STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO

4 March, 1987

EXAMINER HEARING

IN THE MATTER OF:

Applications of John E. Schalk, Columbus Energy Corporation, Union Texas Petroleum Corporation, William C. Russell, C & E Operators, Inc., and Dugan Production Corporation, for an exception to Rule 5(a)2(2) of Division Order No. R-8170, as amended, San Juan and Rio Arriba Counties, New Mexico.	CASE 9096 9097 9098 9099 9100 9101

BEFORE: Michael E. Stogner, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

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I N D E X

E X H I B I T S

E X H I B I T S CONT'D

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MR. STOGNER: Call next Case 9096.

MR. TAYLOR: Application of John E. Schalk for an exception to Rule 5(a)2(2) of Division Order No. R-8170, as amended, Rio Arriba County, New Mexico.

MR. STOGNER: Call for appearances in this case.

MR. KELLAHIN: Mr. Examiner, I'm Tom Kellahin of Santa Fe, New Mexico, appearing on behalf of John E. Schalk.

Mr. Examiner, with regard to the Cases 9097, 9098, 9099, 9100, and 9101, each of them is in the same regard as Case 9096, and we represent all applicants in these six cases in this matter, and would request that the cases be consolidated for purposes of testimony.

MR. STOGNER: Very well, Mr. Kellahin, we will call Cases 9097, 9098, 9099, 9100, and 9101 at this time and they will be consolidated for purposes of this hearing.

MR. TAYLOR: Application of Columbus Energy Corporation for an exception to Rule 5(a)2(2) of Division Order No. R-8170, as amended, San Juan County, New Mexico.

Application of Union Texas

Petroleum Corporation for an exception to Rule 5(a)2(2) of Division Order No. R-8170, as amended, San Juan County, New Mexico.

Application of William C. Russell for an exception to Rule 5(a)2(2) of Division Order No. R-8170, as amended, San Juan County, New Mexico.

Application of C & E Operators, Inc. for an exception to Rule 5(a)2(2) of Division Order No. R-8170, as amended, San Juan County, New Mexico.

Application of Dugan Production Corporation for an exception to Rule 5(a)2(2) of Division Order No. R-8170, as amended, San Juan County, New Mexico.

MR. STOGNER: Will the witness please stand and be sworn?

(Witness sworn.)

MR. STOGNER: Mr. Kellahin.

MR. KELLAHIN: Thank you, Mr. Stogner.

A. R. KENDRICK,

being called as a witness and being duly sworn upon his oath, testified as follows, to-wit:

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Mr. Kendrick, for the record would you please state your name and occupation?

A A. R. Kendrick, Petroleum Consultant.

Q With regards to the six consolidated cases, Mr. Kendrick, have you been retained by each of those applicants to prepare testimony as a petroleum engineer in those cases?

A Yes, sir.

Q Would you describe generally what is the subject matter of each of those six applications for the Examiner?

A The subject matter is the procedure for calculating allowables for these wells. They are nonstandard proration units having approximately 50 percent acreage factors because they have only one-quarter of a section dedicated to the wells instead of a half section, and the present proration formula does not treat these wells fairly compared to offset wells on standard proration units.

Q Have you made an examination of the way the allowables are calculated for each of the wells for each of the applicants?

A Yes, sir.

MR. KELLAHIN: We tender Mr. Kendrick as an expert petroleum engineer.

MR. STOGNER: Mr. Kendrick is so qualified.

Q Mr. Kendrick, I have marked as Schalk Exhibit A-1 the allowable calculation policy and then the allowable calculation as Exhibit A-2, and then finally, as A-3 and 4 are the Schalk calculations on specific wells.

So that the Examiner will have an understanding of what we're doing for all of these cases, I would like to use the Schalk case as an example and have you begin, then, with the generic exhibit, if you will, A-1, and have you go through the allowable calculation policy that you're recommending and give us the basis upon which -- to give us a basis upon which you have made the recommendation that the allowable for nonstandard proration units be adusted.

A The generic description package, Exhibit A-1, shows the -- my conception of the allowable calculation policy as it currently exists and is a recap of the procedure for the determination of the allowable formula, which the allowable is equal to the acreage factor times a factor known as F-1, plus the acreage times deliverability factor, times a factor known as F-2, which is referred to as the A x D factor or the deliverability factor in the formula.

Where we have infill wells drilled we add the deliverabilities in the deliverability portion of that formula and those are shown on the bottom of Page A-1 in this packet.

On Page A-2, the allowable calculation, I cited the statute, 70-2-17, which essentially says that the allowable assigned to each proration unit shall be equal to that or represent that proration unit's fair share of the known reserves of the pool.

And I stated further that based on the premise that this statute was followed when the proration formulas were established, the deliverability of one well in the Basin Dakota or Blanco Mesaverde Pools would represent the recoverable reserves under each proration unit or 320 acres.

When the infill drilling orders were issued for these pools this must have caused a redefinition of the value of the deliverability to equal the deliverability of a 160-acre tract since we added the deliverabilities to represent the reserves under the tracts.

And this is resulting in the equation shown at the bottom of the page, or the second one up from the bottom the bottom showed that the allowable is equal to the acreage factor times Fl plus the acreage factor times the sums of the deliverabilities of the two wells times the

factor F2.

The formula that I'm proposing to be used on these wells would delete the acreage factor itself of the deliverability portion of that formula so that the allowable formula would be equal to the acreage factor times the F1 plus the sums of the deliverabilities times F2, and if this is applied on a poolwide basis, if the second well had not been drilled on a drill tract, you would add a zero for deliverability and wind up with the exact same formula that we have now if it were on a standard unit.

On a nonstandard unit you would just not reduce the calculated reserves under the tract by the multiplication of the acreage factor.

Q To see how the existing formula and the proposed formula work in a specific example situation, have you prepared a calculation to demonstrate the disparity in allowables under the current formula versus the proposed formula?

A Yes. I have tow pages of generic type situations.

The first is shown as an example for the Basin Dakota Pool. I've made the assumptions that we have a 320-acre unit on which two wells are drilled, one with the deliverability of 200 MCF and one with a deliverability of 400 -- excuse me, of 500 MCF.

By taking the average allocation factors, F1 and F2, from the Basin Dakota Pool for the year 1985, the average factors are entered under Assumption 2.

By substitution into the present formula the allowable for one 2-well unit is 10,150 MCF.

Using the present formula if we divide that into two 1-well units, each well having a 50 percent acreage factor, the allowable for the one with deliverability of 200 would be 3,303 MCF and the allowable for the unit having a deliverability of 500 MCF would be 4,366.

When we add those together we get 7,669 MCF for the 320 acres.

When we subtract that from the 10,150 where we have one 2-well unit, we find that during that month those two 160-acre units would lose 2,481 MCF of allowable just because the unit was divided into two units instead of one unit.

Q There is no other factor that accounts for the difference in the disparity in allowables other than the fact that you've taken a 320-acre unit and divided it in half --

A Yes, sir.

Q -- into two nonstandard 160-acre proration units.

A That is true.

Q By adjusting the formula as you have proposed by deleting the acreage factor from the deliverability portion of the calculation, can you show us what happens then under the proposed formula?

A Under the proposed formula if we apply the proposed formula to one 2-well unit, we would arrive with the same answer of 10,150 MCF for the allowable for that average month.

If we divide the unit and have two 1-well units with the same deliverabilities as cited in the example earlier, for the well with the deliverability of 200 MCF, that allowable is moved from 3,303 to up 4,012, and for the well the deliverability of 500, the allowable would change from 4,366 to 6,138.

We add those two together we get 10,150 MCF.

We subtract that from the allowable assigned to the 320-acre unit and we get zero.

So that all we're asking for is that the wells, because they're on nonstandard units, be given the same allowable they would get if they were on the 320-acre drill tract.

Q All right, you've demonstrated for us the Basin Dakota Gas Pool situation and how you would propose to adjust the allowable calculation to remove the disparity in

the formula, does the change also hold true if you do the calculation for the Blanco Mesaverde Gas Pool?

A Yes, the examples shown on the next page are using the average factor for the Blanco Mesaver Pool under Asssumption 2, and by substituting those values in the same formulas, this page shows the identical calculations and the difference in allowables under the present formula would be 6,412 MCF and under the proposed formula the difference would be zero.

So that the wells would wind up with identical allowables as those for two wells on one 320-acre tract.

Q What is your recommendation to the Examiner as to when this affected change in the calculation should be made for all the applicants involved in the six consolidated cases?

A I think the effective date should be the first day of a proration month so that there would be no supplemental requirements to change the history. Probably on the next schedule calculated if the resulting order can be out earlier enough that they can (not clearly understood).

Q Are you seeking to make any type of retroactive adjustment in the allowables for any of these wells?

A No, sir.

Q All right, sir, let's go to Page A-3 of the exhibit package and the caption says John E. Schalk. Would you describe for the examiner what it is that you've put on this exhibit?

A Do the --

Q Do you want to go to that exhibit?

A Well, let's apply these together with the plat from the John Schalk --

Q All right.

A -- case.

MR. KELLAHIN: Mr. Examiner, I'm handing you what is a package of exhibits from the Schalk Case 9096. They're Exhibits One through Five, and I'd like to direct your attention to Exhibit Three in that package.

Q All right, sir, if you'll -- if we'll use Schalk Exhibit A-3 and then turn to Schalk Exhibit Three, which is the plat, describe for us what you have specifically done for the Schalk well.

A The Schalk Exhibit Number Three is a plat showing the John E. Schalk Schalk Gulf No. 2 Well and it's proration unit, and the Union Texas Petroleum Corporation's McCrodden A-3 Well, both being in the east half of Section 8 of Township 25 North, Range 3 West.

And on Schalk Exhibit A-3 there's a calculation of the allowables based on the current formula and the proposed formula showing the different sets of factors, one for the total of 1985, one for the average of 1985, and one for September '86, which happened to be a schedule laying on my desk when I prepared these.

It shows the allowables calculated under formula one, being the current use formula; formula two, being the proposed formula, and the differences identified in the column shown as gain in MCF.

Moving from the current use formula to the present formula -- excuse me, from the present formula to the proposed formula.

Q We've looked at how to make the adjustment in the allowable formula for the Schalk Well. Also on Exhibit Three below the Schalk nonstandard unit is a Union Texas Petroleum Corporation nonstandard unit. Can you show us the allowable calculation for that one so that we can compare the Schalk to the Union Texas?

I think that's shown on your Exhibit A-4.

A On Exhibit A-4 we have the top set of calculations is similar to those that we just discussed on Exhibit A-3 for the same three types of calculations, using the actual deliverability of the well and the acreage factors.

And immediately below that is the same information shown on Exhibit A-3 for the John E. Schalk well, and then at the bottom of the page where we have both wells considered as being unitized, and the composite is shown there of what the allowables would be calculated for Formula 1 or Formula 2, and it shows how they would be as one 2-well unit as compared to being two 1-well units, and the difference in each case results in zero.

Q If we assume the west half -- the east half of Section 8 is a single spacing unit with an infill well on it, then we would look at the bottom portion of A-4 and you can see for September of '86 there would be an allowable of -- under your formula, yours is Formula 2 --

A Yes, Formula 2, the proposed formula.

Q -- the 2118?

A During the month of September, 1986.

Q Okay.

A For the average of 1985 it would be 6,957 MCF, to relate back to the pages in the generic package, or earlier.

Q If we take the Union Texas well for September of '86, and under your Formula 2 the allowable for September of '86 is 1194, right?

A Yes, sir.

Q And then on the Schalk well the September

'86 allowable under your proposed change is 924.

A That's correct.

Q And we add those two together and we're going to get the 2118.

A That's correct.

Q So by using the adjusted formula you're proposing you have removed the inequity in the formula so that regardless of whether or not you have two wells on a single communitized 320-acre unit or whether you have a well on separate 160-acre units, they will each have allowables that are equitable for the owners of those particular interests.

A Yes, sir.

Q It would --

A It would remove the inequities in the allowable calculation.

Q And without the change the current rule provides a disadvantage in allowables for nonstandard 160-acre units.

A That's correct.

Q And the only reason that disparity is there is simply a function of the calculation and the fact that you've taken 320 acres and divided it in half.

A Yes, sir.

Q All right. In your opinion, Mr. Ken-

drick, is the proposed change in the formula that you've requested for each of these wells one that is in the best interests of conservation, the prevention of waste, and the protection of correlative rights?

A Yes, sir.

Q Let's start, sir, with the exhibits for each of the cases now so that the Examiner will understand how we have put together the exhibit package.

If you'll start with the first Schalk exhibit, would you identify Exhibit One?

A Exhibit One in the Schalk package is the application for hearing for Case Number 9096.

Q It will be the certificate of mailing portion to the offset operators, it would be that portion of the application?

A Yes, sir.

Q And Exhibit Number Two is what?

A Shows the name of the operator, the well, the location of the well, and the pool it's located in, and the names of the offset operators.

Q Okay. Exhibit Number Three is what?

A It's a plat showing the proration units with different patterns to show the Schalk well and the offset wells identified by operators and well names and locations.

Q Okay. And Exhibit Number Four?

A Exhibit Number Four is the same as Page A-1 on the generic exhibit.

Q And Exhibit Five?

A Page A-5 -- excuse me, Page 5 is the same as the generic Page A-2, and the supplemental calculation pages attached behind that for the pool in which this operator's wells exist; in this case the Blanco Mesaverde Pool.

Q All right, sir, let's turn to the next case, which is the Columbus Energy Corporation Case 9097.

A Exhibit One is the Certificate of Mailing and shows the names and addresses of the offset operators notified.

Exhibit Two is a plat showing Columbus Energy's Aberdeen (sic) No. 1 and Landower No. 1-E Well locations and their -- their offset operators.

Exhibit Number Three shows the Owens No. 1, Gross No. 1-E, Arnstein No. 1, and Reed No. 1 locations and proration units and their offsets.

Exhibits Four and Five are copies of the generic exhibit pages similar to those in Case 9096.

Q Let's turn now to the Union Texas Petroleum Corporation Case 9098 and let me have you identify the exhibits that are submitted for that case.

A Exhibit Number One is the Certificate of

Mailing showing the names and addresses of the offset operators notified for the lease.

Exhibit Number Two shows the names of the wells, the locations of the wells and the pools they're located in and the offset operators for three of the wells.

Exhibit Number Three identifies two other wells and their locations and pool and the offset operators that were notified.

Exhibit Four is the plat of the Jicarilla L No. 5 and its offset operators.

Exhibit Number Five shows the plat of the Schalk Gulf 2 an the McCrodden A-3 and the offset operators.

A Exhibit Number Six shows a plat of the Rothson (sic) No. 2 Well and the offset operators.

Exhibit Number Seven shows the plat of the Jicarilla L No. 12 and Jicarilla L No. 11 Wells and the offset operators.

And the remainder of this package is identical to the generic package that we discussed earlier, the A-1, A-2 package.

The calculation pages were not identified by exhibit numbers. They were just attachments to -- One through Nine and then we also have a calculation for the well which would be similar to Exhbiit A-3 of the Schalk Well but this exhibit or page is for the Union Texas McCrod-

den A-3 Well, which is the companion well to the Schalk well, and that is the well in the same quarter section -- same half section.

Q Let me direct your attention now, Mr. Kendrick, to the package of exhibits for the Russell Case 9099 and have you identify those exhibits.

A Exhibit Number One is the Certificate of Mailing and the names and addresses of the operators notified.

Exhibit Number Two shows the names and locations and the pool name and the offset operators for the two wells covered by the William C. Russell case.

Exhibit Number Three shows the plats of proration units and their offsets.

Exhibit Number Four is equivalent to generic Exhibit A-1 and Exhibit Number Five would be the Exhibit Number A-2.

Q I direct your attention to the C & E Operators, Inc. Case 9100, and ask you to identify the exhibits for that case.

A Since there were no offset operators to this, there was no certificate of mailing.

Exhibit One shows the list of offset operators as "none" for the Aztec Wells Nos. 8 and 9, the

location of the wells and the pool they're in.

Exhibit Two is a plat showing the prorations units of these two wells and their offsets, and C & E Operators is the only offsetting operator to these wells.

Exhibit Number Three is the -- a copy of generic Exhibit A-1 and Exhibit Number Four is a copy of generic Exhibit A-2.

Q When we talk about the generic exhibit for the calculation of the allowable, that is simply a sample for the Mesaverde Pool and does not represent the actual numbers for the two C & E Operator wells.

A That's correct.

Q And that's true of the other exhibits.

A Yes, all exhibits.

Q All right. So except for the original package of exhibits where we made a specific calculation on the Schalk wells and the UTP wells to show a comparison and to show the absence of a disparity in allowables, you have not run an actual calculation for each of the wells.

A I have not included it in these packages.

Q There's no reason to believe that the calculation would be other than as you've represented in the generic example in terms of balancing the equity.

A It's calculated according to the present formula and the proposed formula. They will be equivalent

to the generic.

Q And turning now to the Dugan Production Corporation Case 9101, I hand you what is marked as a package of exhibits for the Dugan case and ask you to identify those exhibits.

A Exhibit Number One is the Certificate of Mailing, showing the names and addresses of those persons notified.

Behind that without an exhibit number is a list of the wells, the locations, and the pool they're in, and the offsets to each of those.

Exhibit Number Two is the plat of Dugan Production Corporation's No. 1-A New Dawn Well, and the offset operators.

Exhibit Number Three is the plat of the Fullerton No. 1 Well and the offsets.

And Exhibit Number Four is the plat of the McAdams No. 3 and McAdams No. 2 Wells, and their offsets.

Exhibit Five is a copy of generic Exhibit A-1 and Exhibit Six is a copy of generic Exhibit A-2 and the calculation page behind that.

MR. KELLAHIN: At this time, Mr. Examiner, we'd move the introduction of the respective exhibits in the relative cases, as well as the Schalk Exhi-

bit A-1 through A-5, was it?

THE REPORTER: Four.

MR. KELLAHIN: Through A-4.

MR. STOGNER: Schalk, or generic, Cases 1-A through 1-4 and all the exhibits in the cases will be admitted into evidence at this time.

MR. KENDRICK: Mr. Examiner, on each of the plats, I would refer you to any of the plats showing the proration unit, in the center of that proration unit I've attempted to identify the order that set out the nonstandard proration unit.

On Union Texas Petroleum Corporation's exhibits, for the Jicarilla L-11 and 12 Wells I did not show you the order for those two wells and I learned that those two wells were drilled on 160-acre drill tracts because the West Lindrith Gallup-Dakota Pool was expanded to include the 160-acre tract in the section and merely left this acreage to be all that's still available to dedicate to these wells because there's an offset 320-acre drill tract in each section, and I would submit to you a miscellaneous notice filed through the BLM with an attached C-103 that explains why they dedicated the 160-acre tract to the Jicarilla L Well and I think the situation is, or will be, similar to the Jicarilla L-11, because there was only 160 acres available in that section to dedicate to a well, and I don't

think that a nonstandard proration unit has been approved for either of those as such, but the Jicarilla L-12 Well has produced for several years as the Jicarilla L No. 6-E and due to this other manipulation of the expansion of the West Lindrith-Gallup-Dakota Pool it only left 160 acres in the Dakota formation for this well.

MR. STOGNER: Let me make sure I got that right.

You're talking about Jicarilla L No. 12 and the Jicarilla L No. 11 only.

MR. KENDRICK: Yes.

MR. STOGNER: Those were 160-acre units because of a quirk in the pooling (not understood).

MR. KENDRICK: Yes, sir.

MR. STOGNER: Okay, how about the Jicarilla L No. 5?

MR. KENDRICK: If it's not included in the packet, I'll determine the order number and get you notice of the nonstandard proration unit order number.

Tom, why don't you read him that. I failed to read that order number that sets up those. It's --

MR. STOGNER: Also do you have

a copy of that order?

MR. KELLAHIN: Sure.

MR. KENDRICK: The order number for Jicarilla L-11 and Jicarilla L-6 is Order No. R-8106 and 8106A.

MR. STOGNER: So that the record may be straight on those wells, Mr. Kendrick, would Union Texas Petroleum Corporation please submit an application for nonstandard proration units -- better late than never -- so we'll have it on record?

MR. KENDRICK: I'll tell them that you requested that.

CROSS EXAMINATION

BY MR. STOGNER:

Q I don't know where to get started on this. Let's turn to the generic exhibits and the third page, this is your example for the Basin Dakota Gas Pool?

A Yes, sir.

Q So that I'm understanding this, let's go through the present formula, AF concept 1, and F1 you show to be 5188.54 and that changes each proration period?

A That's -- that's the average F1 for the year of 1985 for the Basin Dakota Pool, and the 7.087965 is

the average F2 for the year of 1985.

Q For the record, how is that F1 accomplished? How is that determined?

A Each month the purchasers nominate the amount of gas they plan to take from each pool and those nominations are totaled and an adjustment factor may or may not be applied in each pool. The amount of gas to be allocated to marginal wells is taken from that volume and the reamining amount of gas is to be allocated to the nonmarginal wells within that pool.

And based on the pool proration orderss, that is split into a portion to be allocated on deliverability and a portion to be allocated on acreage.

The portion to be allocated to straight acreage is divided by the sums of the participating acreage factors of the nonmarginal wells and determines factor F1.

The volume of gas to be allocated to the nonmarginal wells based on deliverability is divided by the sums of the acreage factors times the deliverability factors of the individual wells and that resultant answer is F2.

Then the calculation of the allowable for the well is as shown on the bottom of page one or page -- or Exhibit A-1 or Exhibit A-2 or the example for one 2-well unit where we have wells -- the deliverabilities added together, and we take the acreage factor of the individual

well or the proration unit and the deliverabilities and apply those through these formulas, using the F1 and F2 factors determined each month for that pool, and by computer all the allowables are calculated based on these two factors and the individual well factors throughout the pool.

Factors F1 and F2 change each month in each pool based on the anticipated market.

Q So in using the present formula, to keep this to an example, let's say that we had a prorated pool that had five sections, that would be the 320-acre proration units, correct?

A Right.

Q There would a finite number assigned to that pool during a proration period, is that correct?

A The anticipated market would be assigned to the pool.

Q Okay.

A And if those ten proration units were nonmarginal, then we would add the acreage factors of those and divide that into the volume to be allocated to acreage and wind up with an F1.

And we would take the acreage factor of the individual well times the deliverability of that well on that proration unit or the two wells on the proration unit, and determine an AD factor for the proration unit and divide

that into the volume of gas to be allocated based on deliverability and get F2.

Then we would apply the -- excuse me, we would take the acreage factors times the deliverabilities of each of the units and total all those and get a pool total, A times D factor and divide that into the volume of gas to be allocated to the nonmarginal well based on deliverability and get the F2.

The we would go back and take the individual acreage factor of the well times the F1 that had been calculated and the acreage factor of the proration unit times the deliverability of that proration unit, and multiply that by F2.

F1 and F2 applies to all wells within the pool each month.

Q Okay.

A But the acreage factors of the individual wells and the deliverabilities of individual wells is what causes the difference in allowables between the wells in the pool.

Q So we throw this scenario in there that we have two 160-acre units and we've been prorating along using the old formula, if we come in and change it now, how would that affect the other wells in this scenario?

Would they have to give up a certain por-

tion of their allowable or would the allowable be broken down evenly throughout the pool?

A The effect of changing the allowables of these few wells in the pool, I don't remember the count of these wells for these six operators, but it would be somewhere in the range of about 15 wells, but the total effect here would not affect the allowable assigned to any other well in the pool by any more than one MCF.

Q So in essence there wouldn't be some allowable taken from a standard 320 to make up for this 160, with the formula you have.

A No, what would happen was that the allowables that have been assigned historically are in error and it would correct that error so that this 320-acre drill tract would get its rightful allowable equal to what would be on an offset 320-acre tract with two wells of equal deliverabilities.

Q How come this hasn't come up before a hearing to change the proration rules, do you know?

A I do not know.

MR. KELLAHIN: These type cases have come up in the past, have they not, Mr. Kendrick, before the Division on an individual well basis?

A Yeah, the first one of these was about a year ago, sometime last summer, for Cinco, Limited, in Case

Number --

MR. KELLAHIN: That's a different case.

A -- Case Number 8820 -- no, excuse me, in a case or two cases last summer, Cinco, Limited, asked for one 160-acre proration unit and Gerber, I think it's the Gerber Estate, asked for the companion 160-acre proration unit, and then this is a matter of four cases here by P-R-O Management, Incorporated, asking for some similar things.

Q Would it be better to correct an allowable formula than to come in and get exception to each of these that exist out here?

A I think in the long haul it would be.

Q Let's stay with this particular exhibit right here for the time being.

All of these proration units that you're seeking exceptions on the existing proration units that you're seeking today, do they have 160 acres dedicated to them or do some of them have less acres or more acres?

A Each of these proration units has a quarter section dedicated to it and I think that in each instance they have a .5 acreage factor; that is, a 160-acre proration unit.

I did encounter one or two in my study of these type of units that had acreage factors of .49 or .51,

but I think each of these has .50 acreage factor.

Q All right, now let's take that scenario for a second.

Let's assume that, and I'm going with the formulas here on this particular page, let's say that we had an acreage factor of 320 (not clearly understood) that would be essentially one of the quarter sections having about 224 acres and the other one having 160 acress, that's usually the way it works, or in this particular case how would we make up for that in this formula? Would that change this formula to where it would be equal if we had this scenario pop up?

A If you apply the acreage factor correction in the first portion of this formula --

Q Okay, when you say "first portion of the fomula" are you talking about the --

A The factor in the formula that's acreage factor times F1.

Q Uh-huh.

A If the acreage factor is left in that proportion, then you have corrected for the difference in acreages among the proration units.

If you leave the acreage factor out of the deliverability portion and allow the deliverability to represent the reserves under that drill tract on the basis

that since infill drilling has caused the definition of the deliverability to represent the reserves under one 160-acre tract, then if you don't drill the second tract your deliverability is zero, or 320-acre one-well units as compared to 320-acre two-well units.

Q I did some quick calculations here, Mr. Kendrick, so what I think I'm going to do is take a short recess on these cases and what I'd like for you to do is let's assume that we had a 320-acre unit that had 384 acres. That would give us an acreage factor of 1.2, and assuming that one of the quarter sections had 224 acres and the other one had 160 acres, how that would change this, and while you're doing that, I'm going to hear the BTA case, because don't get that -- if I use your proposed formula of allowable 1 plus allowable 2, assuming that my -- one of my acreage factors would be .7 and the other would be .5. I come out with it just to be a little bit less, and this could probably be assumed if we had an acreage factor for a 320-acre unit to be .94.

A Would you please give me that proration unit size again, please?

Q Let's go with 384 acres, the top half having 224 acres, having for extended section, and the bottom part being 160 acres.

A All right, sir, I'll calculate --

Q Maybe I'm missing something here. Let me add this piece of paper that I did some rough calculations on, that may help.

MR. STOGNER: So let's take a short recess on these cases at this time and I'll come back to them later.

(Thereupon Cases 9096, 9097, 9098, 9099, 9100, and 9101 were in recess until later in the docket.)

(Thereafter, following completion of other cases on Docket No. 7-87, Cases 9096, 9097, 9098, 9099, 9100, and 9101 were again called to be concluded.)

MR. STOGNER: The hearing will come to order.

We will call the grouping of cases starting with 9096 and ending with 9101. We took a recess several hours ago.

Mr. Kellahin.

MR. KELLAHIN: Thank you, Mr. Examiner.

A. R. KENDRICK,

resuming the witness stand and remaining under oath, testified as follows, to-wit:

REDIRECT EXAMINATION

BY MR. KELLAHIN:

Q Mr. Kendrick, before the continuation of this case Mr. Stogner asked you whether or not there were any of the nonstandard proration units which were utilizing a acreage factor of other than 50 percent full acreage?

A To my knowledge, no. I think they all have an acreage factor of .50.

Q If all the subject wells for the various applicants have a .5 acreage factor, then will your proposed formula change work in the way that you have demonstrated earlier to the Examiner it would work in the generic example?

A Yes, sir.

Q If the acreage factor is plus or minus one for a 320-acre spacing unit, then will your proposed formula be a solution for resolving the inequities of the allowables?

A It will not resolve the problem to a zero balance. It will just be a lot closer than the current formulas.

Q Okay. Have you reviewed the proration schedule to determine whether all of the wells that are the subject of the consolidated hearings have allowables assigned to them that will allow your calculation to work properly?

A In reviewing the schedule I just found two wells operated by the Columbus Energy Corporation to be of acreage .49 instead of .50, being the Arnstein No. 1-E and the Reed No. 1-M, in the Blanco-Mesaverde Pool.

Q Subsequent to the hearing, Mr. Kendrick,

will you make a review of all of the wells that are the subject of this consolidated hearing and for those wells that do not fit your proposed formula, will you submit to the Examiner a written calculation showing how for those exceptions you should make the adjustment in the allowable?

A Yes, sir.

MR. KELLAHIN: That concludes my questions of Mr. Kendrick.

(Thereupon a discussion was had off the record.)

MR. STOGNER: Well, let's get back on the record here.

Are there any questions of Mr. Kendrick?

Mr. Chavez? Mr. Kendrick? Do you have any questions?

MR. H. L. KENDRICK: No, sir.

RECROSS EXAMINATION

BY MR. STOGNER:

Q The two wells that you found with the .49 acreage factor, those were just the two Columbus wells?

A Two of the Columbus wells, the Arnstein

C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY the foregoing Transcript of Hearing before the Oil Conservation Division (Commission) was reported by me; that the said transcript is a full, true, and correct record of this portion of the hearing, prepared by me to the best of my ability.

Sally W. Boyd CSR

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case Nos. 9096 through 9101 heard by me on 4 March 1987.

Michael E. Stogner, Examiner
Oil Conservation Division