labeled "average equals 16.6" is simply the arithmetic average of the last 18 months of production for the pool. That average is 16.6 BCF.

Q. How does that average compare to what is shown in the preliminary schedule for the next proration period?

A. It's essentially the same. The NMOCD-recommended value is 16.5 BCF. The pool has shown a historical ability to produce at a 16.6 BCF-per-month rate for the last 18

months, and therefore I recommend no change to what the Commission has recommended.

Q. Do you have an opinion as to whether or not there continues to exist market demand for gas at this allowable level?

A. Yes, sir, I think the market can absorb all the gas that is being produced in the Mesaverde.

Q. Let's turn now to the plot on the Dakota Pool. That's Exhibit Number 3. Would you identify and describe that display?

A. Exhibit Number 3 is a similar presentation for the Dakota Pool. Once again, production in BCF per month is on the vertical axis, and a historical timetable from January of 1991 through December of 1993 is on the horizontal axis.

Once again, the solid dark line is the actual production for the pool during this time frame, with November and December values being estimated via Meridian's internal estimate of production and percentage of the pool production.

As the horizontal line labeled "average equals 9.5 BCF" exhibits, for the same 18-month time frame, the average pool production in the Dakota has been 9.5 BCF, which is essentially the same. It is the same as the NMOCD-recommended value for this summer proration period.

Therefore, the conclusion that I draw from this exhibit is that the market demand can absorb the pool production of the Basin Dakota, and the Dakota Pool can produce at a 9.5-BCF-per-month limit.

Q. Have you taken this information and data and displayed it in a different format?

A. Yes, Exhibit Number 4 is actually probably a little easier to understand. It is simply a bar graph by year, from 1982 through 1993, once again an average production for the Mesaverde production in BCF per month, with one bar representing each year.

Now, this does not differentiate between the summer and the winter time frame.

What it shows is that in 1983 I've estimated the average pool production of the Mesaverde as 16.5 BCF, and you can see just from looking at the bar graph, that is the largest -- the highest production that the Basin -- that the Blanco Mesaverde has enjoyed since 1982, and that is due to a couple of reasons.

As I've testified in previous hearings, take-away ability in the Basin has expanded in the last couple of years due to interstate pipeline construction. Therefore, the deliverability and producing ability of the Mesaverde has increased dramatically in the last several years to its current level, about 16.5 BCF.

Q. Let's turn to the Basin Dakota display, Exhibit 5.

A. Exhibit 5 is a similar presentation for the Basin Dakota.

As you can see, the yearly estimate for 1993 is estimated as 9.42 BCF per month, which is the highest monthly production in the Basin Dakota since 1985, or in the last eight years. This is reflective of the same conditions I just spoke about, take-away capacity out of the San Juan Basin.

Q. I will tell you, Mr. Fraser, that the Phillips witness is about to request an adjustment by the Commission in the Basin Dakota. That company is seeking a 100-million-MCF additional adjustment be placed in the Basin Dakota.

What is your company's position with regards to an adjustment of that level?

A. We have no objection to that recommendation by Phillips.

Q. Do you have anything else, Mr. Fraser?

A. No, I don't believe I have any other direct testimony.

MR. KELLAHIN: That concludes my examination of Mr. Fraser.

We move the introduction of his Exhibits 1

through 5.

CHAIRMAN LEMAY: Without objection, Exhibits 1 through 5 will be admitted into the record.

Questions of the witness?

Commissioner Carlson?

COMMISSIONER CARLSON: I don't think so.

CHAIRMAN LEMAY: Commissioner Weiss?

COMMISSIONER WEISS: I have one.

EXAMINATION

BY COMMISSIONER WEISS:

Q. Jim, would your company be adversely affected in terms of correlative rights if there was no proration in the northwest?

A. I don't believe so, sir. Mr. Carlson had asked a question about how many wells were shut in and overproduced, and I do happen to have Meridian's statistics on that, and I'd like to try to share that with you to try to amplify that point I just made.

For instance, in the Dakota Pool we operate 1418 wells. There are no wells overproduced, 12 times overproduced, that Meridian operates at this time.

In the Mesaverde we operate 1934 wells. Two of those wells are shut in due to 12 times overproduced.

Point being is, very few wells are being affected by the 12-times-overproduced limits.

COMMISSIONER WEISS: Thank you.

CHAIRMAN LEMAY: I don't believe I have any questions, Mr. Fraser. Thank you very much for your testimony.

Without additional questions, you may be excused.

Mr. Kellahin, call your next witness.

MR. KELLAHIN: Yes, sir. On behalf of Phillips Petroleum Company, I'd like to call Mr. Mike McGovern.

MIKE McGOVERN,

the witness herein, after having been first duly sworn upon his oath, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q. Would you please state your name and occupation?

A. My name is Mike McGovern. I'm a reservoir engineer with Phillips Petroleum.

Q. Mr. McGovern, on prior occasions have you testified before the Oil Conservation Commission or Division of New Mexico?

A. No, I have not.

Q. Summarize for us your education.

A. I've got a petroleum engineering degree from Louisiana State University.

Q. In what year, sir?

A. 1982.

Q. All right, sir.

A. And I've worked for Phillips Petroleum since that time in the capacity as a reservoir engineer, and my current title is a reservoir engineering specialist in the Farmington office.

Q. As part of your duties in the Farmington office, have you made a study of the allowable system in the Basin Dakota with regards to your production?

A. Yes, I have.

Q. And based upon that study, do you have recommendations for the Commission concerning an adjustment in the allowable for the Basin Dakota Pool for the next proration period?

A. Yes, I do.

MR. KELLAHIN: We tender Mr. McGovern as an expert witness.

CHAIRMAN LEMAY: His qualifications are acceptable.

Q. (By Mr. Kellahin) Mr. McGovern, let me have you refer to Exhibit 1, and then ignore it for a moment and let's talk about where you want to be.

The calculation you've shown on your Exhibit 1 is in a slightly different format, if you will, than the spreadsheet before the Commission, if they're looking at the preliminary schedule that the Division has issued.

A. That's right.

Q. All right, let's deal with the end result of the calculation. Under the current allowable level, when you look at the nonmarginal GPU, on a daily basis how much gas can you produce?

A. From a nonmarginal GPU?

Q. Yes, sir.

A. On a daily basis. That's a function of the acreage allowable and the deliverability allowable. And for instance, 1-million-cubic-feet-a-day deliverability, a nonmarginal well would be allowed to produce -- a nonmarginal proration unit would be allowed to produce 800 MCF per day.

Q. Okay. What are you trying to accomplish with this --

A. I'm sorry, that was for the proposed adjustment. Is that what you had asked me to say?

Q. No, sir, you and I are not communicating.

A. Sorry.

Q. If we take the preliminary schedule without your adjustment in it --

A. Right.

Q. -- assume a nonmarginal GPU -- I understand it's going to be different because there's a deliverability component to the calculation --

A. Right.

Q. -- but pick a baseline deliverability --

A. Okay.

Q. -- that is characteristic of the nonmarginal wells and tell us without an adjustment what that GPU can have.

A. Okay, without an adjustment and 1 million cubic per day, a GPU would be allowed to produce 506 MCF per day.

Q. Okay. When we look at this schedule without an adjustment, do you have an indication for us of at what level a well would be reclassified from marginal to nonmarginal?

A. The well -- Well, the well's classified as nonmarginal when it's able to produce -- when it historically produces in excess of its allowable.

However, based on the acreage alone, if a well can produce over 224 MCF per day, then the deliverability component of the allowable is applied and impacts the allowable for the well.

Q. Okay. Under that situation where nonmarginal wells are going to have the capacity to produce in excess of 225 MCF a day, how many of those kind of creatures do you have?

A. We only have two wells in the Basin Dakota -- they were both drilled in 1991 -- that are classified as

nonmarginal and that produce at 12 times the allowable and are currently shut in.

We drilled nine wells last year, based on allowables set in the fall of 1992, spring of 1993. Based on those allowables, and those wells -- only two of those wells are on production. The remaining seven will be coming on production this spring, and they will probably -- -- if they produce up to expectations -- will also be curtailed and will reach 12 times the excess of allowable.

Q. If no adjustment is made in the schedule, what impact, if any, does it have on the economics of that work recently done?

A. It drastically reduces the economics of the wells drilled in 1993, and with the current allowables, the seven wells that we had planned for 1994, we probably wouldn't be able to justify.

Q. All right. Future work, you've got what? Seven? Nine?

A. Seven.

Q. Seven wells for 1994 that you're going to have to postpone if the allowable level stays as shown on the preliminary schedule?

A. That's correct.

Q. Have you made a calculation to show us what adjustment you would recommend to be placed in the

allowable schedule to provide the economic incentive for you to go ahead and do the work?

A. Yes.

Q. What's the number?

A. The number is an adjustment. If we can refer to this exhibit here --

Q. Yeah, Exhibit 1?

A. Well, not Exhibit 1 but the Commission's --

Q. -- preliminary schedule?

A. -- preliminary schedule.

MR. STOVALL: Exhibit 2, I believe it is.

Q. (By Mr. Kellahin) All right, sir, Exhibit 2, and if you'll turn to the first lines, the Basin Dakota -- ?

A. Right.

Q. All right. Take us through the line and show us where the adjustment is.

A. Okay. The first column there is the average monthly pool sales, and we would -- and that is equivalent to column three, which is the monthly pool allowable proposed for the summer of 1994.

We would wish to increase that pool allowable by roughly one percent, which would then place in column two a pool adjustment of 98,958 MCF per month, resulting in a month -- in column five, a monthly nonmarginal pool allowable increase from 171,042 to 270,000 MCF per month.

The result of this adjustment would allow us to produce, based on our acreage component of our allowable, an increase from 224 MCF per day to 350 MCF a day. And for the case of a-million-a-day deliverability, the well would be able -- the unit would be able to produce an increase from 282 MCF per day to 445 MCF per day for the deliverability component, resulting in an overall increase in allowable from 506 MCF per day to 799 MCF per day for the proration unit.

Q. In your opinion, would that be a sufficient allowable incentive to allow you to do this additional work?

A. Yes, it would, and we chose this allowable, for one reason, because it is roughly equivalent to the allowable that the wells enjoyed in the period from October, 1992, through March of 1993.

Q. Let's go to Exhibit 2, so you can illustrate that point.

A. Okay.

Q. Before we talk about that, look at Exhibit 2 and show us how to read the information.

A. Okay. Exhibit 2 is a graph showing the GPU deliverability versus the GPU calculated allowable over time.

The horizontal axis is GPUs deliverability, from

500 MCF per day to a million a day. And the vertical axis is the calculated allowable for -- from 300 MCF per day to 1000 MCF per day.

The legend shows that -- The red line indicates what the calculated allowables were for the period 10-92 through 3-93.

In the next proration period, the summer of 1993, the white line shows a reduction in allowable and then, in the winter of 1993-94, shows an additional reduction in allowable.

And the green line at the bottom shows the proposed allowable schedule for the Basin Dakota.

And if we look over here for a proration unit capable of producing a million cubic feet per day, back in the winter of 199- -- or in the period from 10-92 to 3-93, this proration unit would have been allowed to produce 800 MCF per day, whereas based on the proposed summer -- this summer allowables, that same proration unit would only be able to produce 500 MCF per day.

This drastically impacts our ability to continue to develop the Basin Dakota, and I'd like to present an example, a typical example, of eight of the nine wells that we drilled last year, if I may.

On these wells that we've drilled, eight of the nine were infill drilled wells, and what I'll give is an

example of those eight wells. There were -- infill drilled wells or an existing well produced roughly 100 MCF per day.

Well, if we come in and we drill our infill well and it produces -- has a deliverability of 900 MCF per day, then that proration unit's allowable is -- or proration unit's deliverability is a million a day. And based on the current proposed allowables, that proration unit would only be allowed to produce 500 or so MCF per day.

Well, since the original well already produced 100 MCF per day, then we are only allowed 400 per day to pay off our investment for our infill well. And that's where the problem comes in, is that's too small of a rate for us to economically justify continued development in the Basin Dakota.

Q. Do you know whether or not Phillips still has a demand for the gas to be produced if this adjustment is made?

A. Yes, we do.

Q. You can sell the gas that would be generated from this activity if the allowables increase?

A. Yes.

Q. Have you discussed your proposal with the other two major operators in the pool, Meridian and Amoco?

A. We've contacted Amoco, and they understand our predicament, and they have no objection to our proposed

allowable adjustment. We have not --

Q. Mr. Fraser just testified that he had no objection?

A. (Nods)

Q. All right, sir.

Do you have an explanation as to why the system appears to be ratcheting itself down in terms of the allowable level left for the nonmarginal wells in the Basin Dakota?

A. No, no, I really don't have an explanation for why --

Q. All you can see is the end result of the calculation, is there not enough allowable margin left to do the incentive for the work?

A. There was a very large adjustment in the number of nonmarginal proration units back -- let's see -- I think two proration units ago, where we had -- we had -- Okay, here it is.

In -- For the period 4-93 through 9-93, the number of nonmarginal acreage factors was 259. However, in the subsequent period from 10-93 to 3- -- let's see --10-93 through 3-94, that was reduced from 259 down to 13 nonmarginal proration units, and I'm not sure what the reason for that was, but it has an impact on the calculated allowables.

MR. KELLAHIN: That concludes my examination of Mr. McGovern. We move the introduction of his Exhibits 1 and 2.

CHAIRMAN LEMAY: Without objection, Exhibits 1 and 2 will be admitted into the record.

Questions of Mr. McGovern?

MR. STOVALL: Yes.

CHAIRMAN LEMAY: Mr. Stovall?

EXAMINATION

BY MR. STOVALL:

Q. Mr. McGovern, I think you've hit on a point that the Division is concerned about and aware of. Why has the allowable ratcheted down? With the higher allowables, there are in fact more marginal units, would that be correct, with -- If the higher allowable, more units are going to go marginal?

A. Right, and that's what --

Q. And more of the pool sales is going to come from marginal units?

A. That's right.

Q. And therefore, there's going to be less nonmarginal allowable to divide amongst fewer wells, but it's not a proportion that keeps the level high enough per well; is that -- Would that be a fair assessment?

A. Right.

Q. Let me ask you this question, and I sense -- and this is the kind of question I asked Mr. Morrow -- it sounds to me like what Phillips has done and, I suspect other operators, is, if you've gone in and done some work, and what has happened is that those units in which you've done some work and increased the deliverability have not been brought into the schedules yet, since we're looking at like periods a year ago, and therefore that production really isn't getting cranked into the pool allowable, and therefore you're not really getting credit for wells that are there. Does that sound like a fair assessment?

A. That's true, and the fact that in this particular Basin Dakota Pool, it's such a small percentage, then even if we do produce 12 times the allowable or shut in, it still is going to have a small impact on the 99 percent of the wells that are marginal.

Q. In other words, when the allowables are cranked up, it's an incentive and a disincentive at the same time: It makes more wells marginal, and then because of a lag involved it doesn't allow the units in which you've done the work which you've done because of the incentive of higher allowables, to get the benefit of those higher allowables?

A. That's right.

MR. STOVALL: Okay, I have no further questions.

CHAIRMAN LEMAY: Mr. Stovall.

Additional questions?

Commissioner Carlson?

COMMISSIONER CARLSON: No.

CHAIRMAN LEMAY: Commissioner Weiss?

EXAMINATION

BY COMMISSIONER WEISS:

Q. Yes, on your infill wells, the process involves notification of offset operators to get a drilling permit?

A. I believe it does, but I can't testify to --

Q. So if there were no proration in this pool, these people would have an opportunity at that time to object to whatever?

MR. STOVALL: Commissioner Weiss, let me -- let's stop and make sure you understand the -- that we're answering the same question.

If they go drill an infill well on a Basin Dakota unit that's in a standard location, they don't have to notify offset operators of it, and offset operators do not have an opportunity --

COMMISSIONER WEISS: Oh, so there is a danger of correlative rights then?

MR. STOVALL: There is an issue, and that was the issue I raised before on the proration on infill drilling. It does have some effect, because they can do it just by

getting an APD from --

COMMISSIONER WEISS: Okay, I thought there was a mechanism where offset operators were notified and had an opportunity to --

MR. STOVALL: Not in this particular pool, the rules provide for it.

COMMISSIONER WEISS: Okay. I have no other questions. Thank you.

EXAMINATION

BY CHAIRMAN LEMAY:

Q. Just a couple, Mr. McGovern. I'm assuming that if you drilled last year nine wells, eight of them were infill wells, eight of them were capable of producing, you say, close to a million a day or in that range?

A. Actually, the two -- We've only got two wells that we have got some production information from. One will make about 700 M a day, and the other one will actually make about 350 M a day. So the situation becomes even more important on these lower-rate wells.

If we were able to -- You know, if we were able to drill 2-million-a-day wells, we wouldn't need to have the allowables adjusted. But if these infill wells and in the areas that we're developing, we're looking at 700-to-a-million-a-day wells, and it becomes viable for us to get as much allowable as possible.

Q. In those cases, what was -- The well that was originally there, was it a relatively low-deliverability well, 100 MCF a day or something of that nature? You mentioned --

A. Yes.

Q. -- you had one example. That was it?

A. Right.

Q. Would that be indicative of a relatively tight reservoir and very difficult to keep right in the full proration unit; that's the reason why you're drilling the second one?

A. Right, and that's --

Q. Would that also tend to protect correlative rights, I guess, of offset operators? Because you do have a tight reservoir, and it would be difficult to drain your neighbor's gas if you have a tight reservoir?

A. That's correct.

Q. One more question, a clarification. Is it -- You presented in your Exhibit 2 a ratcheting down of the allowables, but generally the Commission has a policy of basing allowables on what's been produced in previous proration periods.

So is it your testimony that you would like the increased allowable not so much because your wells have produced it and need it, but because you need it as an

incentive for additional wells or as a -- I guess you have these wells that are going to come out of production, and they will, in turn, eventually get the production graphed up there so we can assign the allowables. You're speeding up that process, are you?

A. That's right. It's a -- That's correct, and this impacts wells that we drilled last -- basically drilled last year, so they are going to be subject to the allowables through this summer. And in these drilling projects payout comes in the early times, and we need to make sure that we can produce as much as possible through the first few years.

Q. But ultimately the system would probably account for that production, you get higher allowables, but you would just be playing catch-up on the allowables, you would have some curtailed production in the meantime, I take it. That would be the --

A. Right, that's right.

Q. -- the reason for the request?

A. Right, that should work that way.

CHAIRMAN LEMAY: Have you got another question, Commissioner Weiss?

FURTHER EXAMINATION

BY COMMISSIONER WEISS:

Q. Yeah, I have one basic one. I'm not sure, since

you're new to this business...

Has anybody talked about deprorating this pool?

A. Within Phillips?

Q. Yes, within Phillips, and other operators in the pool. Has there been any discussion?

A. Yes.

MR. KELLAHIN: Prior to Mr. McGovern's involvement, Commissioner Weiss, we've discussed this *ad infinitum*. The difficulty is the notice obligations to the thousands and thousands of interest owners, both royalty, override and working, that share in Dakota production.

It would overwhelm the resources of any of the operators to comply with the notice obligations to deprorate the pool, and so that has not been an option that we thought we could execute.

COMMISSIONER WEISS: So the operators in the northwest in these large pools are in favor of continued proration?

MR. KELLAHIN: Well, I think what we'll have seen is the assignment of additional allowable has let the system fluctuate, and the system itself has enough flexibility in it that as you add adjustments the allowables to go up, and these wells can produce, then, to meet market demand.

And so you can adjust the system that exists, get

to the same point as you would if you simply deprorated.

Q. (By Commissioner Weiss) Do you have any other --

A. No.

COMMISSIONER WEISS: Thank you.

CHAIRMAN LEMAY: Any other questions?

If not, the witness may be excused. Thank you very much, Mr. McGovern.

Let's take a 15-minute break, and we'll come back.

(Thereupon, a recess was taken at 10:28 a.m.)

(The following proceedings had at 10:50 a.m.)

CHAIRMAN LEMAY: We can resume. Mr. Carr?

MR. CARR: May it please the Commission, before we leave the San Juan Basin, I'd like to make a brief statement on behalf of Amoco.

As Mr. McGovern indicated in his testimony, Amoco does not oppose an adjustment in the allowable for the Basin Dakota Pool. Amoco did elect, however, not to present testimony here today because after reviewing -- You may all be lucky, I may lose my voice. After reviewing the preliminary numbers, Amoco concluded that by and large they were reasonable numbers upon which the prorationing system in the San Juan Basin could be based for the next proration period. That's why they did not present testimony here today.

And if you're ready to go to southeastern New Mexico, initially I would like to call a Chevron witness.

CHAIRMAN LEMAY: Let me just make -- Before we go to southeast New Mexico, is there anyone else that has any statements to give or comments to make on allowables in northwest New Mexico?

Okay, fine, Mr. Carr, let's go on to southeast New Mexico.

MR. CARR: At this time I'd like to call Robert E. Green to provide some general testimony on the gas market.

ROBERT E. GREEN,

the witness herein, after having been first duly sworn upon his oath, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. CARR:

Q. Would you state your name for the record, please?

A. Robert E. Green.

Q. Where do you reside?

A. I reside in Midland, Texas, and work for Chevron USA Production Company.

Q. And what is your current job with Chevron USA?

A. I'm a natural gas coordinator for southeast New Mexico.

Q. What are your duties as natural gas coordinator?

A. As a natural gas coordinator, I supervise a group of people that forecast our available gas for sale, nomination and confirmation and the delivery of that gas into the first transport. Additionally, I coordinate or negotiate the sale of natural gas, both the short-term spot market and longer-term gathering and processing agreements.

Q. And how long have you held this position?

A. I've been in this particular position for two years.

Q. And before that, how long were you employed in the oil and gas industry?

A. I've been in the natural gas part of the company since 1981.

Q. Now, Mr. Green, you've previously testified at allowable hearings and had your expertise in the area of gas marketing accepted and made a matter of record by this Commission, have you not?

A. Yes, that's correct.

Q. And you are also a registered professional engineer?

A. Yes, that's correct.

Q. Have you prepared certain exhibits for presentation here today?

A. Yes, I have.

MR. CARR: Are the witness's qualifications

acceptable?

CHAIRMAN LEMAY: They're acceptable, yes.

Q. (By Mr. Carr) Initially, Mr. Green, I think it would be helpful if you could provide just a general overview of how Chevron sees the market for New Mexico natural gas from southeastern New Mexico.

A. As I had said in February of 1993 before this Commission, Chevron is bullish on natural gas; Chevron is still bullish on natural gas today.

The natural gas market in the United States remains strong, and it's a vital part of the petroleum industry. Chevron has maintained its multiple market accessibility for New Mexico gas supplies and continues to move New Mexico gas to markets in the Midwest, Gulf Coast and east of the Mississippi River, as well as some gas still to California markets.

Q. Let's go to what has been marked as Chevron Exhibit Number 1. Would you identify this and review it for the Commission, please?

A. Chevron Exhibit 1 is an exhibit, a caricature of the different natural gas pipelines that Chevron uses to transport gas from New Mexico to our consumer markets.

A few years ago, most of the producers, and Chevron included, were contracted to a single particular pipeline. That producer's gas flowed into that pipeline in

accordance with that particular pipeline's market demand.

Consequently, there was always seasonal swing from winter to spring, summer and fall. Some clients had peak loads in the summer and some had peak loads in the winter.

Under today's operations with Chevron, we're no longer locked into a particular pipeline or a particular market area. Chevron has worked very hard to develop transportation agility, moving gas down different pipelines to reach the best market for our gas. Therefore, through a series of front-haul, back-haul, cross-haul and interconnect agreements, we can move our gas from New Mexico to almost any market in the continental United States.

This transportation agility, along with our current conditions under the FERC deregulation, has virtually eliminated seasonal swings for our New Mexico gas supplies.

Q. Let's go now to Exhibit Number 2. What is this?

A. Exhibit 2 is a three-year plot of the spot market price on the El Paso Natural Gas Pipeline. As you can see, it illustrates the volatile of pricing that we see from month to month.

I would, however, like to point out that over the last three years we have seen a steady 12-1/2-percent-per-

year growth in that natural gas price, as illustrated by the straight line across from February of 1991 to February of 1994. While this is only one pipeline, it does represent the general market trend throughout the natural gas market.

Q. And this is indicative of the market -- natural gas from the Permian Basin?

A. Yes, it is. The growth that we've seen in prices and the volatility in prices is indicative of all of our gas in the Permian Basin and in southeast New Mexico.

Our experience, however, has been that our Midwest, our Gulf Coast and our eastern markets are stronger and more reliable at this time than our California markets are.

Q. Mr. Green, what conclusions has Chevron been able to reach about the future of the gas market for gas produced in southeastern New Mexico?

A. Well, Chevron, along with some of our other resources that we look at and the energy administration, predicts that the United States' natural gas market will grow this year by some 3.7 percent in all four sectors of the industrial, residential, utility and commercial customers.

And Chevron's market forecast for New Mexico gas production sees the need to continue our production

allowables at the current winter rates.

With this market strength, we want New Mexico natural gas reserves to participate in the opportunity and not be displaced by other gas.

Chevron requests that the Commission consider our market for gas in lieu of the now defunct pipeline market forecast when setting allowables and not restrict New Mexico production from the market.

Q. Mr. Green, these conclusions would be applicable to the Eumont Gas Pool?

A. Yes, they are applicable to the Eumont Gas Pool, as well as all of our gas production from southeast New Mexico.

Q. And were Exhibits 1 and 2 prepared by you?

A. Yes, they were.

MR. CARR: At this time, may it please the Commission, we move the admission into evidence of Chevron Exhibits 1 and 2.

CHAIRMAN LEMAY: Without objection, Exhibits 1 and 2 will be admitted into the record.

MR. CARR: That concludes my examination of Mr. Green.

CHAIRMAN LEMAY: Thank you, Mr. Carr. Questions of Mr. Green? Gary?

COMMISSIONER CARLSON: No.

CHAIRMAN LEMAY: Bill?

COMMISSIONER WEISS: I have no questions, thank you.

CHAIRMAN LEMAY: I might have one, just a quick one here.

EXAMINATION

BY CHAIRMAN LEMAY:

Q. When you mentioned that you do have markets for your gas and so forth, you had some terms there. I understand what a forward haul is and a back-haul. I'm not sure I know what a cross-haul is. Can you tell me what a cross-haul is?

A. Well, we have some cross-haul agreements with pipelines that -- We're moving across that pipeline from one -- from -- I don't know how I want to discuss this part.

Q. You can speak generically. I've just never heard the term "cross-haul".

A. "Cross-haul" means you're moving across the pipeline and -- You're just using it as an interconnect between two other pipelines.

Q. That's like making a little hub out of it there? You wheel the gas around the pipeline to other pipeline that --

A. No, it's not a hub but it's more -- you're moving

-- You may be moving up one pipeline, and you move across another pipeline and then into a third pipeline.

Q. I see. I think I understand that.

A. For an example, I guess, if you were moving up Northern Natural Gas into their core area, and you needed to get that gas across the Mississippi, you would cross-haul on a different pipeline that was connected to Northern and then connected to the other pipeline that you had interest in, to take the gas to, say, Washington DC, for example.

Q. I see, which is mainly by displacement like a back-haul would be? The gas doesn't physically move that way, but it's credited?

A. Yeah, in some cases we're actually physically moving the gas. It can be by displacement, credit or by physical motion.

CHAIRMAN LEMAY: Well, thank you for educating this Commissioner.

THE WITNESS: All right sir.

CHAIRMAN LEMAY: Are there any other questions? If not, you may be excused. Thank you, Mr. Green.

THE WITNESS: Thank you.

CHAIRMAN LEMAY: We're ready to go into southeast, are we? Mr. Kellahin, I think Mr. Carr is waiting on you. I think maybe --

MR. KELLAHIN: Well, I'm not sure --

CHAIRMAN LEMAY: -- he wants you to take the lead. I don't --

MR. KELLAHIN: He must see a pothole ahead somewhere.

CHAIRMAN LEMAY: I don't see it either. But he's comfortable so...

MR. KELLAHIN: We have presentations on the Eumont Pool, Indian Basin, and that's all that I have.

MR. CARR: That's all that I have also, and it seems to me that the testimony on the Eumont will certainly be the longest testimony. Jim has --

CHAIRMAN LEMAY: Jim, you have what?

MR. BRUCE: I have a brief testimony on the Tubb, which --

CHAIRMAN LEMAY: The Tubb?

MR. BRUCE: -- can wait until the end.

CHAIRMAN LEMAY: Okay.

MR. CARR: I believe the Eumont Pool is by far the most lengthy presentation. It might be appropriate to go with that first.

CHAIRMAN LEMAY: Okay, let's get the Eumont out of the way, then. We'll start with Eumont.

MR. KELLAHIN: Mr. Chairman, we'd like to put the Conoco presentation on first in the Eumont.

CHAIRMAN LEMAY: Okay.

MR. KELLAHIN: I'll call my first witness.

DAMIAN BARRETT,

the witness herein, after having been first duly sworn upon his oath, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q. Would you please state your name and occupation?

A. I'm Damian Barrett, and I work for Conoco. I'm a reservoir engineer for them in the Midland office.

Q. Mr. Barrett, on prior occasions have you testified as a petroleum engineer before the Division?

A. Yes, have.

Q. What is your particular function with regards to this Application before the Commission?

A. Like I said, I'm a reservoir engineer. I'm working southeast New Mexico where we have a significant interest in the Eumont Pool, and we are working on projects in that area.

Q. Have you made a study of the allowable system insofar as it affects the allowables assigned to the Eumont Gas Pool?

A. Yes, I have.

Q. And based upon that study, do you have recommendations to the Commission concerning how to adjust

the preliminary schedule in that pool?

A. Yes, I do.

MR. KELLAHIN: We tender Mr. Barrett as an expert witness.

CHAIRMAN LEMAY: His qualifications are acceptable.

Q. (By Mr. Kellahin) Mr. Barrett, let's tell the Commission where you're going, and then we'll try to get there.

A. Okay.

Q. But what is your ultimate conclusion and recommendation?

A. The ultimate conclusion is that we have significant work projected for 1994 and even beyond that we are proposing to do, and with that should add significant reserves, along with that, and in order to do that work we need the extra economic incentive to increase the allowable.

Q. It helps me understand the adjustments if I can deal in MCFs of gas a day for a nonmarginal GPU. What's the number you want to get to?

A. 952 MCF per day.

Q. What is the current nonmarginal GPU in your pool for the allowable period we're in now, this winter period? What do you get?

A. 952.

Q. And what did you get last summer?

A. The same.

Q. Okay. And you propose the same number again --

A. Correct.

Q. -- for the summer of 1994?

A. Correct.

Q. All right. In order to get to that point, do you have a schedule that shows where to put all the right numbers so that the calculation comes out right?

A. Yes, I do.

Q. All right. Let's turn to Exhibit 1, then, have you show us how you've organized your spreadsheet, and then get down to the bottom row, which is your proposal.

A. Okay. This is the market demand and allowable determination schedule, as it was given to us. This is -- What we've done is put in the previous five periods that you see in there, with the numbers that the Commission has given to us. We have the preliminary schedule that the OCD has for 4-94 to 9-94, and then we have the Conoco-proposed schedule.

Q. To get to the 952 MCF of gas per day for the daily F1 factor, if you will, what is the pool adjustment that you're requesting?

A. The pool adjustment is 246,214 MCF per month.

Q. Now, that calculation will work provided the nonmarginal acreage factors, the 22.6, does not materially change?

A. That's correct.

Q. Do you forecast any material change in the nonmarginal GPU acreage factors?

A. Not at this time.

Q. All right, sir. Let's go now to Exhibit 2. Your display is in two parts. Let's look at the top half of Exhibit 2 first. What are you showing?

A. Can I just make one statement --

Q. Yes, sir.

A. -- that in the previous table on Exhibit 1, I've got highlighted and bolded two columns there, one in the middle and one at the end. Those numbers are the MCF per day rates that I will be discussing in the top portion of the graph on Exhibit Number 2.

Q. All right. Those two bold columns are additions to the spreadsheet that the Division use when they prepare their preliminary schedule?

A. That is correct.

Q. And one is taking it and reducing the pool monthly allowable to a day MCF number?

A. That's correct.

Q. And the other one is the F1 daily factor?

A. Correct.

Q. All right.

A. All right, in Exhibit 2 what we're -- The top portion of this, we're looking at the MCF-per-day rate on the vertical axis and time on the horizontal axis. In red we're seeing the pool production as it has occurred since 1992, up to November of 1993. Those are the numbers that we have.

And then you'll see there are two circles there in red that are the pool forecast with Conoco additions only, for production.

The blue line is the F1 factor and an MCF-per-day rate, and with its daily F1 factor below it, the daily rate below it, and those are the numbers that have taken place for the several past periods, like I mentioned on the previous table.

Q. All right. Let's take the blue line which is the allowable --

A. Uh-huh.

Q. -- and track it or make a comparison with pool production.

A. Okay.

Q. What do you see?

A. With that, each period, the Eumont Pool has been overproduced, as shown by the red production curve. We

have overproduced the blue allowable line.

Q. Historically, then, have the operators in the pool been utilizing the allowable assigned to that pool?

A. Yes, they have.

Q. Let's look at the point in time where on the right margin of the red hashed area, we're at the present, forecast for us what you see will be the pool's use of the allowable.

A. Okay. Like I mentioned, that is the full -- the pool production as it was left off in November of 1993. We're forecasting the additional work that Conoco has done, and those are the additions, the adjustment that we have asked for, for the continual pool production.

Q. So on a poolwide basis, we can see that the operators are utilizing the allowable?

A. Correct.

Q. Let's look at the bottom half of Exhibit 2 and have you explain to us what we're seeing there.

A. Okay, this is again another production plot of Conoco's production only in the Eumont Pool. The green line is showing that production.

In -- Late in 1993, we started doing some work, as is shown there, 16 workovers, four new wells, and the associated increase in production in green there, with that work.

What we're showing in 1994 is 14 workovers and six new wells in 1994, and the green dots are showing that increased production due to that work.

Q. Let's start lower down on the graph with the 1993 work.

A. Uh-huh.

Q. You have 16 workovers and four new drills?

A. Uh-huh.

Q. What was the reason for doing that work?

A. The reason for doing that work was because the base allowable was at 600 MCF a day, which was the initial incentive to be able to do some of this work. We also are under the 952-MCF-a-day daily allowable to go ahead and do incrementally a little bit more work.

Q. The difference -- The 352 a day, was that sufficient allowable margin to allow you to do the 1993 work?

A. Yes, it was.

Q. The economics of doing that work were forecasted on the hope that at least the 952 would continue for subsequent proration periods?

A. That's correct.

Q. When you look at the forecast for the 1994 work, work yet to be done, when we look at maintaining at last an allowable level of 952, is all 14 workovers and four new

drills economic at that allowable level?

A. Six new drills. And yes, that's correct.

Q. What happens to that work forecast if the allowable is set at the minimum allowable of 600 MCF a day?

A. If it's set at a minimum of 600, four of the new drills will drop out and a minimum of two workovers will not be done.

And along with that, just on new work, we will also have to curtail our production. And that's what the second line down there is showing: We'll continue to do some work, but we'll also have some curtailment of the production we have currently.

Q. Your circumstance is similar to the workover program that Phillips has got in the Basin Dakota, isn't it?

A. That's correct.

Q. You're in the same kind of predicament, are you not?

A. That's correct.

Q. Let's go to Exhibit 3. Identify for us what we're seeing on Exhibit 3.

A. Exhibit 3 is a -- This is the production that we have currently on line. It was based on the 952 MCF a day. This is where we did some of this work.

These wells are currently producing at a 952-MCF-

a-day allowable or greater. And what it's showing is that if we do have a reduction in the proposed allowable, that we will have to curtail production.

Q. All right. Just to keep it straight, Eumont Gas Pool is 640 gas spacing, but you get one acreage factor per 160?

A. That's correct.

Q. And so that's the fraction here? You're dealing with multiples or portions of 160s to get an acreage factor of one?

A. That's correct.

Q. Let's turn now to Exhibit 4. In the first column on the left, what does each row identify?

A. These -- The first column are the different drilling wells that we have proposed for 1994. Those are the drilling wells that we have proposed.

Q. Have you analyzed these individually to verify for the Commission your statement a while ago that four of those six are at risk if the allowable adjustment is not made?

A. That's correct.

Q. All right. Let's have you help us understand how to read the display.

A. Okay.

Q. Second column on the right is the first line of

numbers. What are those rates?

A. Those rates are what we have determined that the particular locations that we have chosen are capable -- those wells are capable of producing those rates.

Q. All right. The third column is a calculation based upon the available allowable, if the Commission adjusts it to the 952-a-day number, right?

A. That's correct.

Q. Under each of those examples, then, is the well economic to drill?

A. Yes, it is, every one of them.

Q. The fourth column over is an economic projection based upon the allowable available to you, if it's left at 600 a day?

A. That's correct.

Q. So within a given GPU for the first row, the Number 14 well, you have enough allowable margin left that's not currently being assigned to wells of 644 MCF a day?

A. That's correct.

Q. Is that enough incentive to drill that well?

A. Yes, that is.

Q. Go down the rows and show us what happens.

A. Okay. With that, the second well, the State J 2 Number 15, will no longer have any remaining allowable to

be produced at. Therefore, we cannot drill that well.

Q. You'd do the work and couldn't produce it?

A. That's correct.

Q. All right.

A. So therefore we wouldn't do the work. The Meyer B 4 Number 30, with only 200 MCF a day remaining allowable, at the 600-MCF-a-day-allowable rate, we could not economically drill that well either.

Q. Your margin for an allowable assigned to the Number 30 well is only 200?

A. That's correct.

Q. Okay, go ahead.

A. Okay, with the Monterey 1 Number 21 we have 386 MCF, and that is an economic rate to go ahead and drill that well.

And then the other two wells, again, are below an economic rate that we could drill those wells.

Q. Okay. So the Commission can visualize what the operators are doing in the Eumont Pool, have you provided an illustration in the next series of displays to let us see how an operator or several operators within a section would handle the allowable?

A. Yes, we have.

Q. Let's turn and look at Section 20 within the pool and look at Exhibit 5. This is simply a locator map?

A. Yes.

Q. What are we seeing?

A. We're just seeing a full section of 640 acres that Conoco has 320 acres and Citation Oil has 320 acres, with the wells located on this map, the dates that they were brought on line, and either a cumulative production below the line or a current rate.

Q. Okay. The section gets developed with initial wells in the section. Let's turn to Exhibit 6 and pick up a point in time, say in -- early in 1991. Within Section 20, how many producing wells do you have within this GPU?

A. We have two wells.

Q. The Number 5 and the Number 6?

A. Uh-huh.

Q. Okay, what happens?

A. Those wells are producing below the unit allowable at that time.

Q. The unit allowable is the blue line?

A. Correct.

Q. Okay. There's a differential between the allowable and the 5 and 6 capacity to produce gas?

A. That's correct.

Q. So you have under-utilized allowable?

A. That's correct.

Q. What did you do?

A. With that, we decided that we could go ahead and recomplete the Number 7 in 1993, which we did, and again that was during the time period that the allowable was increased, and we were able to maintain that increased allowable. And that further led to more recompletion work early in 1994 under the 952-MCF-a-day allowable.

Q. Okay, this GPU now has got -- four? Did I count right?

A. Correct.

Q. We've got four wells in the section. Let's go to the dashed part of the blue line. If the Commission reduces the GPU allowable on the F1 factor to 600 a day, what's going to happen?

A. We'll have to curtail production on this GPU.

Q. If we continue to maintain the F1 factor at 952, what happens?

A. We will be able to maintain that production.

Q. All right, let's turn to Number 7. Have you prepared an economic analysis, Mr. Barrett, to show the consequence of a change in allowable based upon recompletion work of an example in the field?

A. Yes, we have.

Q. Show us what we're seeing.

A. This is the same lease, the State C 20. We're looking at the Number 2 well. The current lease production

as of 12-93 is 1675 MCF per day.

To do the work on the C 20 Number 2, it would cost us $230,000. Under the current allowable of 952 MCF per day, our economic incentive there was 229 MCF a day, which would pay out in roughly 1.57 years.

The proposed allowable of 600 MCF a day would not give us any economic incentive at all to do this work. We would not have done this work.

Q. As an engineer, have you made a study to determine whether or not you're adding additional ultimate recovery of gas from the section, as opposed to simply accelerating the rate of recovery of the same volume of gas?

A. Yes, I have.

Q. And what was the conclusion?

A. The conclusion is that we are not accelerating recovery; we are indeed adding additional reserves.

Q. Okay. Do you have a display that illustrates that?

A. Yes, I do.

Q. Exhibit 8, what are we seeing?

A. Again, we're seeing the same location map that we saw previously, with the same information on it, basically.

Q. Okay. Exhibit 9?

A. Right here we have a rate-versus-cum production

plot of the daily rate on the vertical axis, cum production on the horizontal axis, with our production from the different wells at their different time periods.

Q. All right. Dealing with an entire section in 1975, there is the Number 6 well?

A. Correct.

Q. And you have forecasted an ultimate recovery from the section, and what do you get? When you read the horizontal axis at the bottom, what was the forecast?

A. Well, whenever we originally had Wells 1 and 5 on for just a 320-acre spacing, the ultimate recovery was 21.6 BCF.

Q. All right. That predates the Number 6 then?

A. Correct. And then when we brought on the Number 6 well, it brought this down to a 213-acre spacing, and our projected ultimate recovery was 31 BCF, which was 9 BCF over what we had with just the two wells.

Q. Continue reading the display, then. As you continue to add wells, what has happened to your projections of ultimate gas recovery from the section?

A. Each time that we have added wells to this particular section, the recovery has increased. We went from a 213-acre spacing down to a 107-acre spacing with a total of six wells, incrementally three more wells from the previous curve, and are going to recover another 4 BCF of

gas for that.

Q. Is the 952 so high that it's going to result in the drilling of unnecessary wells?

A. No, it's not.

Q. This continues, then, to be an incentive for you to improve ultimate recovery from the sections?

A. That's correct.

Q. Does that appear to be true for other sections, apart from Section 20?

A. It sure is.

Q. And you have subsequent displays that show that?

A. I do.

Q. Without describing them in detail, identify for the record the other sections that you've looked at.

A. Okay. The other one is Section 34, Township 21 South, Range 36 East. That is on Exhibit Number 10.

And then with the preceding production graph on that, Section 12 -- I'm sorry, Exhibit Number 12, which shows Section 35 in Township 21 South, Range 36 East, is another example with this production graph following that as well, all showing basically the same thing.

Q. Does Conoco have a market for this gas that's being generated by the additional allowable?

A. Yes, we do. Currently we are even going out for competitive bidding to get the highest price for our gas.

Q. Have you discussed this proposed allowable level with the other operators in the pool?

A. Yes, we have.

Q. With what result?

A. Everybody is in agreement.

Q. To request a continuation of the 952?

A. That's correct.

Q. Summarize for us your conclusions.

A. My conclusions are that if we are not allowed to increase this 952 MCF-a-day allowable, that we will have to severely cut back on our proposed work, as well as curtail production on leases that we've already done some work.

So with that, we would like to see the allowable increased to 952 MCF per day to allow continued production and not to have to curtail any of our production.

MR. KELLAHIN: Thank you, Mr. Barrett.

That concludes my examination of Mr. Barrett. We would move the introduction of his Exhibits 1 through 13.

CHAIRMAN LEMAY: Without objection, Exhibits 1 through 13 will be admitted into the record.

Questions of the witness?

EXAMINATION

BY MR. STOVALL:

Q. I'll do briefly what I did before, just to make sure we all agree since we're now in a different pool.

Were you here for my questions for the Phillips witness?

A. Yes, I was.

Q. And the thrust of that was that it appears that the reason the allowables are ratcheted downward is because more wells become marginal, fewer nonmarginal wells, and the new ones that you're developing have not yet gotten into the system?

A. That's correct.

Q. You'd agree with that?

A. Yes, I would

Q. And so what worked two years ago to get this production up has now declined, and now it's time to do some more, and so you'd like to keep it there; is that correct?

A. That's correct.

MR. STOVALL: I have nothing further.

CHAIRMAN LEMAY: Thank you, Mr. Stovall.

Additional questions? Mr. Kellahin?

FURTHER EXAMINATION

BY MR. KELLAHIN:

Q. Mr. Barrett, it's not simply a function of being a temporary lag in the system, is it?

A. Well, no, that's true. Basically we've had a 952-MCF-per-day six-month allowable. We based some of our

work on that current, at that time, allowable. And that's what we went ahead and did some of that work on.

But along with that, also, some of our work is lagging in the system, which would help also. So I think it impacts us both ways.

Q. Is it a correct characterization to say that the ratcheting down of the allowable can be attributed to the fact that as the allowable has been increased, more wells go marginal, and therefore you have a very small number of nonmarginal GPUs -- Even if you produced it at six times over, you don't have enough capacity in those nonmarginal wells to drive the pool allowable up?

A. That's correct.

Q. You need a permanent solution in terms of an allowable, rather than simply a temporary flux in the calculation?

A. That would help.

MR. KELLAHIN: All right, sir.

CHAIRMAN LEMAY: Thank you.

Questions? Gary?

COMMISSIONER CARLSON: Yeah.

EXAMINATION

BY COMMISSIONER CARLSON:

Q. If we go to your Exhibit Number 1 -- and I guess, from what I understand from your Exhibit Number 2, if we're

looking at -- I think you stated that Exhibit Number 2 shows that the pool has produced over the allowable. But as Mr. Kellahin just said, a lot of that is due to nonmarginal -- or to marginal production.

If the nonmarginal wells had produced over the allowable, by the OCD's method of doing this, your allowable would have increased this time; is that correct?

That doesn't make any sense?

A. You might need to restate that.

Q. Well, I look on the number of nonmarginal acreage factors on Exhibit 1. For the last year, summer season, there was 1975. This time we have 22.6. So we have increased the number of nonmarginal acreage factors.

Yet -- and according to your Exhibit Number 2, the total production for the pool has exceeded the allowable; is that correct?

A. Uh-huh.

Q. My question is, though, isn't the overproduction shown on Exhibit 2 due to the marginal wells? And if your nonmarginal wells had exceeded the allowables, the way this system works, your allowable would in fact be higher this time?

A. Yes, if I -- I think I'm understanding you correctly. The nonmarginal wells -- Let's see. Since the allowable was increased to 952, those wells that were at

600 -- or less than 952 were marginal. And so they could have been increased somewhat, and -- bringing us closer to the allowable, and then just a few nonmarginal wells would take us over. Does that make sense? Is that your question?

Q. Well, you know, we went from -- The Division went from an allowable of 952 to a recommended allowable this time of 600. That shows to me that -- except for what I see on Exhibit 2, that the production had not exceeded the allowables; that's why it went down. Yet according to your Exhibit Number 2, the production had in fact exceeded the allowables.

But that -- The fact that the allowables have been exceeded is due to marginal production rather than nonmarginal.

In other words your nonmarginal wells aren't producing the allowable; otherwise your allowable would have increased. Isn't that correct?

A. I don't think so. I think the nonmarginal wells are producing above the allowable. I think what we're seeing there, starting in about July of 1993 -- I know for Conoco, we started a lot of work at that point in time, which has caused that production to increase. And I think that's where we get back to the point that some of that is not into the system yet.

Q. New wells?

A. New wells.

Q. So this -- the increase in nonmarginal acreage factors from 1975 to 22.6, is that due to new wells?

A. Speaking from Conoco's point of view, yes, that could very well be, because I do know we have some nonmarginal wells.

COMMISSIONER CARLSON: Maybe I'm asking the wrong guy.

Jim is -- Why have the nonmarginal acreage factors for that pool increased?

MR. STOVALL: Maybe I could do that, Commissioner Carlson, because I think I know where you're going, and I can usually confirm what I'm saying.

In some of those wells -- The classification period is three months, the proration period is six months. A well might come on, say, in the latter half of last summery, and would show up as a -- and within three months or even over the winter period, might push up the allowable -- or push up its production, go nonmarginal, these new wells that I've talked about lagging.

They would then come in as a nonmarginal acreage factor, yet their production would not have been shown in the April-to-September production last year because they didn't have production for all or most of the period. Is

that making sense to you?

In other words, they could reclassify to nonmarginal without having their production get into the numbers. And when you look at -- There's a graph on Exhibit 2. Those -- Where his red line goes above the allowable is after that period.

So it's not showing up in the number that's appearing for 4-93 through 9-93 in terms of total production. Yet the effect of those wells is showing up in the number of nonmarginal acreage factor column.

So they're getting to -- In other words, what they're getting to do is, because they're nonmarginal, they're having to share this production they didn't contribute to, which would have raised up that production during that period, had they been on line during that period.

MR. MORROW: Or maybe they contributed one month and you divide that by six --

COMMISSIONER CARLSON: Right.

MR. MORROW: -- and it doesn't have any effect.

COMMISSIONER CARLSON: Right. Okay, yeah. That explains it.

THE WITNESS: I think I may have stated something unclearly also on that second exhibit. The red portion there that there are red circles there --

COMMISSIONER CARLSON: Uh-huh.

THE WITNESS: -- those are actual production numbers. I think I may have misstated that before. Those are actual production numbers. So we know we've gone above with that.

Also, to add further to that, if you look at Exhibit Number 3, Exhibit Number 3 is production that is on line right now on the State C 20. It -- Some of that work was done January of 1994.

So absolutely, those numbers are not in the monthly production. That is new production that we already have seen, that is nonmarginal.

MR. STOVALL: Commissioner Carlson and Commission, I'd like to point out something else about the Eumont Pool that's unique; I think maybe Jalmat shares a little bit with it.

In most of the other pools that you look at, there's a standard proration unit which -- 90 percent of the GPUs have a marginal factor -- have an acreage factor of 1.

In the Eumont, and also the Jalmat to a large extent, the size of the proration unit varies from 40 to 640, and the number of wells is widely divergent. It's not like, say, Basin Dakota where you've got two wells on a 320. Here you may have three wells on a 40 and two wells

on a 640, type of thing.

So it's a -- When you look at that 2260, you don't assume there are 22.6 F1 -- or acreage-factor-of-one wells. I mean, there's a lot of fractions above and below one that go into that. It's a much more complicated pool as far as proration, what's going on there.

COMMISSIONER CARLSON: What is the proration unit for the pool as set by the pool rules?

MR. STOVALL: An acreage factor -- Well, I think, if my recollection is correct, the standard proration unit is 640. The witness -- Can you confirm that?

THE WITNESS: Correct.

MR. STOVALL: An acreage factor of one, I believe, is 160.

THE WITNESS: That's correct.

MR. STOVALL: So it's a real strange deal. In another pool -- Like, say, Indian Basin: It's a 640 pool with an acreage factor of one to 640.

COMMISSIONER CARLSON: Uh-huh.

MR. STOVALL: Here it's a 640 pool with an acreage factor of one to 160.

So when you start looking at the actual wells, it becomes much more complicated, and so it's harder to figure out what's happened.

Believe me, we know it's harder to figure out

what happened.

COMMISSIONER CARLSON: Yeah, it does...

Q. (By Commissioner Carlson) Okay, I have one more question that probably further shows my stupidity, but on your Exhibit Number 7 when you show the economics of -- I guess this is Well Number 2. The lease production in the top portion there of 1675 MCF per day, that's out of the three, I guess, existing wells, right?

A. Correct.

Q. And then if you recomplete the Number 2, you would get an additional 1904 MCF per day?

A. No, you get an additional 229 MCF per day.

COMMISSIONER CARLSON: Okay. I guess -- I think I understand that.

MR. KELLAHIN: That's a function of the --

COMMISSIONER CARLSON: Yeah.

MR. KELLAHIN: -- 320.

Q. (By Commissioner Carlson) Right. The 952 times 2 is the total allowable for that 320?

A. That's correct.

COMMISSIONER CARLSON: All right, it sinks in now. Thank you.

CHAIRMAN LEMAY: Not one of our easier pools.

COMMISSIONER CARLSON: Right. I have no other questions. Thanks.

CHAIRMAN LEMAY: Commissioner Weiss?

COMMISSIONER WEISS: Yeah, I have one on the same exhibit.

EXAMINATION

BY COMMISSIONER WEISS:

Q. The Number 2 well that you -- that's proposed as a recompletion, has it produced out of this pool before, or is it from someplace else or -- I don't understand it.

A. No, the Number 2 well was to a deeper horizon, and right offhand I don't remember which horizon that was. But we are recompleting it to this pool.

Q. Okay. So it didn't have anything to do with the Eumont Gas Pool?

A. That's correct.

And just to add further to that, this was a recompletion to this pool. We had upper pay that's down in the bottom of this exhibit, that we could have opened up, that we didn't because we knew we were going to be even above the 952-a-day allowable.

So there is even more reserves and pay to go after in this particular well.

COMMISSIONER WEISS: Okay, thank you.

EXAMINATION

BY CHAIRMAN LEMAY:

Q. I think I understand what the economics are, but

correct me or please comment on it.

It's economic to recomplete a well; it's not economic to drill to capture that unused allowable within a proration unit?

A. That's correct.

Q. So as you complete wells, I'm real curious on your adding reserves per additional well completed in the 640. Can you get to some point that you're still adding where you've got wells on 40-acre spacing? Have you projected that out to where there's an economic limit to how many wells you should be basically drilling in this field, on 640s?

A. Yes, we actually have one that we have a well on a 40-acre proration unit. That was going to add to it earlier. That's the only one that we have.

We'll have to be very careful before doing that, and that's why we feel the 952-MCF-a-day allowable now is acceptable. We don't want to see it get too carried away in drilling up to --

Q. Yeah, the gist of my question is, will you be coming here for adding additional allowables as you drill up the 640-acre proration unit or recomplete it on a 40-acre spacing pattern?

A. That -- probably not. That's hard to say, I guess.

Q. Okay. I just wonder where we're going in this field. The -- Evidently it's economic with the price of gas and -- to recomplete at least -- You're down to 96-acre patterns that add reserves on a recompletion, and you're saying that the 952 per -- I guess per 160, will allow you to continue this type of development?

A. That's correct.

Q. So the allowable is as much an incentive -- like the other allowable-increase requests -- as much an incentive for additional development as anything else?

A. Yes, it is.

And what I meant to say, I guess, earlier was that we're going to be more careful to not go beyond that, because then you start bringing in risk that you may not have as many successful projects. So that's why we're going to be more careful in our development.

Q. I see. And right now it makes sense for you on recompletion but not necessarily on new drills?

A. Well, it does on both if -- you know, under the 952.

CHAIRMAN LEMAY: That's all the questions I have.

Additional questions of the witness?

FURTHER EXAMINATION

BY MR. KELLAHIN:

Q. One follow-up question on how Conoco operates the

available six-times-over rule.

This pool and the other pools in southeastern New Mexico, you're allowed the flexibility to overproduce the allowable by as many as six times, and then to subsequently balance. What do you do about that?

A. Currently, we are not overproducing the six times because what we've seen in this Eumont Pool, at least from our viewpoint, is that if you were to overproduce and then shut wells in, we'd have problems getting them back on the line. So we feel it's best, as far as from a completion standpoint, to go ahead and produce these at the allowable and not overproduce them so we don't have to shut them in.

MR. KELLAHIN: I have no further questions.

CHAIRMAN LEMAY: Thank you. Additional questions? The witness may be excused.

More on Eumont? Mr. Carr?

MR. CARR: May it please the Commission, at this time I would call Mr. Al Bohling to testify on the Eumont for Chevron.

AL W. BOHLING,

the witness herein, after having been first duly sworn upon his oath, was examined and testified as follows:

DIRECT EXAMINATION

BY MR CARR:

Q. Would you state your name for the record, please?

A. My name is Al W. Bohling.

Q. By whom are you employed?

A. Chevron USA.

Q. And what is your current position with Chevron?

A. I'm a petroleum engineer.

Q. Mr. Bohling, have you previously testified before this Commission and had your credentials as an expert in petroleum engineering accepted and made a matter of record?

A. Yes, I have.

Q. Have you testified in previous allowable hearings concerning the allowable figures for the Eumont Gas Pool?

A. Yes.

Q. Are you familiar with the preliminary allowable figures that have been provided by the Oil Conservation Division?

A. Yes, I am.

Q. Have you made a study of the recent production history of this pool?

A. Yes.

Q. Are you prepared to make recommendations to this Commission concerning adjustments in those preliminary allowable figures?

A. I am.

MR. CARR: Are the witness's qualifications acceptable?

CHAIRMAN LEMAY: His qualifications are acceptable.

Q. (By Mr. Carr) Can you briefly state the purpose of Chevron's testimony in this case?

A. Chevron's purpose in presenting testimony here for the Eumont Prorated Gas Pool is to provide some additional recent information to the Commission in order to set a more appropriate gas allowable for the Eumont Prorated Gas Pool.

Q. Have you prepared exhibits for presentation here today?

A. Yes, I have.

Q. Would you refer to what has been marked Chevron Exhibit Number 1, identify that for the Commission, and then review the information on this exhibit?

A. Exhibit Number 1 is a production graph of the producers, several principal producers in the pool, and also the Eumont total pool's production. It's here basically to illustrate the relative position of the producers within the pool.

The scale on the left, in black, is in MCF per day, and that is primarily for the producers and their production.

The scale on the right, shown in red, is in MCF per day, and that relates to the pool's total production,

which is shown by the red line at the top of the graph.

The line just underneath the red line, or blue line, represents Chevron's production. And this production is for the period of January, 1991, through to November of 1993.

As you can see, Chevron is a significant contributor to the overall pool's daily gas production, and Chevron has maintained a steady, full producing rate throughout each year, due primarily to its workover and drilling program.

And as of November of 1993, Chevron produces approximately 23,000 MCF per day, or 25 percent of the pool's total, which is -- as of November, 1993, is 93,000 MCF per day.

Another point I'd like to show is, by the green line and by the magenta-colored line, Arco and Conoco, as well as others, you can see that they have realized significant recent increases in their daily production as a result of their development programs in the Eumont Gas Pool.

Q. Let's go to Exhibit Number 2. Could you identify and review this exhibit for the Commission?

A. Exhibit Number 2 is a bar graph which depicts historical daily production, April of 1993 to November of 1993, of both the Eumont Gas Pool and Chevron.

The total bar height represents the Eumont Pool's total daily production and is typified by the dark blue, while the dark red portion of that bar represents Chevron's contribution to that total production.

Also cutting through the top of the graph is a line which represents the OCD's proposed 600 MCF per day per acreage factor of one allowable, or 84,300 MCF per day.

As you can see, the production basically from August of 1993 through November of 1993 has been consistently above the OCD's proposed allowable 600 MCF per day.

To go on and describe the light-colored bars to the right, from November of 1993 on to September of 1994, what I've done here is, I've held the production for the Eumont Pool as of November of 1993 flat at 93,386 MCF per day and have just added Chevron's estimated production increases as a result of our 1993 and 1994 development programs, and forecasted out the Eumont's and Chevron's production through to September of 1994, through the next essentially two proration periods, the remainder of this proration period, and the one that we're here for today. These are depicted by the light-colored red and blue bars.

Since November of 1993, Chevron has completed eight workovers and two new drills, which have added approximately 4.8 million per day of production. And this

will bring the Eumont Pool's total production to approximately 98,000 MCF per day for March of 1994.

Q. Now, this is reflected in the forecast portion of this exhibit; is that right?

A. That is correct.

Q. And the forecast portion is only showing additional Chevron production?

A. That's correct.

Q. What would happen if the OCD were to adopt the 600-MCF-per-day recommendation?

A. If they were to adopt the 600-MCF-per-day recommendation, Chevron would instantly go from what it has now, two nonmarginal acreage factors, to 20 nonmarginal acreage factors, and would essentially have to curtail or defer 3.3 million a day of current production.

This would also place at risk the remainder of our 1994 development program, which consists of completing two new drills and up to six more workovers. The two new drills and six more workovers would be an additional 2 million a day, curtailed production.

The two new wells, just for your information, we are currently completing a second new drill, as far as the drilling process is concerned. We still have yet to do the completion work on those two wells. If we were to adopt a 600-MCF-a-day allowable, these two wells' production

probably would not come back or be severely curtailed, as far as that gas proration unit which they are on.

Q. Since November of 1993, how much additional reserve or production has Chevron been able to achieve in this pool because of their workover program?

A. Essentially, as I stated, since November of 1993, we have -- to March of 1994, we have added approximately 4.8 million a day.

From March of 1994, if we were to continue our current 1994 program, to roughly the middle of the next proration period, June of 1994, we'll add about another 4 million a day.

Q. And is continuation of this program, in your opinion, dependent upon reasonable allowable limits for the pool?

A. Yes, it is.

Q. Let's go to what has been marked as Chevron Exhibit Number 3. Would you identify this and explain how this exhibit differs from the preceding one?

A. This exhibit differs primarily just in the fact that the line drawn across the top of the bars or graph represents what the current allowable of 952 MCF per day, as evident maintaining the current allowable at 952 MCF per day through the next proration period would be more appropriate.

Chevron would have two nonmarginal acreage factors which would expand to approximately four nonmarginal acreage factors in June of 1994, if we were continue with our 1994 program under this scenario.

Q. And under this scenario, even just including the additional production from Chevron properties, the pool would be producing in excess of the allowable limit; is that right? Or could produce in excess of the allowable limit?

A. Yes, it could.

Q. Are you ready to go to Exhibit 4?

A. Yes.

Q. Let's move to that now, and would you explain to the Commission what this shows?

A. Exhibit Number 4 is a comparison table which shows Chevron's recommendation for adjustment to the pool's allowable. And that is, we recommend an increase or an addition of 246,214 MCF per month, which would bring the pool's total monthly allowable for April of 1994 to September of 1994 to 2,800,000 MCF, and this would result in a monthly acreage allocation factor of 28,928 MCF or 952 MCF per day.

Q. So you're recommending continuation of the current allowable limit?

A. Yes, I am.

Q. Is there a market for this gas?

A. Yes, there is.

Q. In your opinion, would an increase in allowable, as you're recommending, enable producers in this pool to maintain their market share for Eumont gas?

A. Yes, it would. We feel the continuation of the current allowable of 952 MCF per day for an acreage factor of one would allow an ongoing development in the Eumont Prorated Gas Pool by operators in the pool. And as previously stated by our witness, Mr. Green, we would have a market for that production.

Q. In your opinion, will approval of this recommendation, or adoption of Chevron's recommendation, result in the protection of correlative rights?

A. Yes, it would.

Q. Would it otherwise be in the best interest of conservation and the prevention of waste?

A. Yes.

Q. Will it result in a more efficient producing rate, in your opinion, for the reserves in the Eumont Gas Pool?

A. Yes, it will.

Q. Were Exhibits 1 through 4 prepared by you?

A. Yes, they were.

MR. CARR: May it please the Commission, at this

time I'd move the admission into evidence of Chevron Exhibits 1 through 4, and I would note that we have put the letter E after these exhibits to identify them as relating to the Eumont Gas Pool.

CHAIRMAN LEMAY: Thank you, Mr. Carr. Exhibits 1 through 4 will be admitted into the record without objection.

Questions of the witness? Gary, do you have any?

EXAMINATION

BY COMMISSIONER CARLSON:

Q. Yeah, on your exhibit -- I guess it's 3 -- you took into account Chevron's additions only. If I look at what Conoco is proposing, it looks like they're going to add approximately another 4000, so...

My point is, it looks like even 952 a day may not be enough for you, if I take into -- both Chevron and Conoco's proposed additions into account. Is that possible?

A. Well, Chevron feels that 952, even with Conoco's additions, would still be appropriate. This would increase the pool's production. However, it would not necessarily entail curtailment of production, when you think of a gas proration unit, the number of wells on a gas proration unit, what the allowable is assigned to that gas proration unit, and the fact that there are decline rates associated

with wells on those gas proration units also.

Q. So you would still feel comfortable with what you propose?

A. Yes, sir.

Q. Have you contacted the other operators in the pool?

A. I have been in conversation with several of the other operators in the pool, yes, sir.

Q. What's their feeling about increased allowables?

A. Their feeling is to basically support the 952 MCF per day per acreage factor of one.

They also have programs similar to Conoco's and Chevron's that they would like to continue, and that will enable them to do so.

Q. And none of the operators are opposed to the 952?

A. The ones I've been in contact with are not opposed to it, no.

Q. How many have you been in contact with?

A. I have been in contact with Amerada, Arco, Texaco, Conoco, and that's it.

COMMISSIONER CARLSON: Thank you. I have no other questions.

CHAIRMAN LEMAY: Commissioner Weiss?

COMMISSIONER WEISS: I have no questions.

CHAIRMAN LEMAY: Just one.

EXAMINATION

BY CHAIRMAN LEMAY:

Q. Didn't call Doyle Hartman, I take it?

A. No, sir.

CHAIRMAN LEMAY: Any other questions of the witness? If not, he may be excused.

MR. CARR: May it please the Commission, I don't believe there's any other presentation on the Eumont Pool.

I have two very brief statements, one from Texaco, one from Arco. With your permission, I would like to read them into the record.

CHAIRMAN LEMAY: Please do.

MR. CARR: The statement from Texaco is signed by Terry L. Fraser, Hobbs area manager, and it states that Texaco advocates the continuance of the Eumont Gas Pool allowables at or near the current level of 952 MCF per day.

The proposed reduction to the minimum 600 MCF per day may adversely affect the growth and activity level seen in the pool recently. Production levels resulting from this activity have clearly been able to support higher allowables over the past 18 months.

Texaco then goes on to note that on the 17th testimony was presented to the -- 17th of February, testimony was presented which assured that all operators in the pool would have pipeline availability for all gas

produced.

Arco's statement is from David Newell, their senior operations analytical engineer, and it again supports maintaining allowables at the current levels for the April, 1994, through September, 1994, time period.

It seeks continuation of the current rates because it notes that in 1993 they completed 13 workovers or recompletions in the Eumont Pool and drilled four additional wells.

Arco states that it's planning seven additional workovers and two wells in 1994 and that it would probably have to cancel this additional work if the minimum allowable of 600 MCF per day was adopted for the next proration period.

I have copies of these statements for the Commission.

And that's all I have.

CHAIRMAN LEMAY: Thank you.

Mr. Kellahin? I'm sorry, Jim, do you have a statement?

MR. BRUCE: I have a statement on behalf of Exxon that Exxon supports the proposal made by Conoco.

CHAIRMAN LEMAY: You're for the Eumont Pool, right?

MR. BRUCE: Yes.

CHAIRMAN LEMAY: All right. Thank you, Mr. Bruce.

Any more comments on the Eumont Pool?

MR. KELLAHIN: Yes, sir.

CHAIRMAN LEMAY: Mr. Kellahin?

MR. KELLAHIN: Mr. Chairman, Oryx Energy Company has a letter of support. It is executed by Rick Hall, the operations engineer for Oryx out of Dallas, Texas.

He joins with the others in supporting a continuation of the monthly allocation factor. It's the same number that we've all talked about. It gets you to the 952.

It says, Our gas marketing division assures us that they have a market for the proposed volume, and he urges the Commission to approve the allocation factor proposed by these other companies in this Application.

The second statement is one by Marathon Oil Company. It's signed by T.N. Tipton, the Engineering manager in the Midland Operations Office in Midland, Texas.

It says, Marathon Oil Company operates eight active wells in the Eumont Gas Pool. Marathon supports the acreage allocation factor of 28,928 MCF per month. We believe this will permit equitable sharing between the owners of the gas pool based upon present production capacities of the producers in the pool. Marathon recently

drilled three development wells. The drilling of those wells was justified based upon the continuation of that existing rate. They have plans for additional wells and support the continuation of the allowable that they're currently enjoying.

CHAIRMAN LEMAY: It will be incorporated into the record.

Mr. Stovall?

MR. STOVALL: One other comment, address a little bit Commissioner Carlson's questions on the -- pushing the allowable up.

The level for the new proration units coming on will stay the same for each of those new units. What is likely to happen, I think you can anticipate, next year the same sort of thing, because you've got more nonmarginal units on stream, but they're coming on during or after the proration period.

I suspect you may see the same sort of results next year, that it will not have taken effect yet, and the mathematical calculation won't keep it up at that level. They could conceivably be in the same situation where the nonmarginal production in the field is not reflected in the report, yet there are the number of units.

So that's where that will affect what your question was that you were asking earlier.

CHAIRMAN LEMAY: Anything additional on Eumont?

Let's go on, then. What do you want to do? Indian Basin?

MR. CARR: At this time, on behalf of Chevron, I will call Mr. Brian Huzzey.

(Off the record)

BRIAN HUZZEY,

the witness herein, after having been first duly sworn upon his oath, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. CARR:

Q. Would you state your name for the record, please?

A. My name is Brian Huzzey.

Q. Where do you reside?

A. I live in Midland, Texas.

Q. By whom are you employed and in what capacity?

A. I'm employed by Chevron USA, and I'm a petroleum engineer for several fields in Eddy and northern Lea County, New Mexico.

Q. Have you previously testified before this Commission?

A. Yes, I have.

Q. At the time of that testimony, were your credentials as a petroleum engineer accepted and made a matter of record?

A. Yes, they were.

Q. Have you testified in prior allowable hearings concerning the status of allowables for the Indian Basin Upper Pennsylvanian Gas Pool?

A. Yes, I have.

Q. Are you familiar with the preliminary allowable figures that have been promulgated by the Division for this pool?

A. Yes, I am.

Q. Have you studied recent production trends in the pool?

A. Yes.

Q. Are you prepared to make recommendations to the Commission concerning adjustments to those preliminary figures?

A. Yes, I will.

MR. CARR: Are the witness's qualifications acceptable?

CHAIRMAN LEMAY: His qualifications are acceptable.

Q. (By Mr. Carr) Mr. Huzzey, have you prepared certain exhibits for presentation here today?

A. Yes, I have.

Q. Let's go to what has been marked Chevron Exhibit Number 1. These are all indicated IB for Indian Basin.

Go to Exhibit Number 1 and, using this exhibit, could you review generally Chevron's recommendation for this pool?

A. Okay. Chevron recommends an adjustment of 169,000. You can find that on line 3 in the far right-hand column. This will change the monthly acreage allocation factor found line 8 in the far bottom right-hand corner of the chart or table, to 197,000.

Q. And how does this compare to current allowable figures for this pool?

A. This is a continuation of the current allowable through the winter period.

Q. What is Chevron's ownership position in this pool?

A. Okay, Chevron operates approximately 43 percent of this field's production.

Q. At this point, I think it would be helpful if you would just identify what has been marked Chevron Exhibits 2 through 11, as it relates to this pool.

A. Okay. Exhibit Number 2 is the Bogle Flats Unit Number 1 Well, and I will be going through each well we have in the field -- we have ten wells -- to explain our position and where they are and where we plan to go.

Q. And so what you're going to do is look at each performance curve on each of these ten wells?

A. Yes.

Q. All right. Well, let's start with Bogle Flats Unit Number 1. Review this for the Commission, please.

A. Okay. Bogle Flats Unit Number 1, if you'll look at the plot, the solid bars are the C-115 productions reported to the OCD. And the dark line that starts slightly above 150,000 MCF a month is the pool allowable, historical pool allowable and the current pool allowable.

If you'll notice, in June -- There are several features that are common through all these plots, one of them being that in June of 1993 all the production was down. The plant which handles all the gas from this field was down for ten days, so every well has a downgrade in June. Also, in November of 1993, the plant was again down for five days, which significantly impacted production.

On this particular well, in late November we installed compression, wellhead compression, and this well is now currently producing well over the -- not significantly over, but over the current pool allowable, and it's averaging approximately 205,000 MCF per month.

Q. Do you anticipate that for this the next proration period this well can produce in excess of the recommended allowable?

A. Yes.

Q. Let's go to the Bogle Flats Number 2 Well.

A. Bogle Flats Number 2 is also a well in which we have recently added wellhead compression. It was installed the last week of December.

As you can see from this plot on the far right-hand side, in January of 1994, the production was in excess of a current pool allowable.

Q. Bogle Flats Unit Number 3.

A. Okay, the next exhibit, Bogle Flats Number 3, this well does not have a compressor on it. However, due to current and -- activities in this field, compression may be installed sometime within the next six to eight months to maintain production at this level.

Q. At this time, which wells actually have compression installed on them?

A. Okay, for Chevron we only have two wells. However, other wells in the field are having compression, and it's added as time goes on.

That has a tendency to make it harder for the naturally flowing wells to compete in the gathering system. Therefore, we have to have more compression to other wells to maintain our rates.

Q. All right. The Bogle Flats Unit Number 3 Well, even without the compression, is producing in excess of the recommended allowable level with the adjustments you're proposing?

A. Yes.

Q. All right. Let's go to the Number 4 well.

A. Okay, Bogle Flats Number 4, again, has only been below the current allowable when there have been operational problems in the plant or in the field, and it's currently averaging 195,000 MCF per month.

Q. The Helbing Federal Gas Com Number 1.

A. Okay, this well we did some additional work in August of 1993, and you'll notice in September it became a top-allowable well and has been producing steadily at a top-allowable rate since that time.

Q. Each of these first five wells is at this time able to produce in excess of the recommended allowable level?

A. Yes.

Q. All right. Let's go now to the Bogle Flats Unit Number 6 Well.

A. The Bogle Flats Unit Number 6, as you can see, does not and has not been exceeding the pool allowable that is recommended.

However, we've recently stimulated within the last two or three weeks, due to some studies which I concluded earlier this -- in the middle of last year, and it's currently making approximately 6400 to 6500 MCF a day, which would make it 197,000 MCF per month, or a top-

allowable well, or right at the top allowable.

Q. And the Federal Gas Com '33' Number 1?

A. The '33' Number 1 is again not currently producing at the top -- at the allowable which we are recommending.

However, we have already initiated work to install compression on this well, and it will probably be put on within the next month to month and a half.

Q. Bogle Flats Unit Number 5, Exhibit 9.

A. This well is, from this chart or plot, not a top-allowable well. However, this doesn't reflect some of the work which we did in January.

We upsized the tubing from 2-7/8 to 3-1/2-inch, and this well is currently making about 5600 MCF per day, so that's over 170,000 MCF per month. And again, this is a candidate for additional compression, this year.

Q. Go to the next one, the Bogle Flats Unit Number 8 Well, Exhibit 10.

A. Okay, Bogle Flats Unit Number 8 already, again, has an AFE circulating for additional compression, as well as Bogle Flats Unit Number 9, which is the next exhibit.

Neither of them is currently a top-allowable well. However, Number 8 has an excellent opportunity to become a well in that range.

Q. From these performance curves, Mr. Huzzey, what

conclusions can you reach about the appropriate allowable limits for this pool?

A. Many of our wells are already capable of producing at the current allowable of approximately 6500 MCF per day. Therefore, we would recommend continuation of this.

And as stated, many of our wells will be able to in the very near future, if a reduction was -- in the allowable, as stated, many of our naturally flowing wells would have to be choked back at this time.

Q. Does a market exist for all the gas produced from this field?

A. Yes, as Mr. Green testified, we have no problem marketing our gas.

Q. If this allowable was increased from the recommended level to the current or your proposed level for the next proration period, would there be any adverse impact on the correlative rights of operators in the pool?

A. No, sir.

Q. Have you talked to other operators about their concurrence in your recommendation?

A. Yes. Chevron contacted most of the operators in the Indian Basin Upper Penn Gas Pool in late January, and we all -- or many of the operators chose to attend the meeting, which was held on February 9th. And at that point

in time, most -- in fact, all the operators supported maintenance of the current allowable and/or the option of going to a higher allowable.

Q. Attached to the Chevron exhibits is a letter from MW Petroleum Corporation supporting your recommendation.

Was that a result of this meeting that you just referenced?

A. Yes, MW or Apache attended, as well as Texaco, Marathon, Oryx. Several other smaller operators were invited. They chose not to attend the meeting.

Q. Could you briefly review recent events or recent efforts whereby operators have been attempting to develop efficient reservoir management practices or procedures for this pool?

A. Again, at the meeting which we had in our offices in Midland in February, one of the primary results of the meeting was the formation of an Indian Basin Upper Penn Gas Pool technical committee.

The initial charge of this committee is to determine what sort of reservoir management plan will most effectively produce and deplete -- effectively and efficiently produce and deplete this reservoir.

And the first technical committee meeting is scheduled for April 10th in our Chevron offices in Midland.

Q. Is this technical committee looking at this time

at unitization of the field?

A. That subject was broached at the February 9th meeting. However, the primary obligation or charge of the Committee at this point in time is to develop a reservoir management plan.

Q. And the results of this effort may wind their way into subsequent allowable hearings; is that fair?

A. Yes.

Q. Were Exhibits Indian Basin 1 through 11 prepared by you?

A. Yes, they were.

MR. CARR: At this time, may it please the Commission, we would move the admission into evidence of Chevron Exhibits 1 through 11.

CHAIRMAN LEMAY: Without objection Exhibits 1 through 11 of Chevron will be admitted into the record.

MR. CARR: And that concludes my direct examination of Mr. Huzzey.

CHAIRMAN LEMAY: Thank you, Mr. Carr.

Questions of the witness?

COMMISSIONER CARLSON: No.

CHAIRMAN LEMAY: Bill?

COMMISSIONER WEISS: No.

CHAIRMAN LEMAY: I don't have any either. You did a good job. Thank you very much, Mr. Huzzey.

Mr. Kellahin?

MR. KELLAHIN: I'd like to call Mr. Rick Hall on behalf of Oryx Energy Company. He has a presentation on this.

RICK HALL,

the witness herein, after having been first duly sworn upon his oath, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q. Would you please state your name and occupation?

A. My name is Rick Hall. I'm with Oryx Energy Company in Dallas, Texas.

Q. In what capacity are you employed, Mr. Hall?

A. I'm a petroleum engineer for Oryx, specifically an operations engineer for the Hobbs area, which includes Eddy County, which obviously Indian Basin is located in.

Q. Do your duties include managing your production or reviewing your production from the Indian Basin Upper Pennsylvanian Gas Pool and looking at the allowable proposed by the operators in that pool?

A. Yes, sir, my job -- primary function is to maintain the production in the Indian Basin Pool and those operations.

Q. All right. And have you testified before the Commission before with regards to the subjects of allowable

in this pool?

A. Yes, I have.

MR. KELLAHIN: We tender Mr. Hall as an expert witness.

CHAIRMAN LEMAY: His qualifications are acceptable.

Q. (By Mr. Kellahin) Mr. Hall, if you'll take Exhibit Number 1 and tell us what your company's position is with regards to the next allowable period and the allowables to be assigned in this pool.

A. Our company's position is similar to Chevron's. We would like to see the 6.5-million-per-day allowable remain in effect.

It's the same allocation factor that the Commission has granted in the past three allowable periods. We see our wells capable to produce at this allowable, and we have gas marketing available for the gas that we can produce.

Q. How many wells in this pool do you operate?

A. We operate five wells in the pool.

Q. Let's look at Exhibit 2. What have you shown here?

A. Exhibit 2 is a list of our wells that we operate and a production comparison in the winter period. We show the gas proration schedule provided by the Commission for

the winter period in the middle column, and in the last column we show what we are estimating our wells to produce in this current winter period. Basically those range from 1.7 million a day to 6.9 million a day.

Q. Which of your wells are -- if any, are restricted by the current allowable level?

A. At the current situation, none are inhibited by the allowable period -- or by the allowable level.

If the Commission's 5.3 proposed allowable is granted, four of our five wells would be inhibited by that allowable.

Q. Let's turn to Exhibit 3. Would you identify and describe that display?

A. Exhibit 3 is similar to Exhibit 2. It's a summer-period list of our wells, the April, 1993, through September, 1993, proration schedule provided by the Commission, our actual production last summer.

You can see the Commission estimated our production to be 754. We actually produced 778,000 MCF per day. And we're showing our production capability for this summer, based upon work that is in progress and work that we've done in the past, which we're estimating to be 890,000 MCF per month.

I might add that if you'll look at the right-hand column, if the 5.3-million-per-day allowable is granted, we

would have four wells that would be overproduced. If the 6.5 that we're proposing along with Chevron and Marathon is granted, then we would only have two wells that would be overproduced.

Q. All right. They would have the capacity to overproduce?

A. Have the capacity to overproduce.

Q. Okay. Exhibit Number 4, identify and describe that display.

A. Exhibit Number 4 is a production plot. It's in MCF per day, gross volume over time, for our five wells producing at Indian Basin Pool.

The down ticks in the curve indicate gas plant down time, but the overall shape of the curve is in an upward position. And it's to show that if the allowable was cut, that we would have to significantly reduce these volumes and bring this curve down. If the allowable were granted at the level of 6.5, we would continue on with our current production.

Q. Okay. In summary, what do you propose?

A. Oryx proposes that the allowable remain at the 6.5-million-per-day level and that the Commission grant the adjustment proposed by Chevron.

MR. KELLAHIN: That concludes my examination of Mr. Hall. We'll move the introduction of his Exhibits 1

through 4.

The last is a letter from Mr. Strickland, who is here, and I'll call him for his comments in just a moment.

CHAIRMAN LEMAY: Any objection? If not, Exhibits 1 through 4 will be admitted into the record.

Questions of the witness?

Commissioner Carlson?

Commissioner Weiss?

COMMISSIONER WEISS: I have no questions.

CHAIRMAN LEMAY: Thank you very much. You may be excused.

TOM STRICKLAND,

the witness herein, after having been first duly sworn upon his oath, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q. Mr. Strickland, would you please state your name and occupation?

A. My name is Tom Strickland. I'm currently employed as a gas supply representative for Oryx Energy Company in Dallas, Texas.

Q. Do your duties involve marketing your share of the gas produced out of the Indian Basin Upper Penn Gas Pool?

A. Yes, sir, my area of responsibility includes the

gas that is supplied through the Indian Basin Plant, and I'm part of the marketing team that markets this gas.

Q. Have you testified before the Commission on prior allowable hearings in your current capacity?

A. Yes, sir, I have.

MR. KELLAHIN: We tender Mr. Strickland as an expert in gas marketing.

CHAIRMAN LEMAY: His qualifications are acceptable.

Q. (By Mr. Kellahin) From your perspective, what do you see about the gas market for Indian Basin in relation to the allowables the operators seek to have maintained in the pool?

A. Our position is very similar to what Robert Green presented with Chevron. We agree that we are -- have the ability to market all the gas in various regions that is produced from this part of New Mexico. We have the ability to take that gas to the West Coast, to the Midwest and to the Texas Gulf Coast.

We currently market approximately 28,000 MCF a day from the tailgate of Indian Basin Plant.

Q. What is your forecast for the demand for that gas production for this next six-month period?

A. We don't anticipate any change in the demand for that gas. We feel that we'll be able to sell everything

that we produce.

MR. KELLAHIN: That concludes my examination of Mr. Strickland.

We move the admission of Exhibit Number 5.

CHAIRMAN LEMAY: Exhibit 5 into the record without objection.

Questions? Mr. Carlson? Mr. Weiss? Anything else of the witness?

COMMISSIONER WEISS: I have no questions.

CHAIRMAN LEMAY: I have no questions. Thank you. You may be excused.

MR. KELLAHIN: I believe that concludes the witnesses in the Indian Basin.

I have a statement from Marathon.

CHAIRMAN LEMAY: Why don't we take that now and then we'll --

MR. KELLAHIN: Okay.

CHAIRMAN LEMAY: Marathon. Do you want to read that or just --

MR. KELLAHIN: I'm going to paraphrase it.

CHAIRMAN LEMAY: -- for the record?

MR. KELLAHIN: Yes, sir, paraphrase it and then put the letter in the record.

Mr. Chairman, Marathon has submitted for your consideration -- it's a letter dated March 4th. It is a

statement of support for the continuation of the current nonmarginal well allowable.

The operators, including Marathon, have agreed, as was testified a while ago, to form a technical committee to evaluate development techniques and rules governing the pool in an attempt to optimize gas recovery. Marathon says it's looking forward to working in unison with the other operators in a cooperative effort to possibly unitize and improve recovery from the field.

In the second to the last paragraph there is specifics about the gas plant. That was also mentioned earlier. You'll see the downslope on the production plots from the Chevron wells. Chevron, as the operator of the gas plant, tells you that there was downtime of the plant, that affects all those wells, and they approximate that probably four percent of the total producing time for the 1993 summer period that you were looking at represents downtime. They forecast for you the fact that there will be plant downtime of approximately seven days in June for maintenance and upgrading.

Marathon says there's significant investment by them and the other operators in improving the capacity of the gas wells in the pool to produce. Marathon currently operates one well. It has an interest in two Chevron-operated wells that have the capacity to produce to or

greater than the maximum nonmarginal allowable, and they ask that you continue this current level at least for the next six-month period.

CHAIRMAN LEMAY: Thank you, Mr. Kellahin.

Is there anything else on the Indian Basin field?

COMMISSIONER CARLSON: I have a question.

If I remember correctly, a year or two ago Marathon wanted higher allowables and Chevron was opposing those allowables. I take it those conflicts between Marathon and Chevron have been resolved and --

MR. KELLAHIN: I can't represent to you that they have. All I can represent for you is that there's a consensus for the next proration period that we would maintain the allowables at the 6.5 daily producing rate on the F1 factor.

CHAIRMAN LEMAY: Mr. Carr, would you concur?

MR. CARR: Yes, I concur on that statement.

CHAIRMAN LEMAY: Anyone not concur?

Would -- You say they're in agreement for this six months, but you may not be for the -- six months from now?

MR. KELLAHIN: Yes, sir.

CHAIRMAN LEMAY: Mr. Bruce, I think we're finally ready for you. Sorry to -- We appreciate your patience. Sorry you had to wait so long.

DONNA BAUER,

the witness herein, after having been first duly sworn upon her oath, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. BRUCE:

Q. Would you please state your name for the record?

A. My name is Donna Bauer. I'm an engineer with Exxon in Midland, Texas.

Q. Have you previously testified before the Commission?

A. No, I have not.

Q. What's your educational background?

A. I received a bachelor of science degree in petroleum engineering from the University of Missouri at Rolla in 1984, and I've been employed with Exxon since 1985.

Q. And in what part of Exxon in particular?

A. I work in the environmental and regulatory affairs group.

Q. Are you familiar with production from the Tubb Pool?

A. Yes, I am.

Q. And also the nonmarginal wells in that pool?

A. Yes, I am.

Q. And have you prepared some exhibits with an eye

toward making a recommendation regarding the allowable in the Tubb Pool?

A. Yes, I have.

MR. BRUCE: Mr. Chairman, are the witness's credentials acceptable?

CHAIRMAN LEMAY: Qualifications are acceptable.

Q. (By Mr. Bruce) Right off the bat, what does Exxon request regarding the Tubb Pool?

A. Exxon requests the allowable for the Tubb Pool to increase by approximately 42,000 MCF per month.

Q. What is the basis for this request? And I'll refer you to Exxon Exhibit Number 1.

A. As you can see on Exhibit Number 1, the pool allowable for the Tubb is approximately 294,000 per month for the time period for April, 1993, through September, 1993, a year ago. That allowable is approximately equal to the allowable proposed for this time period.

However, if you'll note, last year the nonmarginal allowable was approximately 129,000 per month, which is approximately -- which equates to a monthly acreage allocation factor of 13,580 per month for each nonmarginal well. We ask the Commission to add to the allowable for the pool so that the nonmarginal wells will again have an allocation factor of approximately 13,500 for this time period. That means an adjustment, backing into

it, of 42,000 MCF per month.

Q. Would you identify Exhibit 2 and describe its contents for the Commission?

A. Exhibit 2 is a spreadsheet that shows the nonmarginal wells within the Tubb Oil and Gas Pool. The upper portion, from the Amoco State Number 6 through the Exxon New Mexico S 23, represents the wells that are nonmarginal under the current -- during this current time period.

The well listed at the bottom, the Exxon Hardison B 5, is a well that Exxon recently reclassified from oil to gas, which we believe will be a nonmarginal well in this upcoming time period.

Q. What will happen if the allowable is maintained -- or the nonmarginal allowable is maintained at the 89,000 figure?

A. If the current level is maintained at about 89,000, the monthly allowable would be approximately 9205, will be the acreage factor allocation. As you can see, that would -- It's about a third lower than this time period last year.

Q. And would a number of wells be curtailed as a result?

A. Yes, they would. If you look on Exhibit 2 at the column that says "9205 times Acreage Factor", the asterisks

off to the side represent the wells that have production capability in excess of that allowable. So several wells would be curtailed.

Q. Some of the -- Under your proposal, then, for 13,500, some of the nonmarginal wells could potentially become marginal; is that correct?

A. That is correct. If that happens, it is possible the extra 42,000 MCF per month may not be realized.

Q. Okay. And what does the final column on your Exhibit 2 show?

A. The final column represents the incremental value to Exxon -- we've just listed it to Exxon in this exhibit -- increasing the allowable for the pool by the requested 42,000 MCF per month.

You can see that equates in the six-month period at a gas price of $1.80 per MCF. That represents almost $91,000 of additional income over that time period.

Q. And what does Exhibit 3 represent?

A. Exhibit 3 is a plat of the Tubb Oil and Gas Pool. You'll see highlighted in yellow are the Exxon leases, and the green dots represent the nonmarginal wells for this time period, the 11 nonmarginal wells.

Q. They're scattered pretty well throughout the pool, are they not?

A. That's correct.

Q. And so this would benefit operators in addition to Exxon?

A. Yes, it would.

Q. Now, referring to your Exhibit 4, is the requested increase in the allowable out of line with past production?

A. There is a general increase in production from the Tubb Oil and Gas Pool, so it is an increasing trend.

Q. And is there a market for the gas?

A. Yes, there is. In fact, some of our purchasers have indicated to us that they would be willing to take as much additional gas as we could provide to them. There are four gas plants in the area. Finding a market is not a problem.

Q. Now, even with the increase, the allowable for the Tubb Pool is still quite low, is it not?

A. Yes, it is, especially when compared to other oil and gas pools, prorated pools, within the southeast section.

Q. It's probably one of the lowest of the prorated pools, is it?

A. It is the lowest.

Q. And as we said, there are -- I think, looking back at your Exhibit 2, other operators will benefit from the increase in the allowable proposed by Exxon?

A. Yes. In fact, Chevron, Marathon, Mobil, Shell, J.R. Cone, all have wells that would be allowable-limited with the proposed -- with what the Commission has originally drafted. So all of those operators would see benefits from a 42,000-MCF-per-month increase.

Q. In your opinion, is the granting of Exxon's request for the Tubb Pool in the interests of conservation and the prevention of waste?

A. Yes, it is.

Q. And were Exhibits 1 through 4 prepared by you or under your direction?

A. Yes, they were.

MR. BRUCE: Mr. Chairman, I move the admission of Exhibits 1 through 4.

CHAIRMAN LEMAY: Without objection, Exhibits 1 through 4 will be admitted into the record.

Questions of the witness?

Were you through? I'm sorry.

MR. BRUCE: Yes.

CHAIRMAN LEMAY: Gary?

EXAMINATION

BY COMMISSIONER CARLSON:

Q. Have you contacted the other operators?

A. I personally have not, no.

Q. Has anybody within Exxon?

A. Not to my knowledge.

Q. So we don't know if they're all for this request or --

A. I don't know if they are or not. I have not had any contacts with them, and I did not ask our gas marketing people if they had had any contacts with them.

COMMISSIONER CARLSON: That's all I --

THE WITNESS: They do see additional benefits, though, or they should.

Q. (By Commissioner Carlson) Some of them do?

A. Some of them.

COMMISSIONER CARLSON: That's all I have.

CHAIRMAN LEMAY: Commissioner Weiss?

COMMISSIONER WEISS: I have no questions.

CHAIRMAN LEMAY: I have none. Thank you very much.

MR. BRUCE: That's all I have, Mr. Chairman.

CHAIRMAN LEMAY: You may be excused.

Are there any other statements concerning the proration hearing. Any other witnesses? Anything else?

We'll take the case under advisement.

(Thereupon, these proceedings were concluded at 12:31 p.m.)

* * *

CERTIFICATE OF REPORTER

STATE OF NEW MEXICO)
) ss.
COUNTY OF SANTA FE)

I, Steven T. Brenner, Certified Court Reporter and Notary Public, HEREBY CERTIFY that the foregoing transcript of proceedings before the Oil Conservation Commission was reported by me; that I transcribed my notes; and that the foregoing is a true and accurate record of the proceedings.

I FURTHER CERTIFY that I am not a relative or employee of any of the parties or attorneys involved in this matter and that I have no personal interest in the final disposition of this matter.

WITNESS MY HAND AND SEAL March 27th, 1994.

STEVEN T. BRENNER
CCR No. 7

My commission expires: October 14, 1994