

## 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: )

CASE NO. 11,762

IN THE MATTER OF THE HEARING CALLED BY )  
 THE OIL CONSERVATION DIVISION ON ITS OWN )  
 MOTION TO AMEND RULE 111 OF ITS GENERAL )  
 RULES AND REGULATIONS TO SIMPLIFY THE )  
 REGULATORY PROCESS )

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGSCOMMISSION HEARING

BEFORE: WILLIAM J. LEMAY, CHAIRMAN  
 WILLIAM WEISS, COMMISSIONER  
 JAMI BAILEY, COMMISSIONER

April 10th, 1997

Santa Fe, New Mexico

This matter came on for hearing before the Oil  
 Conservation Commission, WILLIAM J. LEMAY, Chairman, on  
 Thursday, April 10th, 1997, at the New Mexico Energy,  
 Minerals and Natural Resources Department, Porter Hall,  
 2040 South Pacheco, Santa Fe, New Mexico, Steven T.  
 Brenner, Certified Court Reporter No. 7 for the State of  
 New Mexico.

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 Commission Hearing  
 CASE NO. 11,762

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## Enron

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## A P P E A R A N C E S

## FOR THE COMMISSION:

LYN S. HEBERT  
 Deputy General Counsel  
 Energy, Minerals and Natural Resources Department  
 2040 South Pacheco  
 Santa Fe, New Mexico 87505

## FOR THE OIL CONSERVATION DIVISION:

RAND L. CARROLL  
 Attorney at Law  
 Legal Counsel to the Division  
 2040 South Pacheco  
 Santa Fe, New Mexico 87505

## FOR ENRON OIL AND GAS COMPANY:

RANDALL S. CATE, Petroleum Engineer

\* \* \*

1           WHEREUPON, the following proceedings were had at  
2   11:01 a.m.:

3           CHAIRMAN LEMAY: We shall now call Case 11,762,  
4   in the matter called by the Oil Conservation Division on  
5   its own motion to amend Rule 111.

6           Appearances in the case?

7           MR. CARROLL: May it please the Examiner, my name  
8   is Rand Carroll, appearing on behalf of the Oil  
9   Conservation Division.

10          CHAIRMAN LEMAY: Any other appearances?  
11       Yes?

12          MR. CATE: Yes, my name is Randall Cate. I  
13   represent Enron Oil and Gas, and I will put forth Enron's  
14   position concerning the proposed rule changes, and we want  
15   to put forth a possible addition to the rules.

16          CHAIRMAN LEMAY: Do you have any witnesses, Mr.  
17   Cate?

18          MR. CATE: Me.

19          CHAIRMAN LEMAY: Just -- Are you going to make a  
20   statement to that effect? Is that what you'd like to do?

21          MR. CATE: Yes.

22          CHAIRMAN LEMAY: Okay, we accept statements.

23               Will those witnesses that will be giving  
24   testimony kindly raise your right hand, stand and raise  
25   your right hand?

1 (Thereupon, the witnesses were sworn.)

2 CHAIRMAN LEMAY: Thank you.

3 Mr. Carroll?

4 MR. CARROLL: Mr. Chairman, I have some exhibits  
5 here, multi-media presentation here, and these were  
6 expensive so I only enough for the Commissioners.

7 Mr. Chairman, Exhibit Number 1 is the book with  
8 the blue cover, and that is the same information that will  
9 be shown on the screen here for everybody.

10 Exhibit 2A is the redlined version of the new  
11 Rule 111, as compared to the old Rule 111.

12 And then 2B is the clean version of the new rule.

13 Exhibit 3 is a copy of comment letters we have  
14 received. I did not include the Phillips letter; I did not  
15 find it when I was making this, but I know you've seen the  
16 Phillips letter.

17 My first witness will be Mike Stogner, petroleum  
18 engineer and Hearing Examiner with the Oil Conservation  
19 Division.

20 MICHAEL E. STOGNER,

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

23 DIRECT EXAMINATION

24 BY MR. CARROLL:

25 Q. Mr. Stogner, will you please state your name,

1 your employer and your position with your employer for the  
2 record?

3 A. Michael E. Stogner, petroleum engineer, New  
4 Mexico Oil Conservation Division, here in Santa Fe.

5 Q. And what do your duties include with the Oil  
6 Conservation Division?

7 A. Hearing Examiner, also petroleum engineer to  
8 review administrative applications that include directional  
9 drilling, unorthodox locations, nonstandard proration  
10 units, among other things, and a wide variety of other  
11 questions and answers whenever it arises.

12 Q. And how long have you been at the OCD?

13 A. Fifteen years, eight months and several days.

14 Q. Mr. Stogner, will you please give the  
15 Commissioners a summary of what your working group -- how  
16 it proceeded with amending Rule 111?

17 A. Yes, I will.

18 If you remember right, we were here about two  
19 years ago, in June of 1995, and changed the long-standing  
20 Rule 111, rules and regulations, for directional drilling.  
21 And what came out of it then was a great step on giving  
22 administrative authorization for horizontal wells. We'll  
23 go into that a little bit later with another witness, what  
24 we did then. But we made great strides.

25 And what we wanted to do was take that step

1 further and go into perfecting it a little more and also  
2 come up with some new ideas and get some new people  
3 involved.

4           So I'd come up with this idea about getting a  
5 work group together, a work group that consisted of people  
6 and peers and which do these kind of applications,  
7 administrative applications for directional drilling, on a  
8 day-to-day basis.

9           This is somewhat of a different concept, because  
10 a lot of times members of committees and work groups would  
11 consist of individuals from the companies that come up that  
12 may be once or even twice removed from that particular  
13 work. Not to put them down or anything, but they were  
14 somewhat in tune with a particular aspect of what their  
15 company did and maybe lose track overall of what the whole  
16 State was doing.

17           So what I wanted to was get a small group -- it  
18 had to be small -- of the people that worked with it, and  
19 also a representation of what I felt, at least, try, the  
20 whole state.

21           The catalyst of it was an application filed by  
22 OXY, or a proposed application to be filed by OXY, which  
23 brought up the notification rules and regulations. And it  
24 made it so burdensome for them that that was the catalyst.  
25 Well, let's see what we can do. And I'm sure Rick Foppiano

1 will review that a little bit later. So I asked Rick if he  
2 would be willing to help me on this.

3 Also contacted Ms. Donna Williams with Burlington  
4 Resources out of Midland. Now, Burlington Resources, of  
5 course, has operations statewide, and they were also -- or  
6 their predecessor, I should say, the Meridian Oil, Inc.,  
7 being one and the same -- was the applicant two years ago  
8 in the proposed rule changes. So I asked her to do it and  
9 she was able to, and thanks to Burlington Resources for  
10 allowing her to do this.

11 I also contacted Texaco. We needed a major in  
12 this aspect, a true major, not to say that OXY and Meridian  
13 are not, but...

14 So I've asked Wade Howard. There again, they  
15 have operations throughout the state too, but I was getting  
16 a lot of applications in their waterfloods, and he was  
17 perfect on those kind of applications, but he lacked some  
18 other -- the deep drilling and such as that.

19 Also needed somebody from the northwest, and I  
20 asked George Sharpe with Merrion Oil and Gas. They have  
21 been very instrumental on all types of directional drilling  
22 up in the San Juan Basin, and they have got some fantastic  
23 little projects, these little short-radius horizontals on  
24 top of the Entrada formation up there, and they've got some  
25 deep -- or considered deep gas up there. So they have some



1       -- and he was able to provide some expertise.

2               We initially met the Monday after Labor Day in  
3 Midland. George Sharpe was able to come down. And between  
4 us five, essentially what I had suggested at that point was  
5 rewriting the rules.

6               And I -- Really, what I did initially was to say,  
7 Here's some suggested topics, the notification, maybe doing  
8 away with the administrative procedure and turning it over  
9 to the District Offices.

10              But as we got to talking there was a lot of other  
11 aspects that could have been changed.

12              I also encouraged them, because I heard comments  
13 like, Well, I don't think the Commission will go for this,  
14 or perhaps...

15              And I said, Well, hold it, let's discuss it,  
16 let's bring it up, that's what we're here for. We've been  
17 encouraged to think outside the box, so that's exactly what  
18 we did, and we come up with some pretty, what I think,  
19 fantastic ideas.

20              What we did in that work group was use current  
21 Rule 111s, new and improved Rule 111s and comparisons of  
22 those changes and then come up with some, of course,  
23 summaries.

24              Also during this time, this initial phase, we  
25 were all encouraged to talk to other companies, other

1 people, other applicants that come in.

2 So I would have a question for somebody, I'd say,  
3 Oh, by the way, we're thinking about doing this; what do  
4 you propose, and how do you feel about it? I encouraged  
5 them to talk to Rick, Donna, Wade, myself and of course  
6 George Sharpe.

7 So I've essentially introduced to your our little  
8 work group that we came up, which all of them, of course,  
9 do file applications with me.

10 We on, after that initial meeting -- which by the  
11 way, didn't cost the Commission anything because I was down  
12 in that part of the world on a different matter, and I got  
13 together with them, so we wanted to do -- We reviewed the  
14 process, that was another thing we wanted to do, was make  
15 it efficient, effective, and get to the nitty-gritty of it.  
16 And also that encouraged them to talk within their  
17 companies.

18 Of course, Mr. Howard had his regulatory people,  
19 and they were very pleased with him working on this, and  
20 they were able to give him some expertise, and he was able  
21 to go around.

22 One of the things that really came out of it --  
23 because each one may have had an expertise in one  
24 particular aspect, but when you talk about this whole thing  
25 in trying to make the rules and regulations work for the

1 whole state, then they started seeing all these other  
2 mechanisms and ways to do things, what George was doing up  
3 in the San Juan Basin.

4 I've seen some gaping mouths, to be honest with  
5 you: My God, they're doing that? And they can do that,  
6 and here's what we were doing.

7 And it worked out very well. They learned a lot.

8 We outlined a vision, what should the regulatory  
9 process look like? We wanted to see what other states were  
10 doing, what Texas -- and of course, they all had lots of  
11 expertise in other states, like Oklahoma, Texas, Louisiana,  
12 Kansas.

13 We got together and drafted some rule changes,  
14 rule language, which there again, it became their learning  
15 process of it. We were using language which perhaps meant  
16 something else to somebody else. So we had to get that  
17 cohesiveness together. And that was -- That came rather  
18 quickly.

19 We drafted these rule changes that achieved, I  
20 think, or vision. And we solicited feedback from other  
21 companies, of course.

22 Also another thing they did, I sent them copies  
23 of administrative rules or administrative orders that I had  
24 done since the -- June of 1995, and they've meticulously  
25 reviewed them all to see what the consensus was and some of

1 the things that we could improve on.

2 In October -- After our meeting in September, in  
3 October, we had a rough draft order, several of them, I  
4 should say, through October and November.

5 And in December, early part of December, we met  
6 with, of course, the people that this is really going to  
7 affect, and that's the District Supervisors from the four  
8 District Offices.

9 We got them together, Rick Foppiano came up and  
10 made a presentation to them. We also got a lot of feedback  
11 from them. We were quite surprised with some of the  
12 suggestions they made, to make it more streamlined.

13 And we again -- our -- the crew then took those  
14 suggestions back and made some -- we made some  
15 word/language something and got some proposed rules out, and  
16 they submitted to me in January.

17 We again met. Again, I was down in the  
18 Midland/southeast area for some other aspect. I went over  
19 and we had a meeting together to discuss these comments and  
20 come up with a final draft to give to the Commission, which  
21 we did, and of course they were put on the docket several  
22 weeks ago, and additional comments came in.

23 And with that, that's essentially my presentation  
24 at this point, which I then am going to turn over to Rick,  
25 Donna and Wade for additional presentations.

1 MR. CARROLL: Call Rick Foppiano to the stand.

2 RICHARD E. FOPPIANO,

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

5 DIRECT EXAMINATION

6 BY MR. CARROLL:

7 Q. Rick, will you give your name, your company and  
8 your position with your company for the record?

9 A. Yes, my name is Rick Foppiano. I'm a registered  
10 professional engineer for OXY USA in Midland, and my title  
11 is Regulatory Affairs Advisor for our operations in New  
12 Mexico, west Texas, and other states in the western part of  
13 the United States.

14 Q. What are your duties as regulatory affairs --

15 A. My duties are to understand the regulations of  
16 the different jurisdictions that we operate in and  
17 basically interface between our geologists and engineers  
18 and other company people and the regulatory agency in  
19 trying to ensure compliance and ensure understanding of the  
20 regulations, and also participate in industry efforts to  
21 streamline, improve, whatever, on the regulations as they  
22 impact us.

23 Q. And what is your educational/professional  
24 background up to now?

25 A. I'm a graduate of the Georgia Institute of

1 Technology in Atlanta, Georgia. In 1977 I earned a degree  
2 in civil engineering there. Following that I spent three  
3 years with Halliburton Services in field operations,  
4 drilling and completion on the drilling rigs and workover  
5 rigs. And then I went to work for Cities Service, now OXY  
6 USA, where I did for about five years more drilling and  
7 completion activities, then, essentially chasing rigs.

8 And then I evolved into management and then  
9 evolved from management into the regulatory affairs  
10 position where I performed -- I basically did what I do  
11 now, for the last ten years, but I did it in Mississippi,  
12 Louisiana, Oklahoma and various states, and just  
13 interfacing between the regulatory agencies.

14 So I've been handling regulatory affairs for my  
15 company for the past ten years in various states.

16 Q. And do your duties include the handling of  
17 applications for directional/horizontal drilling?

18 A. That is correct, I've prepared and filed several  
19 directional drilling applications in New Mexico.

20 Q. Okay, Rick, if you would proceed through the  
21 slides you've prepared.

22 A. Okay. Mr. Chairman, Commissioners, what we have  
23 here is a slide presentation we're kind of just going to  
24 walk you through. It's identical to what you have in your  
25 exhibit.

1 But we found that when we got together and talked  
2 about this, we ended up drawing lots of pictures. So what  
3 we have are a lot of those pictures that we drew. And it  
4 helped us understand the current rule and where we wanted  
5 to be, so we thought that would be beneficial, and for the  
6 audience that was here, so they'd be able to see it.

7 So thank you for your indulgence on the technical  
8 difficulties we had this morning. I think we've got those  
9 cured.

10 COMMISSIONER WEISS: What was the problem?

11 THE WITNESS: Actually, I had to go into my  
12 computer and configure the setup such that it shows an  
13 external monitor and an internal monitor. It was really  
14 weird. I was getting desperate, because it's worked  
15 everywhere but here.

16 A little bit about the process before we get into  
17 the meat of the subject. The work group, as Mike has  
18 mentioned, got together and the first thing we did was get  
19 agreement among ourselves on what the problem was. Before  
20 we ever started fixing anything, we wanted to get agreement  
21 on what is it that we think is wrong that needs to be  
22 fixed. So we spent a good bit of time doing that.

23 And that was very crucial because after that,  
24 developing the solutions and then -- you know, crafting our  
25 vision and then coming up with rule changes all fell right

1 into place, because we were all rolling in the same  
2 direction.

3           So this presentation will kind of walk you  
4 through the same process. We've gotten -- You've seen a  
5 little bit about the work group. What we want to talk  
6 about is the problems that we identified as a group, the  
7 solutions that we came up with as a group, and the vision  
8 that we crafted such that whatever our solution was fit in  
9 with that vision.

10           And the finally we want to take you through our  
11 understanding of current Rule 111 so you can kind of see,  
12 as we did, what problems industry has had with current Rule  
13 111, and then take you through the new 111 as it's been  
14 proposed for change, and then follow that up with a side-  
15 by-side comparison for clarity, and then just kind of clean  
16 up with some summary stuff.

17           I would like to mention, though, that the red  
18 line and version that you have for exhibits -- I want to  
19 make sure that everyone's. We had a version from our work  
20 group that was sent out to industry for comment. We got  
21 comments back.

22           The work group met and has proposed some  
23 additional changes based on that input, and those  
24 additional changes are included in the version that you  
25 have before you. They're shown in bold italics as



1 additional suggested changes to what was docketed.

2 So in case there was any confusion about what  
3 that document is, it is the most recent set of changes the  
4 work group is working with, based on consensus.

5 So with that, I'd like to go ahead and start in  
6 to what the work identified was the problems. And the  
7 first thing that we identified was the current process for  
8 permitting horizontal and directional wells under Rule 111.  
9 In our view, it was just more difficult than it needed to  
10 be for most of the situations.

11 And for example, even though a bottomhole  
12 location for a directional drilling or horizontal drilling  
13 project was orthodox, an operator was still required to  
14 file a formal application with several attachments,  
15 identify and give notice to offset operators and then wait  
16 at least 30 days to go ahead and get a formal order before  
17 you can proceed.

18 Another problem we identified was the  
19 requirements for vertical wells when you had excessive  
20 deviation, i.e., you had any part of that vertical  
21 wellbore, any 500-foot section of it, with greater than  
22 five degrees of deviation. What happened after that really  
23 was kind of unclear, and that was more or less validated by  
24 our meeting with the District Directors.

25 For example, when the deviation exceeds five

1 degrees per 500 foot, we weren't sure when a directional  
2 survey would be required, and then, more importantly, we  
3 weren't sure what happens when the directional survey  
4 results are known, because a lot of times we drill at the  
5 corner of an orthodox window, and when we do that the  
6 chances are three out of four that our bottomhole location  
7 will be unorthodox. So we thought there needed to be some  
8 clarity in the rule as to what happens.

9           So how could we improve it? The work group  
10 suggested that we could identify those situations that can  
11 be permitted just through a normal APD process, APD meaning  
12 application for permit to drill, just like a vertical well.

13           And then when the bottomhole location is  
14 unorthodox, handle it under Rule 104 just like a vertical  
15 well.

16           Of course, clarify when a directional survey  
17 would be required for a vertical well.

18           And so with those problems and solutions  
19 identified, the team came up with a vision saying, What  
20 should the answer look like?

21           The answer, in our view, should have minimal  
22 regulatory burdens for drilling normal directional and  
23 horizontal wells. And "normal" meaning kind of like more  
24 orthodox bottomhole locations and more, you know, ordinary  
25 type of directional and horizontal. And you'll see some

1 examples of those as we go through.

2 And we felt like that the protection of  
3 correlative rights was paramount -- you know, the  
4 correlative rights of the offsets -- through using Rule  
5 104, because the Division just revised Rule 104 to clarify  
6 the notice, you know, encroachment and that kind of thing,  
7 and so we think that's a very good tool to use for  
8 directional and horizontal wells if the producing interval  
9 is unorthodox. And I think that's been kind of understood,  
10 but it was unclear, and our proposed changes make it real  
11 clear.

12 And then finally, clear requirements for vertical  
13 wells when you have excessive deviation.

14 And really finally, we needed a simple rule so we  
15 could go back and explain it to our engineers and  
16 geologists, so it didn't mentally challenge them any more  
17 than necessary.

18 So with that, we'd like to launch into an  
19 explanation of current Rule 111. I'd be happy to answer  
20 any questions based on what I've presented so far, or we  
21 can go right into the presentation of the current rule if  
22 you would like.

23 CHAIRMAN LEMAY: Okay. Commissioner Weiss?

24 THE WITNESS: Moving right along...

25 The current Rule 111, and this is the current --

1 what's in the rule book right now and what we're working  
2 under -- has six parts.

3 Part A is definitions, Part B deviation tests, C  
4 is an application process related to deviated wellbores.  
5 Part D is the section relating to directional wellbores,  
6 and then Part E says when the Division issues an order for  
7 directional wellbores this is what it has to say, and then  
8 Part F is kind of a cleanup section. And we'll go through  
9 each of these parts, not in excruciating detail but in  
10 enough to kind of get everybody on the same book and page,  
11 I think.

12 Key definitions in Part A that we need to mention  
13 here. First are a vertical well, a deviated well and then  
14 a directional well. A producing interval, a project area  
15 and then a producing area. And we'll go through these  
16 individually real quick.

17 First off, what's a vertical well? Well, a  
18 vertical well to us is like straight-hole well. It's where  
19 we drill a well, it's intended to be straight, but they  
20 never are. So Rule 111 says a vertical well is a wellbore  
21 that's drilled without intentionally steering it somewhere  
22 and without intentionally deviating it, although they --  
23 every wellbore does deviate in the drilling.

24 What's a deviated well? A deviated well seems to  
25 be a very small class of wells that are -- where the

1 wellbore is intentionally deviated for some specific  
2 reason, like to deviate around junk in the wellbore or  
3 something like that. But it still -- It doesn't have a  
4 specific target.

5 A directional well is a wellbore that does have a  
6 specific target, and more importantly, horizontal wells are  
7 treated the same as directional wells. So a directional  
8 well, horizontal, there's no distinction between the two.

9 The producing interval is defined to be that part  
10 of the wellbore which is located within the vertical limits  
11 of a particular pool, and it is specific to that pool. And  
12 here's where we get into some pictures to kind of help  
13 explain this.

14 This is an example of a producing interval. I  
15 used deep gas in southeast New Mexico because that's what  
16 we're real familiar with at this point. But this is a  
17 cross-sectional view of some deeper gas formations, Strawn,  
18 Atoka and Morrow.

19 And if you can kind of picture a boundary line  
20 extending down through the earth there, from the surface,  
21 that could be a side boundary line, it could be an end  
22 boundary line, it really doesn't matter. And then white is  
23 showing the wellbore track.

24 And you can see the wellbore track starts from an  
25 orthodox location, it goes through at an angle and it ends

1 up with its terminus there, right here at the end, at an  
2 unorthodox location. So this red line could be the 660  
3 setback from the side boundary, it could be the 1650  
4 setback from the end boundary, it really doesn't matter.

5 But the key point here is that the producing  
6 interval is orthodox, here, the producing interval right  
7 here is orthodox in the Atoka. The producing interval in  
8 the Morrow here is unorthodox because a portion of it does  
9 encroach on the side -- or on this boundary line.

10 Project areas and producing areas. Project area  
11 is simply an area that an operator designates on his Rule  
12 111 Application. It can be a spacing unit or it can be a  
13 combination of spacing units.

14 The producing area --

15 CHAIRMAN LEMAY: Rick, could I interrupt you for  
16 a question on that previous one?

17 THE WITNESS: Sure.

18 CHAIRMAN LEMAY: Why don't you flip back to the  
19 diagram?

20 THE WITNESS: Okay. Oh, I've got to go all the  
21 way back.

22 CHAIRMAN LEMAY: All right, there. Taking that  
23 Morrow interval, if you only perforated what was right at  
24 that vertical line, you'd still be orthodox, though,  
25 wouldn't you?

1 THE WITNESS: Well, in the current rule, Chairman  
2 LeMay, it's not real clear, but in the proposed changes to  
3 the rule it does not relate to what you perforate. It  
4 relates to where you penetrate it.

5 And if any part -- Since the producing interval  
6 is defined to be this portion of the wellbore, it doesn't  
7 matter that you're perforating down here, a portion of --  
8 or let's -- I'm sorry, let's say you're perforating right  
9 here.

10 CHAIRMAN LEMAY: Yeah.

11 THE WITNESS: It doesn't matter that -- where  
12 you're perforating; it matters that a portion of your  
13 wellbore is in -- is closer to the side boundary or end  
14 boundary than is allowed under the setback rules. So it  
15 kind of clarifies what is -- when the producing interval is  
16 unorthodox.

17 CHAIRMAN LEMAY: Yeah, that's a problem I can  
18 see, that you don't want that bottomhole -- your deviated  
19 well to migrate beyond what is orthodox, according to the  
20 current rules, or you're automatically unorthodox.

21 THE WITNESS: If you want to produce anywhere in  
22 that -- For example, if you want to produce anywhere in  
23 this Morrow --

24 CHAIRMAN LEMAY: Yeah.

25 THE WITNESS: -- under the proposed revisions to

1 the rule, it would require a nonstandard location order, it  
2 would require that you go through Rule 104, even if you  
3 just proposed to perforate it right here.

4 CHAIRMAN LEMAY: If you used the analogy that a  
5 vertical well would be equivalent to a horizontal well at  
6 any point of that horizontal or directionally drilled  
7 well's deviation, then you should be orthodox if you kept  
8 your perforations to the right of that vertical setback?

9 THE WITNESS: I agree, your perforations would be  
10 orthodox, but I think the problem would be, what would stop  
11 somebody where they have pay interval down here --

12 CHAIRMAN LEMAY: Yeah.

13 THE WITNESS: -- and pay interval here, to go and  
14 get producing authority for their perforations up here, and  
15 then later on down the road add the perforations down here.

16 CHAIRMAN LEMAY: Because you'd be unorthodox once  
17 you added the other perforations?

18 THE WITNESS: But it would be very difficult to  
19 police it at that point, later on down the road.

20 And actually, this is -- It's a rare situation,  
21 and Morrow is probably a good example because of the  
22 stratification of it and how broken up it is, but it's --  
23 Most of the time, that really hasn't been an issue that  
24 we've run into yet, is that where we want to perforate is  
25 orthodox but we have a portion of our producing interval is



1 unorthodox.

2 CHAIRMAN LEMAY: Okay.

3 COMMISSIONER WEISS: Is the objective to maximize  
4 the wellbore in any of those formations? The length of the  
5 wellbore?

6 THE WITNESS: I think the objective is -- Where  
7 we were trying to get to is, if my producing here is  
8 orthodox, then that should be fine, that shouldn't be any  
9 problem.

10 But if I intend or I want authority to be able to  
11 produce in this Morrow and a portion of my wellbore is  
12 unorthodox, I should fall under the same rules as a  
13 vertical well. If a vertical well was drilled right here,  
14 it would have to go through Rule 104.

15 COMMISSIONER WEISS: I was just thinking that.  
16 You know, if you were -- If you thought there was something  
17 in all three zones, it looks like you'd want to maximize  
18 the length of the wellbore. I mean, the result here if you  
19 did that, most of your well would be unorthodox in the  
20 Morrow.

21 THE WITNESS: A portion of it would be. But it  
22 would be orthodox for the other zones. I'm not sure I  
23 understand your question.

24 COMMISSIONER WEISS: Well, that's okay, go on.

25 THE WITNESS: The producing area definition is

1 basically the orthodox window inside of that project area,  
2 and it's defined by the minimum setbacks that are  
3 applicable to that particular pool, and we'll have a  
4 picture here to show you.

5 And basically the well is unorthodox when any --  
6 when the producing interval is outside of the producing  
7 area.

8 Here's the example of a 320-acre spacing unit.  
9 That would be kind of like a south half. And in red --  
10 heavy red dashes would be the outline of the project area  
11 that the applicant identified on his application.

12 And in orange here would be what we call the  
13 producing area, and it's defined by these minimum setbacks,  
14 660 and 1650, so that anything that went on here in terms  
15 of producing interval would be considered to be orthodox,  
16 and anything, any part of the producing interval that was  
17 out here in the green area would be considered to be  
18 unorthodox.

19 This is the way we've interpreted the current  
20 rule, but it really isn't clearly addressed in the current  
21 rule, and we propose to clarify that in the new rule. And  
22 I think you'll see how it is clarified.

23 Another example of a producing area consisting of  
24 more than one proration unit. Here's one where there's  
25 four 40-acre units put together. It may be that an

1 operator is planning on drilling a long horizontal -- like  
2 this. And so he would identify this project area as the  
3 outline of the four 40-acre proration units that he put  
4 together.

5 Incidentally, that's been more -- I'm sorry.

6 COMMISSIONER BAILEY: Would that then fall under  
7 unit regulations?

8 THE WITNESS: As we interpret it, Commissioner  
9 Bailey, the current rule allows for you to combine multiple  
10 proration units and have a project inside of that is just  
11 like that.

12 That's how we've seen -- We've seen some  
13 applications up in Farmington that do exactly that, and  
14 it's been handled under Rule 111. Now, I think in those  
15 cases all the interests have been consolidated or unitized,  
16 so there really isn't an issue where you're combining  
17 different leases or you're trying to unitize or anything  
18 like that.

19 Part B of the rule deals with deviation tests,  
20 really relating to what we call straight-hole wells. It  
21 says operators must run deviation tests every 500 feet on  
22 any new drill or deepening project, he must file the  
23 deviation test information with the C-104 and completion  
24 paperwork.

25 And the operative part of the rule is that when

1 the deviation exceeds five degrees in any 500-foot  
2 interval, the operator must calculate the maximum  
3 horizontal displacement of his wellbore.

4 And basically what that is is a theoretical  
5 maximum, if all the departures from the vertical were added  
6 up in the same direction, that would be where the end of  
7 the wellbore would be. No wellbores do that, but the  
8 maximum horizontal displacement is really just a  
9 theoretical maximum outline of where that wellbore would  
10 be.

11 And then it says the Division Director can  
12 require a directional survey for the wellbore.

13 Part C is an application process that applies to  
14 deviated wells, and it says the District Office can approve  
15 an operator's written request to deviate a wellbore for a  
16 specific reason, like deviating around junk or something.

17 And then it says if he wants to deviate for any  
18 other reasons, he must file an application for  
19 administrative approval and attach plats and give notice to  
20 the offset operators and working interest owners. And then  
21 the offsets have 20 days to protest.

22 The interesting thing here is that based on  
23 everybody we've asked inside the OCD and outside, no one  
24 can ever recall an application ever being filed under this  
25 section.

1           And so we -- You'll see we proposed to delete it  
2 all, and the District Directors didn't have any objection  
3 to that at all.

4           Part C has an interesting section in there called  
5 -- what we call the 50-foot rule. And we probably had more  
6 discussion over this 50-foot rule than anything in this  
7 entire rule.

8           So I'll try to walk you through and explain it,  
9 because it may come up again. You may have some questions  
10 about what is this 50-foot rule.

11           Rule 111(C)(4) requires that the producing  
12 interval of a deviated wellbore be orthodox or within 50  
13 feet of an approved location. It doesn't apply to  
14 directional wellbores, so -- It applies only to deviated  
15 wells where you had to run a directional survey. So we'll  
16 talk some more about that later on, when we get into it.

17           Part D, directional wellbores. Directional, of  
18 course, includes horizontal projects. And here is where  
19 the group was -- originally started with its major concern,  
20 was, Part D requires NMOC approval through an application  
21 which has a plat, a horizontal and plan view, a type log,  
22 notice and opportunity for protest to all offset operators  
23 or working interest owners. And that is irrespective of  
24 whether the bottomhole location is orthodox, unorthodox,  
25 whatever. It says you have to go do this.

1           And then the offsets, of course, have 20 days to  
2 protest before -- you know, the application can even be  
3 started to be processed, because it may have to go to  
4 hearing.

5           D(3) contains some information or some discussion  
6 about allowables that, quite frankly, we had a little  
7 trouble with, so we changed it.

8           It says when you're combining units and you're  
9 trying to get a maximum allowable for this area where  
10 you've combined units, that that maximum allowable for that  
11 project area is equal to the number of proration units that  
12 are located within a certain feet of your wellbore.

13           Now, certain feet is the same as the minimum  
14 setback for an outer boundary -- or minimum setback from  
15 the outer boundary that's applicable to a vertical well.

16           Give you an example. For an oil pool or an oil  
17 well in an oil pool under statewide rules where the setback  
18 is 330 feet, if that wellbore is within or closer to 330  
19 feet to any offset unit, then the operator would be allowed  
20 to add that in and define that as part of his project area,  
21 and get a multiple allowable based on that, even though he  
22 didn't get over there and penetrate it.

23           And the group kind of felt like that was a little  
24 lenient and we thought we should tighten that up.

25           And what we ended up doing was adopting the same

1 language that had been, you know, put in the orders that  
2 had been issued in these situations. So we basically  
3 codified the orders back in the rule.

4 Part E are the conditions of approval for  
5 directional and horizontal drilling applications. It says  
6 that they can be approved after 20 days or sooner if no  
7 waivers -- or if waivers are submitted.

8 It says the orders shall require a directional  
9 survey with notice to a District office.

10 And then Part F is the miscellaneous section.  
11 One area that has caused some interesting comments from  
12 industry was this section about that the Division can order  
13 an operator to run a directional survey if an offset  
14 operator complains. There's some stuff in there about who  
15 pays for the survey and the posting of the bond.

16 Interesting, nobody has ever complained past the  
17 Division, yet this paragraph caused more comment from  
18 industry than anything.

19 It says the Division Director can also set any  
20 directional drilling application for hearing, even if no  
21 one protests.

22 So that's kind of a review of the current rule  
23 from where we started with. And to summarize again, the  
24 main problem that we started with was the fact that on a  
25 normal directional drilling application, even when the

1 bottomhole location was entirely orthodox, we still had to  
2 go through an application and notice process that added  
3 extra time and expense to us and to the Commission in  
4 having to process it and issue an order.

5 And an example that Mike brought up that OXY had  
6 was in the City of Carlsbad that we wanted to directionally  
7 drill. And because there were undrilled spacing units  
8 offsetting us, we hired a broker to go out and investigate  
9 the ownership of the leasehold, and it was so broken up  
10 that the estimate we got back was well over \$10,000 and  
11 several months' worth of time to try to get the lists of  
12 people to comply with the notice requirements.

13 So -- That and our experience in other states led  
14 us to ask the question, why are we requiring such strenuous  
15 effort, even when the bottomhole location is orthodox? And  
16 if it's unorthodox, we have a great Rule-104 process; why  
17 don't we use it for that situation?

18 So that's really where we started with.

19 We also attempted to address some questions and  
20 concerns, clarifications that we thought needed to be made  
21 and that kind of thing.

22 And so I'd be happy to answer any questions on  
23 the current rule if you've got any at this point, or we can  
24 go right into the new Rule 111.

25 CHAIRMAN LEMAY: Bill, do you --



1           COMMISSIONER WEISS: Yeah, tell me again what  
2 Rule 104 is.

3           THE WITNESS: I'm sorry, Rule 104 is the  
4 Commission's general spacing rule.

5           It was revised last year, and it basically says  
6 that when you're encroaching, you know, you're trying to  
7 drill closer than is allowed under the spacing rules  
8 applicable, either under a statewide basis or the pool  
9 rules, it has a specific determination of who the affected  
10 parties are and a notice that is required and the  
11 application process.

12          COMMISSIONER WEISS: Is the penalty included in  
13 that rule?

14          THE WITNESS: Not to my knowledge, I don't  
15 believe it is, no. That's, I think, usually been the  
16 subject of an agreement or a Commission order issued after  
17 a protest of hearing.

18          COMMISSIONER WEISS: That was my only question.  
19 Thank you.

20          CHAIRMAN LEMAY: Commissioner Bailey?

21          COMMISSIONER BAILEY: I don't have any, that's  
22 fine.

23          CHAIRMAN LEMAY: I don't have any.

24          THE WITNESS: And with that, I'd like to turn it  
25 over to Donna Williams with Burlington.

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DONNA WILLIAMS,

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

DIRECT EXAMINATION

BY MR. CARROLL:

Q. Donna, will you please state your name, your employer and your position with that employer for the record?

A. My name is Donna Williams, I work for Burlington Resources as a regulatory technician.

Q. Will you please give the Commission a brief history of your educational and professional background?

A. I have three-plus years towards a business degree. Currently, I'm responsible for all regulatory aspects, including drilling completions, production, environmental issues and field compliance for southeast New Mexico, Colorado, Texas, Oklahoma, Arkansas and Kansas, and will be assisting in North and South Dakota, Montana and Wyoming.

Q. Whoa! And do your duties include the -- making applications for directional horizontal drilling?

A. Yes, it does.

Q. Could you lead us through the new Rule 111, please?

A. Sure. As Rick previously discussed, what we took

1 was the current Rule 111 and came up with some revisions  
2 that we felt like that the rule needed.

3 The first is, you'll see the structure. What we  
4 did was take the six parts of Rule 111 and combined some of  
5 them that we felt could be addressed under additional or  
6 the same parts, and basically what you're seeing is a  
7 simpler Rule 111.

8 Under Part A on the definitions, what we did was  
9 redefine a project area to be the area that an operator can  
10 designate on a Form C-102, which is the State form for  
11 certified plats of the acreage assigned to a well.

12 In addition to being one or more drilling units,  
13 we felt like that a project area can also be a secondary  
14 recovery unit or a pressure maintenance project.

15 And finally, we redefined "unorthodox" to mean  
16 encroachment to the outer boundaries only.

17 And we'll look at an example here. What we have  
18 is a standard 320 proration unit. The red bold lines  
19 indicate what we've designated as our project area.

20 The orange in the center is what we would term as  
21 our producing area that's after you do your minimum  
22 setbacks, that that's the area that you can legally drill  
23 and produce out of without encroaching on anybody else's  
24 lease.

25 The green area is what we've determined as the

1 unorthodox area, meaning that if our producing interval or  
2 area got anywhere into that green area, then Rule 104 would  
3 be applicable.

4 The next section that we dealt with was on  
5 deviation tests. Basically what we did was define that a  
6 directional survey will be required if there's a chance  
7 that the wellbore will be off-lease.

8 We maintain the current 50-foot allowance for  
9 straight-hole wells.

10 And we clarified that Rule 104 is applicable if  
11 the survey shows the wellbore is too close to the outer  
12 boundaries.

13 And we finally required that all directional  
14 surveys are to be filed with your paperwork, your  
15 completion work. And it also allows NMOCD to require a  
16 directional survey in any special situation.

17 We're going to look at an example here. It's our  
18 infamous standard 320 proration unit. You've drilled your  
19 well, and during the drilling of it, you've exceeded your  
20 five-degree-per-500-foot interval. You've calculated your  
21 maximum horizontal displacement.

22 And as indicated by the circle around the  
23 wellbore, you didn't exceed the minimum setbacks as  
24 required by the statewide rules. So under the new rule, we  
25 felt like no directional survey would be required.

1           Here we have the same wellbore. We've exceeded  
2   our five-degrees-per-500-foot-interval. We've calculated  
3   our maximum horizontal displacement. However, in this  
4   situation it looks like we might have exceeded our minimum  
5   setbacks that the statewide rules require. And under this  
6   case a directional survey would be required and filed with  
7   the NMOCD.

8           COMMISSIONER WEISS: Does this mean that you guys  
9   don't know which way the wellbore is going to go?

10          THE WITNESS: That we don't know?

11          COMMISSIONER WEISS: Yeah.

12          MR. FOPPIANO: That's correct.

13          COMMISSIONER WEISS: Okay, that's why you have to  
14   do the survey?

15          THE WITNESS: Right, the directional survey --

16          COMMISSIONER WEISS: You pointed to the northwest  
17   there, and you don't know that necessarily it's going to go  
18   to the northwest; is that the idea? Do you have to  
19   demonstrate that?

20          THE WITNESS: Well, the directional survey will  
21   determine what direction the well, I guess, drifted or --

22          COMMISSIONER WEISS: It's to confirm what you  
23   said is going to happen?

24          THE WITNESS: Yes.

25          COMMISSIONER WEISS: Okay.

1 MR. FOPPIANO: If I could add to what she's  
2 saying, this really is the section that only applies to  
3 what we call straight-hole wells, wells where we don't have  
4 directional surveys required, but it sets up a condition  
5 that does require a directional survey for a straight-hole  
6 well, and then it defines what happens after you've run  
7 that directional survey and you find your bottomhole  
8 location is over here.

9 So to answer your question, Commissioner Weiss,  
10 we don't know, on a straighthole well, where that wellbore  
11 goes. That's kind of -- Everybody's at the same  
12 advantage/disadvantage.

13 COMMISSIONER WEISS: Yeah, I was thinking --  
14 directional --

15 MR. FOPPIANO: Directional?

16 COMMISSIONER WEISS: Yeah.

17 MR. FOPPIANO: We haven't gotten there yet.

18 CHAIRMAN LEMAY: But on the straight hole, how  
19 many times, practically speaking, does your -- when you run  
20 the Totco, say, on a trip, does that 500 feet, every --  
21 five degrees every 500 feet, how many times do you get that  
22 much deviation in southeast New Mexico?

23 I've not seen it -- much of it happen. That's  
24 why I didn't know if it was a problem.

25 MR. FOPPIANO: It's happened to us.

1 MS. WILLIAMS: It hasn't happened to us. I think  
2 it's just a case-by-case basis.

3 CHAIRMAN LEMAY: I'm just curious, how much this  
4 comes to play.

5 MR. HOWARD: -- Texaco --

6 CHAIRMAN LEMAY: Huh?

7 MR. HOWARD: Very seldom, we haven't seen --

8 CHAIRMAN LEMAY: Yeah, I've not seen it out in  
9 the field.

10 MR. FOPPIANO: Interesting, if I can expand on  
11 that, that one of the things we're seeing more of is the  
12 application of slimhole drilling technology, and that has  
13 more weight on the bit. One of the problems is excessive  
14 deviation with packed holes assembly when you're trying to  
15 drill that small hole.

16 So it may not have been as much of a problem in  
17 the past. Operators are trying to cut drilling time down,  
18 and that's one way they're looking at doing it.

19 CHAIRMAN LEMAY: As an exploration/exploitation  
20 technique -- I hate to give away a lot of secrets of the  
21 past, but when we were unorthodox we'd get over the reef  
22 and we'd pour the coal to it and try and deviate it because  
23 it was the last trip, that we wouldn't have to run a 500-  
24 foot --

25 MR. FOPPIANO: You old-timers --

1           CHAIRMAN LEMAY: Do you still use that technique  
2 today to try and get closer to a --

3           MR. FOPPIANO: We're just not that good, we're  
4 just not that sharp.

5           MR. STOGNER: No, but they will.

6           MR. FOPPIANO: I'm going to know that, though.

7           MS. WILLIAMS: The next part we're going to deal  
8 with is Part C, regarding directional and horizontal wells.

9           This was probably one of the key factors in the  
10 forming of this work group, was that we felt like with  
11 directional and horizontal wells, as long as the -- it was  
12 a legal location, that we felt like we could obtain  
13 approval to do this through the district offices and not  
14 have to go through a special permitting process as the rule  
15 currently requires.

16           And we also added that Rule 104 will apply if the  
17 wellbore encroaches on the outer boundaries, as it would  
18 with a vertical well.

19           It deals with the allowables for project areas  
20 that combine proration units, as Rick had previously  
21 discussed, and we had expounded on that part of the rule,  
22 as you'll see in the comparison part that Wade will be  
23 going through.

24           And we also stated that directional surveys will  
25 be required on any directional and horizontal well.



1           Part D is regarding to the miscellaneous, or the  
2 cleanup version, as Rick refers to it.

3           The first part describes how an offset operator  
4 can request a directional survey on another's well.

5           And the Division Direction can require an  
6 application to go through administrative approval process,  
7 or be set for hearing.

8           And finally that notice and opportunity for  
9 hearing are required for approval of any directional  
10 drilling project that is not addressed in the rule.

11           And that's concluding my part of the  
12 presentation. If you all have any questions or...

13           COMMISSIONER BAILEY: I have seen some confusion,  
14 ambiguity, between unit areas and the definition of project  
15 areas.

16           THE WITNESS: Okay.

17           COMMISSIONER BAILEY: Was that a two-channel  
18 problem?

19           THE WITNESS: We had several discussions on that,  
20 actually, including project areas. We felt like for  
21 Burlington, most of ours would be done on a lease basis,  
22 but we would never cross -- It would be like a state lease,  
23 one state lease that we have or federal lease, and that was  
24 what we would deem as our project area.

25           We did discuss the ability of putting leases

1 together and using joint operating agreements, the kind of  
2 conditions that operators do amongst themselves for --

3 COMMISSIONER BAILEY: But then it starts crossing  
4 the line into unit approvals, and then it's differences in  
5 leases or differences in --

6 THE WITNESS: -- in interests.

7 COMMISSIONER BAILEY: -- in ownerships. And I  
8 can see that there would be confusion and ambiguity as far  
9 as when a unit is going to be approved or when a project  
10 area is not considered a unit and --

11 THE WITNESS: Where is the difference or the  
12 distinction?

13 COMMISSIONER BAILEY: Exactly, exactly. It's a  
14 very gray area.

15 MR. FOPPIANO: Commissioner Bailer, the answer we  
16 finally came up with was the definition of a project area  
17 by an operator, either under the old rule or the new rule.  
18 And our view didn't confer unit status on that area.

19 However, where you had units already formed,  
20 either through an operating agreement or it was single  
21 lease anyway, or it was a secondary recovery or a tertiary  
22 recovery project, that an operator should be able to  
23 designate that area as a project area.

24 And interesting, the current rule just says an  
25 operator can combine more and more proration units. It

1 doesn't speak to under what situations that will be allowed  
2 or if that has to be unitized or whatever. It more or less  
3 presumes, I believe, that that is only allowed or will only  
4 be allowed in a unit-type situation or in a single-lease-  
5 type situation.

6 COMMISSIONER BAILEY: Or even a gray area, if  
7 it's aggravated, that it doesn't come to hearing. I can  
8 see where that problem would arise if it was not ever set  
9 for hearing, because as it is now, it does come.

10 MR. FOPPIANO: It comes to the Commission, yes,  
11 through the application process, if it's going to be more  
12 than one unit.

13 But in the past the applications we've seen only  
14 address this multiple unit situation in the context of a  
15 federal exploratory unit. We haven't really seen any  
16 applications in southeast New Mexico.

17 But one point where the work group was to deal  
18 with that particular problem was, we actually kept a notice  
19 and application process for the multiple-unit scenario.

20 And we were actually challenged by the District  
21 Directors to say, well, why? You know, you file a C-102 on  
22 this well, and it says all the interests in this area are  
23 consolidated. And when you say that, you're either  
24 operating on a single lease or you've consolidated all  
25 these interests. And so when you sign that, you are

1     attesting, in their view, that these interests are  
2     essentially unitized.

3             And so we took comfort in that and removed the  
4     notice and application process for the multiple-unit  
5     situation.

6             MR. STOGNER:  If I may pick up on that, because  
7     we did talk about this, let's say, for instance -- we'll  
8     take state, two state leases, same operator, and they want  
9     to combine with the horizontal.  There again, when it shows  
10    up on a C-102, then yes.

11            And also, when that information is then put on  
12    the ONGARD system, then there's going to be something comes  
13    up that says, Is there a consolidation of this acreage,  
14    either by unitization or communitization?

15            So we felt that there was a mechanism, and so did  
16    the District operators -- or the District Supervisors.  
17    There was something there in that, that would cover that  
18    and, in fact, encourage it also, and would catch it.

19            Does that kind of summarize it a little bit?

20            COMMISSIONER BAILEY:  Where does it show up in  
21    the ONGARD system?  It would just be as an approved C-101?

22            MR. STOGNER:  Well, I understand that is checked,  
23    once it ends up on the C-102 as something that is abnormal,  
24    bigger than what the allowed spacing is, say 40 in this  
25    instance, and when an 80-acre nonstandard proration or a

1 proration unit or project area shows up, that then there's  
2 something that comes out to state leases, some sort of  
3 communitization.

4 COMMISSIONER BAILEY: -- following up on that.  
5 But that's for communitization; units do not normally have  
6 that requirement?

7 MR. STOGNER: Right. We did have a situation --  
8 Merrion, in fact -- and that was one of the reasons I asked  
9 George Sharpe to be on it.

10 They had some projects up in those Entrada  
11 subterranean sand-dune projects, and most of their 40-acre  
12 tracts, or in some cases 160-acre tracts, tracts in this  
13 instance being the normal spacing, were combined by a  
14 cooperative unit agreement, and this included fee land,  
15 Indian land and BLM land.

16 And as long as they were -- "they" being in this  
17 instance the agency and the mineral interest owner, if  
18 there was some sort of a written agreement, we felt it was  
19 satisfactory and could proceed with the project with as  
20 little bureaucratic hassle as possible. We encourage that,  
21 actually, and it seemed to have worked out pretty well.  
22 And from that model, that's where we took this from.

23 COMMISSIONER BAILEY: Well, I think you've -- or  
24 inter-agency cooperation.

25 But one of the problems that I've been looking at

1 is OCD Rule 507 concerning unitized areas where it says  
2 after petition and notice of hearing, the Division may  
3 grant approval of the combining of contiguous developed  
4 proration units into a unitized area.

5 Is this proposed revision going to be in conflict  
6 with Rule 507?

7 MR. STOGNER: We hope not.

8 MR. FOPPIANO: Here again, it's really the same  
9 as the current rule, and we were operating from the current  
10 rule that says you can combine them.

11 But I agree, we did eliminate the notice process  
12 for that combination, and I wasn't sure if the notice  
13 process under Rule 111 actually -- because it never really  
14 stated we're combining -- or want to operate this area as a  
15 unitized area, if that was meant to address that section of  
16 Rule 500 anyway -- of the 500 rules anyway.

17 COMMISSIONER BAILEY: Rule 507.

18 MR. STOGNER: And we didn't -- We weren't  
19 suggesting that it's going to overrule whatever leasing  
20 organization there is out there. I mean, if this situation  
21 was to occur on state lands before they would even begin to  
22 start this process or produce it, there would have to be  
23 some sort of an agreement, through either communitization,  
24 or a unitization, for that matter, through the State Land  
25 Office or the BLM.

1           COMMISSIONER BAILEY: Right, I'm just looking for  
2 potential areas of ambiguity and potential problems that  
3 would arise, just to refine this to the point where we  
4 could eliminate some of those problems.

5           MR. FOPPIANO: That's exactly what we were trying  
6 to get to.

7           One thing that might improve your comfort level  
8 on that, that we kind of take comfort in, is, the process  
9 we're proposing forces all of this stuff through District  
10 Directors, and it also has a process that says if the  
11 District Director is uncomfortable with something that he's  
12 presented, he can boot it up to Santa Fe at his discretion,  
13 his sole discretion, to be set for -- to go through a  
14 notice process and an application process and a hearing  
15 process if that's applicable.

16           So it really kind of empowers the District Office  
17 to go ahead and handle the normal stuff, the mundane  
18 directional and horizontal.

19           But also, if they get an unusual one, which may  
20 involve the combination of multiple units in southeast New  
21 Mexico, it may be that the first couple of those, they do  
22 want to force those through some sort of a process to give  
23 the Commission the opportunity to establish some precedent  
24 in that area, and then their comfort level is improved and  
25 they can approve subsequent applications.

1           So that process gave industry some comfort in  
2   that, yeah, we won't have to force every one of these  
3   through, particularly if we're just doing the same thing  
4   over and over again. But maybe the first couple -- If the  
5   District Director feels uncomfortable with what he's  
6   presented, he has the discretion under our proposed rule to  
7   boot it right up to Santa Fe and force it through an  
8   application and notice process.

9           COMMISSIONER BAILEY: Shall we go on?

10                   CHRISTOPHER WADE HOWARD,  
11   the witness herein, after having been first duly sworn upon  
12   his oath, was examined and testified as follows:

13                           DIRECT EXAMINATION

14   BY MR. CARROLL:

15           Q.   Mr. Howard, will you please state your name, your  
16   employer, and your position with that employer for the  
17   record?

18           A.   My name is Christopher Wade Howard, that's what  
19   the C is for. I'm with Texaco Exploration and Production,  
20   Inc., in Midland, Texas, and I'm currently an advanced  
21   technician with Texaco.

22           Q.   Mr. Howard, would you please give the Commission  
23   a brief history of your educational and professional  
24   background?

25           A.   I have a bachelor's of science degree in



1 communications from west Texas State University in Canyon,  
2 Texas. I've been with Texaco for 18-plus years. I've been  
3 involved with drilling operations since 1983 in some  
4 aspect.

5 I'm currently responsible for coordinating all  
6 the surveying of new drilling locations and all pre-drill  
7 applications, which include 104 applications, 111  
8 applications, federal and state, in New Mexico.

9 Q. Mr. Howard, would you please lead us through the  
10 comparison of the two versions of the rule?

11 A. What we've tried to do here, we've tried putting  
12 some of the parts of the rule side by side to kind of get a  
13 better understanding for what we were trying to do.

14 First is the definition of a project area. Under  
15 the old rule it was just limited to one or more units. And  
16 as we said a while ago, under the new you're going to  
17 designate that project area on your C-102, and it can be  
18 one or more units, and we've added that it can also be a  
19 secondary recovery unit.

20 Definition of "unorthodox". Under the old rule  
21 it really wasn't defined, and there was the 50-foot  
22 allowances for deviated wells only. Under the new rule we  
23 did define it as the -- when producing interval encroaches  
24 on the outer boundary of the project area. And the 50-foot  
25 allowance, we added some language to hopefully clarify

1     that, but it's still for deviated wells only, not  
2     directional or horizontal.

3             Excessive deviation, the old rule, when excessive  
4     deviation requires an operator to submit his maximum  
5     horizontal displacement calculations, it is really unclear  
6     to us what happens next.

7             So we made it very clear under the new rule that  
8     when you provide those calculations, if there's a chance  
9     that your wellbore is off lease, a directional survey will  
10    be required.

11            Talk a little bit more about the 50-foot rule.  
12    Under the old rule the well is unorthodox if the producing  
13    interval is found to be more than 50 foot from approved  
14    location or at a previously approved unorthodox location.

15            Under the new rule, the well is unorthodox if the  
16    producing interval is found to be 50 foot from the approved  
17    location and encroaching on the outer boundary of the  
18    spacing unit.

19            Deviated well approval process, under the old  
20    rule, was a written request with the District Office, give  
21    notice as described in Part C. As Rick said, we deleted  
22    that section. And as he said, after our meeting with the  
23    District Directors we all agreed that we hadn't found any  
24    of these that had been filed, and they agreed that it was  
25    probably unnecessary.

1           CHAIRMAN LEMAY: Just a correction. They may  
2 want to be directors, but currently they're supervisors.

3           THE WITNESS: Excuse me.

4           The directional well approval process.

5           Under the old rule an administrative approval  
6 process was initiated by application and notice under part  
7 D.

8           Under the new rule, if the producing interval is  
9 unorthodox or at a previously approved unorthodox location,  
10 then you simply file your APD with the district supervisor,  
11 district office.

12          The unorthodox location approval process.

13          Under the old rule, the operator files an  
14 application and gives notice under 104. It was a little  
15 bit confusing because the operator also had to give notice,  
16 file application under Rule 111.

17          So under the new rule, if you're unorthodox, the  
18 operator files his application and gives notice under 104.  
19 And in part C(2) it makes it clear that 104 applies if the  
20 producing interval is outside of the producing area.

21          An unplanned orthodox directional well.

22          The old rule really didn't address this type of  
23 situation, but in our meetings we felt that this type of  
24 situation should be addressed in the new rule. And what it  
25 says is that an operator must file application and give

1 notice under Rule 104, and approval of that must be granted  
2 before an allowable will be assigned.

3 And kind of an example what we mean here, this is  
4 our planned horizontal well, our surface here, we're going  
5 to enter the formation here. For some reason -- maybe we  
6 don't monitor our directionals as close as we should, and  
7 if we find that our bottomhole location is out here you're  
8 unorthodox, you have to file for a 104 application before  
9 you can get an allowable.

10 COMMISSIONER WEISS: Let me interrupt at that  
11 point. What is the penalty there? I think that needs to  
12 be addressed, perhaps.

13 THE WITNESS: Penalty?

14 COMMISSIONER WEISS: Yeah, for an unorthodox  
15 location.

16 Mike, do you have a comment?

17 MR. STOGNER: A penalty is not assessed unless an  
18 operator, an offset operator, sends in an opposition and we  
19 have a hearing on it. Then a penalty is -- there again,  
20 you have to -- A penalty can either be based, because  
21 there's no set formula, is it prorated, is it unprorated?  
22 A lot of the past ones have been the percentage it was away  
23 from a legal location and the absolute open flow,  
24 calculations off of the well when it initially produced.

25 So if a well is unorthodox, it doesn't

1 necessarily mean -- in fact, most cases, does not receive a  
2 penalty. Perhaps they got some sort of an agreement or  
3 they're offsetting themselves. But they all have an  
4 opportunity to object.

5 But to be honest with you, very seldom is a  
6 penalty assessed, and only then after notice and hearing,  
7 or if the applicant has made arrangement with a neighbor,  
8 and then they complete it themselves.

9 COMMISSIONER WEISS: So it's not as big a problem  
10 as I envisioned it because it's usually worked out?

11 MR. STOGNER: It's worked out, quite often. I  
12 have filed many, many unorthodox locations. I'm the one  
13 that does those administratively, and also when it comes to  
14 hearing, those are the ones, and we've either -- We've gone  
15 the whole gamut, no, you can't drill, yeah, you can drill,  
16 it's unorthodox but it's not going to harm you, it's not  
17 going to harm your neighbor, so go ahead and do it. Or a  
18 penalty, assessed in many, many ways.

19 COMMISSIONER WEISS: Thank you.

20 THE WITNESS: And the last section is allowables  
21 for multiple units.

22 Under the old rule a project area with one or  
23 more proration units, the maximum allowable is based on the  
24 subject unit and the units that were being encroached upon.

25 And we revised that somewhat by stating that for

1 project areas with one proration unit, the maximum  
2 allowable is based on the units that are developed or  
3 traversed by the well's producing interval.

4 We've got an illustration of what we mean here.

5 Here's your horizontal well, and she's got a 40-  
6 acre pull. You're putting four 40-acres together. This is  
7 where you start your producing interval. You can get four  
8 times the allowable for that well, as long as you can  
9 traverse it or -- that 40.

10 And with that, I'd like to turn it back over to  
11 Mr. Foppiano with OXY to summarize our efforts, unless  
12 there are questions for me, excuse me.

13 CHAIRMAN LEMAY: Just a quick one there, Mr.  
14 Howard.

15 You don't have to perforate the interval crossing  
16 a proration unit that's combined in order to get the  
17 allowable that's -- That's it? You just have to traverse  
18 it?

19 THE WITNESS: Traverse it. I'm not sure about  
20 other operators, but in most horizontal wells, most of ours  
21 are open-hole completions. We're not setting casing  
22 through that horizontal section. We set casing up and then  
23 we kick off, and there's an open-hole horizontal completion  
24 in most cases. So that --

25 CHAIRMAN LEMAY: So it would be open to your

1 wellbore?

2 THE WITNESS: If you penetrate it, it's open,  
3 yes, sir.

4 MR. FOPPIANO: It's too difficult to cement that  
5 casing, haven't figured out how to do that yet.

6 Okay, thank you, Mr. Howard.

7 Just summarize real quick where we are. We took  
8 you through the process, identifying the problems,  
9 solutions and understanding of the current rule and come up  
10 with the rule changes that we proposed here, and -- So, you  
11 know, the \$64,000 question is, well, what's the final  
12 result? You know, what does it do for us?

13 And in our view what this allows is a  
14 clarification of these excessive deviation requirements,  
15 allows for more uniform application crossing industry,  
16 which we always beg for. You know, we want to be treated  
17 the same as everybody else.

18 So clarification and consistency among the  
19 District Offices and when a deviation survey is required  
20 and then what happens when a deviation survey is run is  
21 something that we think will be very beneficial for  
22 everybody.

23 It still treats horizontal wells the same as  
24 directional wells. And our experience in other states --  
25 You know, I've got to tell you, I think the way New Mexico

1 has approached this is actually pretty novel and very good  
2 because there isn't, if you sit back and think about it,  
3 any difference between a horizontal and a directional well.  
4 So we maintain that concept all the way through this.  
5 There's not even a mention of a horizontal well in these  
6 rules, if I recall. It just says it's a directional well.

7 And then we think it empowers the District  
8 Offices through this new permitting process and kind of  
9 relieving Santa Fe of some of the -- what we consider to be  
10 unnecessary and burdensome paperwork, since most of the  
11 situations that are being dealt with today are really  
12 orthodox producing intervals for a directional well or  
13 horizontal well. That is most of them right now.

14 Also we think, you know, clarification of the  
15 ambiguous provisions, of course, ensures consistent  
16 application.

17 And probably most importantly, it's going to  
18 improve everyone's understanding of the regulations in  
19 industry, thereby increasing our compliance with them since  
20 we understand them better.

21 The benefits of changing Rule 111, real quickly,  
22 is an elimination of time and expense on operators and the  
23 Commission by eliminating what we consider to be the  
24 unnecessary process involved with these normal projects.

25 Streamlines the permitting process. These days



1 when we're trying to do more with less, our guys are coming  
2 down to our office and wanting to drill their wells  
3 tomorrow. And so we're trying to look to be as efficient  
4 as possible in getting them from point A to point B to well  
5 spud and well completion, and this allows us to get them  
6 where they can drill their wells a little faster.

7 Now, the team actually went back and did some  
8 validation. One of the first questions that we had was,  
9 Are we creating the need for form revision?

10 We looked at the forms and concluded that all the  
11 application requirements through the APD process, there are  
12 places on the current forms that can capture the  
13 information about projected bottomhole locations, producing  
14 intervals, and, when you're combining more than one  
15 proration unit, outlining your project area.

16 So in our view there didn't need to be any  
17 changes to existing state and federal forms.

18 We also, as Mike mentioned, looked back on a  
19 stack of applications that was about that high that had  
20 been filed under the current rule in the past two years,  
21 and we tested them against the proposed rule. We said,  
22 Okay, let's assume this guy filed this application under  
23 the new rule. How would it fare? And most of them would  
24 have been unnecessary applications, because they dealt with  
25 orthodox bottomhole locations in that particular pool.

1           We also have reviewed the proposed changes with  
2     the BLM, and they're okay with them, have no objections.  
3     And as indicated by one of the exhibits, there is broad  
4     support from industry, we feel, and particularly in  
5     eliminating unnecessary notice requirements. I think the  
6     letters from industry all point to, yeah, let's do  
7     streamline this process.

8           And also, there have been no objections to the  
9     proposed version that has gone out, which contains all  
10    these changes, and it has been out for almost 60 days now.

11           In terms of next steps, where we might go from  
12    here, the team had some ideas they wanted to bounce off the  
13    Commission.

14           Of course, the first would be, can we send this  
15    out -- or a final draft out, the draft before you, for  
16    possible adoption on the next Commission hearing on May  
17    22nd?

18           And another idea we had that we wanted to throw  
19    out on the table, that if there's some portions of this  
20    that, like Commissioner Bailey mentioned, we're not sure  
21    they're clear enough or there are some aspects of it that  
22    we want to try and see and see how this process works and  
23    maybe make some changes after that, the idea of just trying  
24    this and revisiting it automatically and deciding that  
25    ahead of time to revisit this two years from now seemed

1 attractive to us if there's some lack of comfort with  
2 streamlining this regulatory process as we've proposed.

3 And then finally, we felt like based on what  
4 we've done so far, that we would offer the Commission our  
5 services as a work group to continue to solicit feedback  
6 from us on the industry comments, if there are any more  
7 coming in, which there probably won't be. But if you buy  
8 off on the concept that we were trying to get to, which is  
9 streamlining the regulatory process, then it might make  
10 sense to try to get this group to come back with feedback  
11 on suggested changes, if there are any, to make sure that  
12 it fits with the concept and doesn't create some conflicts  
13 there.

14 And of course that's the end of this -- I was  
15 getting a little ambitious with my clip art there.

16 So that concludes our direct presentation and --

17 CHAIRMAN LEMAY: Nice presentation.

18 MR. FOPPIANO: -- we're ready for any more  
19 questions that anyone might have.

20 CHAIRMAN LEMAY: Commissioner Weiss?

21 COMMISSIONER WEISS: No, I don't have any more.  
22 Nice presentation.

23 MR. FOPPIANO: Thank you.

24 MR. HOWARD: Thank you.

25 COMMISSIONER WEISS: I enjoyed it.

1           CHAIRMAN LEMAY: The problem is that your lawyer  
2 didn't have anything to do with the whole thing.

3           MR. FOPPIANO: We're not paying him enough.

4           CHAIRMAN LEMAY: I wouldn't pay him if I were --  
5 Commissioner Bailey?

6           COMMISSIONER BAILEY: On page 28, if an offset  
7 operator complains that there could be excessive deviation,  
8 then the directional survey would be required and the  
9 offset operator would be required to post that \$5000  
10 indemnity bond?

11          MR. FOPPIANO: If I could address this, I  
12 apologize. The comment process that we went through, there  
13 were several comments related to this particular paragraph,  
14 relating to was the bond enough, who should pay for the  
15 survey based on the results? It was a hot button for  
16 industry.

17               And in the last 60 days the work group has met  
18 several times, and the version before you, the red line  
19 version, proposes to strike this paragraph out completely  
20 because, number one, no one's ever used it.

21               Number two, it's a hot button, apparently, and no  
22 one can agree on what it should say.

23               And number three, in our view it really doesn't  
24 take away authority of the Commission to order a  
25 directional survey if someone comes in and complains. In

1 fact, in our view, eliminating that paragraph confers the  
2 discretion upon the Commission to decide if a bond is even  
3 required and, if so, how much, and then who should pay for  
4 it and all -- you know, all those kind of things, based on  
5 a case-by-case basis.

6 So the work group concluded that the best thing  
7 to do is just take that piece of it out.

8 COMMISSIONER BAILEY: If a deviation survey is  
9 not required, how would an offset operator know that there  
10 was a problem?

11 MR. FOPPIANO: Well, a deviation survey is  
12 required, deviation being a report of your angle from the  
13 vertical of your wellbore every 500 foot. That's required  
14 on every well that's drilled, unless you're going to drill  
15 it directionally, and then a directional survey is  
16 required. That's under the current rule, and that's in the  
17 proposed rule.

18 COMMISSIONER BAILEY: Okay --

19 MR. FOPPIANO: But addressing the question about  
20 where is the bottomhole location, most of us out there are  
21 drilling wells in a generally straight direction, so the  
22 presumption that the bottomhole location is the same as the  
23 surface location has kind of been an accepted approach to  
24 this problem, but there have always been some caveats to it  
25 which deal with what happens when your deviation gets

1 excessive and what should we do about it?

2           And that's where we think the five-degree rule  
3 comes into effect. It says if you're getting outside this  
4 five degrees -- in other words, the angle of your wellbore  
5 is more than five degrees in any 500 foot -- that  
6 automatically triggers a requirement that you have to  
7 calculate the theoretical maximum point that that wellbore  
8 could be away from the surface location.

9           And then, if that is off lease, or if that  
10 extends to a portion that's off the lease, as you remember  
11 in the diagram, then that indicates a very slim  
12 possibility, but a possibility, that the wellbore could be  
13 off the lease. That's what triggers the requirement to run  
14 the directional survey. And then, of course, you know  
15 where the bottomhole location is.

16           And that's -- That seemed to be the most commonly  
17 accepted approach in other states, and we thought it was  
18 probably applicable here.

19           The other problem is that operators really don't  
20 want to run directional surveys on straight-hole wells  
21 unless they absolutely have to. They're expensive, they're  
22 time-consuming, and it's just -- you know, we feel like  
23 everybody's operating on the straight-hole rules with the  
24 same advantage, disadvantage.

25           And as Bill mentioned, if they want to pull it

1 away to the bit and try to walk it up an anticline or  
2 through the top or whatever, they are going to go over  
3 their five degrees. And so they're probably -- They're  
4 going to trigger the requirements there.

5 CHAIRMAN LEMAY: Not the last trip they make  
6 before they get into the pay.

7 MS. WILLIAMS: And I'd like to say that -- I  
8 mean, all the surveys are filed with your completion  
9 reports, so all of that is public information that any  
10 operator could go check if they had any questions on it.

11 COMMISSIONER BAILEY: Good, thank you.

12 CHAIRMAN LEMAY: Just one quick one. I --  
13 Administrative approval will also be granted under these  
14 new sets of rules for drain holes; is that covered at all?

15 MR. FOPPIANO: Drain hole, are you talking about  
16 a horizontal?

17 CHAIRMAN LEMAY: Well, for a number of  
18 horizontals, like -- I know we had some applications  
19 where -- Mike, maybe you could help on this one -- where  
20 they went in there and they took three or four drain holes  
21 off the same vertical. And that would be, maybe, a  
22 separate circumstance that wouldn't be covered by these.

23 MR. STOGNER: Interesting on that because, yeah,  
24 I -- actually before I came here I did a couple of those.

25 The way we envision that, we did discuss this,

1     that's, of course, the short radius --

2             CHAIRMAN LEMAY:   Short radius.

3             MR. STOGNER:   -- horizontal draining holes, and  
4     there are numbers of them.   Think of it as a root system.

5             CHAIRMAN LEMAY:   Right.

6             MR. STOGNER:   Or root system, I should say.

7             That would pull -- And this would be general  
8     enough that we could do that.   If, let's say, you're in the  
9     center of the 40-acre proration unit and the wells were  
10    going to -- or the holes, the extent of the holes, were  
11    going to be within the proposed standard setback  
12    requirements, if they extend that or they believe they're  
13    going to extend that, then they can get an unorthodox  
14    location.

15            Now, let's say that one of the Districts, maybe  
16    something special with this particular application that  
17    that supervisor feels uneasy with.   We've put in a portion  
18    within our rules that would allow them to come to the Santa  
19    Fe office for an administrative procedure to address those  
20    questions, and perhaps help them into setting up something,  
21    does this look like something that's going to be done in  
22    this particular pool?   Is it going to kick off very well?  
23    So...

24            And I encourage them.   Let's go up here, let's  
25    take a look at your special applications in this particular



1 area. And then we can either do that here administratively  
2 -- and then we can say, Let's notify these offsets if  
3 something's wrong, or let's notify some affected party that  
4 we see fit.

5 Now, let's say -- and we can even have it go to  
6 hearing. That would then help the supervisor say, Well, we  
7 had this application, we had it go administrative, we  
8 notified all offsets, the first two, nobody had a problem  
9 with it. Does this make you feel more comfortable? And  
10 then perhaps go on out.

11 We feel that the rules are general enough to  
12 allow for that and, in fact, encourage it. But yet it  
13 would still -- That hole would be considered a hole and  
14 would then be affected by all the requirements here, herein  
15 -- in the application.

16 It was one of those things that, also, in that  
17 particular aspect, we don't regulate fractures. I even  
18 told somebody one time, why don't you go to some other  
19 state in the south and just say you're going to do some  
20 sort of a fracturing mechanism with a drill bit, and maybe  
21 they'll buy it, where you don't have to, but don't try it  
22 here. And...

23 But we feel that the rules the way we've got them  
24 would address that issue.

25 CHAIRMAN LEMAY: Okay, Rick?

1           MR. FOPPIANO: I need to add one more thing to  
2 make sure the record is clear.

3           If I could direct your attention to page 7 of the  
4 proposed changes, with the red lines on them -- I'm not  
5 sure what exhibit that is.

6           MR. STOGNER: 2A.

7           MR. FOPPIANO: 2A? I wanted to just briefly  
8 touch on a couple of additional changes that the work group  
9 is suggesting that resulted from comments from industry and  
10 the OCD.

11           I think right there you'll see under D.1 -- D.1  
12 is eliminated, or it's struck through. That's the point I  
13 was -- when I was addressing Commissioner Bailey's question  
14 about what is this section, you know, I said we recommend  
15 that it be struck out.

16           New paragraph (1) has some language in there that  
17 says the directional surveys shall have the shot points  
18 less than 200 feet apart and shall be run by competent  
19 surveying companies that are approved by the Division  
20 Director.

21           The reason why that was suggested -- it was  
22 suggested by another company and the work group didn't have  
23 any objection to it -- is, it became apparent through our  
24 research that there are old and obsolete tools that can be  
25 used to run directional surveys.

1           It is also a very technical science, in terms of  
2     calculating the departure and applying corrections, making  
3     sure the instruments are calibrated. In short, there's a  
4     lot of expertise involved in running a directional survey.

5           And so the suggestion was, let's make sure that  
6     operators know they have to use competent surveying  
7     companies.

8           And the minimum shot spacing, 200 foot -- I  
9     understand generally what is used is 100 foot. It's like  
10    you pull a stand of drill pipe, and then you'll take a  
11    picture on your multi-shot tool. So two stands of drill  
12    pipe is about 200 feet. So, you know, that's not -- having  
13    that as a minimum spacing pretty much covers everything  
14    that's going on now.

15          But it does say, just like deviation tests, for  
16    accuracy's sake it's got to be at least every 200 foot.  
17    Because if it's every 500 foot, the directional survey is  
18    less accurate.

19          And so the intent there was, based on comments  
20    from industry, was to put some language in there addressing  
21    the quality of the directional surveying company that  
22    you're using. And that might not be, you know, acceptable  
23    to the Commission to approve -- require that these survey  
24    companies be approved.

25          But it is a practice in an adjoining state, and

1 it has worked real well. And the idea there is, well, if  
2 these companies are approved in other states, you might  
3 just reciprocate so it wouldn't be a big problem.

4 So that was the intent there, was to try to  
5 specify some -- get our arms around, really, some minimum  
6 accuracy standards.

7 And then new paragraph (2) there, the language  
8 where it has a new process in there, is the process where  
9 the District Director -- or, excuse me, District  
10 Supervisor, can throw an application up to Santa Fe, and  
11 the contents of the application, the notice that will be  
12 required, all will be determined by the Division based on  
13 the circumstances presented to them. And we thought that  
14 was a very reasonable conclusion, just deal with it on a  
15 case-by-case basis.

16 That's all I've got.

17 CHAIRMAN LEMAY: Okay, does that --

18 MR. FOPPIANO: That concludes --

19 CHAIRMAN LEMAY: -- conclude your presentation?

20 Your -- Frank, do you have something?

21 MR. CHAVEZ: I just have a question, if you're  
22 ready, when you're ready.

23 CHAIRMAN LEMAY: Yeah, please, go ahead.

24 MR. CHAVEZ: Frank Chavez, OCD Aztec.

25 First of all, I do want to thank the study

1 Committee for promoting us to supervisors.

2 CHAIRMAN LEMAY: Yeah, I thought that was neat  
3 too.

4 MR. CHAVEZ: I have a question for Mr. Foppiano,  
5 just to clarify an issue on the C-102 filed.

6 Under the proposed rule, the operator is still  
7 responsible for consolidating the acreage through force  
8 pooling or unitization. Prior to -- And you show that on  
9 the C-102; isn't that correct?

10 MR. FOPPIANO: That's our understanding, yes.

11 MR. CHAVEZ: So that --

12 MR. FOPPIANO: You described it better than I  
13 did.

14 MR. CHAVEZ: Okay. So that obligation, that  
15 burden, is still on the operator. And all that the C-102  
16 does is, for the purposes of OCD administration, show the  
17 acreage is dedicated and certifies that the acreage is in  
18 some way consolidated?

19 MS. WILLIAMS: Yes.

20 MR. FOPPIANO: That's our understanding, yes.

21 MR. CHAVEZ: Okay. And as far as deleting the  
22 portion where an offset operator could request a survey,  
23 you're saying basically that the mechanism is already  
24 available through the hearing process for an operator who  
25 feels that their correlative rights may be violated by a

1 well and they could use the hearing process, then, to get  
2 some type of relief or request it?

3 MR. FOPPIANO: Yes, in both sections relating to  
4 deviated wells and directional wells, there's general  
5 language which says the Division Director can order a  
6 directional survey, for whatever reason.

7 And I guess if I was going to complain, my vision  
8 would be that that's where I would come to the Division and  
9 say under the terms of Rule 111 and those -- You have that  
10 discretion, here are the reasons why we believe you should  
11 order a survey, and basically present my evidence and facts  
12 and let that issue -- let all the issues related to that  
13 complaint be decided either informally through the parties  
14 or through a contested hearing or whatever.

15 But I guess we feel like there's plenty of  
16 discretionary rule language in both sections to deal with  
17 that situation.

18 MR. CHAVEZ: Okay, that's all I have.

19 CHAIRMAN LEMAY: Thanks, Frank.

20 Any other questions, maybe at the panel here?

21 Bill, Jami?

22 COMMISSIONER BAILEY: I have a question for Lyn.  
23 If you could check to see potential problems, discrepancies  
24 between Rule 507 and the elimination of hearing. Thank  
25 you.

1           CHAIRMAN LEMAY: Okay. I think Mr. Cate had a  
2 statement or -- from Enron or --

3                   RANDALL S. CATE,  
4 the witness herein, after having been first duly sworn upon  
5 his oath, testified as follows:

6                   DIRECT TESTIMONY

7 BY MR. CATE: Yes, I do. Thanks.

8           I also have -- We're going to propose some  
9 language. And I apologize, we weren't able to get it to  
10 the industry Committee in time for them to really digest it  
11 and adopt it, and we're hoping that they've got their  
12 copies now and maybe this could -- if the Commission and  
13 the Division would -- likes the idea of this proposal, that  
14 it could be incorporated into these rules.

15           Number one, we have a letter here that does  
16 support -- showing that Enron does support the efforts of  
17 the industry Committee and the proposed rule changes to  
18 Rule 111 and that if the Commission chooses to adopt as  
19 you've seen presented here today, that Enron does support  
20 that. And we think that it does go a long way to simplify  
21 and eliminate unnecessary requirements of both NMOCD and  
22 the industry and yet does protect correlative rights and  
23 prevent waste.

24           We do have one recommendation that I would like  
25 to take a short amount of time to get into very quickly,

1 and it's concerning the specific incidence of utilizing and  
2 existing an existing wellbore for the purpose of a  
3 directional drilling, and we didn't -- We think that this  
4 is going to occur quite frequently.

5 And actually, Commissioner Bailey has been  
6 hitting on this subject, that the problem that we see that  
7 could happen is one of a regulatory burden, and that is,  
8 you do not know exactly where your bottomhole location is  
9 until you do run a directional survey.

10 Your deviation surveys that you are required to  
11 run for a vertical or deviated hole tell us the cumulative  
12 displacement. And we believe that we will be re-entering  
13 and using a lot of these wellbores, because the first thing  
14 you'd have to do if you're going to kick it off and make a  
15 directional or horizontal wellbore is to find out where  
16 that bottomhole location is so that you can properly pick  
17 your kickoff point.

18 So now I run the survey, I find out -- if you  
19 look at this little drawing here, and if you'll consider  
20 this interior rectangle as a minimum setback, well, you can  
21 see that 75 percent of the time I'm probably going to be  
22 unorthodox. It might only be three, four, ten feet, who  
23 knows?

24 But just assuming that a -- And a well will  
25 generally, when it drills, it corkscrews, it does this,



1 unless you're on a shelf-margin area, then you might  
2 actually have to get in there and try to fix that. But --  
3 You can put bottomhole assemblies and all.

4 But for these certain instances of wells that the  
5 surface location is drilled on a minimum setback, we  
6 believe that chances are, 75 percent of the time you'll  
7 find that you are unorthodox in some and hopefully small  
8 measured displacement. And down here, this producing area  
9 is what we call an orthodox area.

10 And to encourage the use, or perhaps not  
11 discourage and penalize an operator for wanting to use a  
12 wellbore that already exists, we would ask that the  
13 Commission consider some leniency or tolerance, as long as  
14 the operation has proven that you're heading back to your  
15 orthodox producing area, and you're doing it within a  
16 specified area.

17 Now, the reason we came up with 100 feet, it is  
18 somewhat arbitrary, although in our experience when you  
19 take cumulative displacements -- and generally they will  
20 increase, the deeper you go, because you've got more hole  
21 and so on, more subsequent potential for a higher  
22 displacement calculation. But...

23 We chose 100 feet as somewhat arbitrary, but we  
24 have seen that most of the wells should fall within a 100-  
25 foot radius of the surface location, unless there was a

1 major problem. And in that case, they should have run the  
2 directional survey.

3 Chances are, this well has already been produced,  
4 where it bottomholed in the producing interval, it's  
5 already been producing, it's considered an orthodox  
6 wellbore.

7 And so what we're asking is that some leniency or  
8 tolerance be given to this type of situation to allow the  
9 operator to utilize the wellbore, re-enter and kick it off.

10 Now, when a well has casing in it, it's produced  
11 out of the interval of interest, then you are limited to  
12 what you can do as far as -- you can't re-run another  
13 string of casing. If you've got 4-1/2- or 5-1/2-inch,  
14 that's pretty much it. You're confined to what we call a  
15 short-radius turn to make your directional hole and then  
16 kick your lateral off. Okay?

17 And the reason that you can't go way above it,  
18 because if you don't get another string of casing to set,  
19 is, you might be up in shale, it will slough in. You  
20 highly increase the chance of losing your hole.

21 So again, this will encourage, particularly wells  
22 that have casing run, that we can utilize these wellbores  
23 and not suffer a potential penalty or delays of up to, you  
24 know, six months, if the offset wants to just drag out the  
25 regulatory process.

1           We ran -- if you'll look at this page -- the  
2 subsequent page is -- we -- Everybody that drills  
3 horizontal wells has these programs that calculate your  
4 azimuths, you can put in any basic wellbore plan that you  
5 desire. And what it does, it tells you, it warns you of  
6 the potential problems.

7           The example that we're using here is a 5000-well  
8 TD, and now we want to drill a horizontal later. We found  
9 ourselves, after running our directional survey, 100 feet  
10 out, which is probably the most we're going to see.

11           And so at that point, if we don't have this  
12 leniency, we basically have to shut down our entire  
13 operation. You cannot really plan for -- to go ahead and  
14 get your rig in there with your tools and all, because one  
15 foot out, which will be 75 percent of the time, is  
16 unorthodox, and now we've got to go through this whole  
17 process.

18           So it would be a tremendous aid to go ahead and  
19 allow us, as long as we know that we have -- we are going  
20 to penetrate the producing interval, albeit unorthodox,  
21 closer than the girth of the well was in the first place,  
22 and correct the problem back to the orthodox producing area  
23 within a mechanically tolerable area here. And what that  
24 would be is approximately 600 feet in this example.

25           And what we did was a short-radius turn here.

1 And if you look at the number, the bold number under "dog  
2 leg" at the bottom of the page, it's five degrees. That is  
3 the maximum recommended dogleg tolerance when you need to  
4 drill a horizontal lateral.

5 And really, even a vertical well. If you had  
6 more than five degrees, then you are putting yourself at  
7 risk of not achieving the total distance, because now  
8 you're crimping the well, the tools, the drilling collars,  
9 anything that has to go down through there, you've created  
10 a crimp. So you've got to make these on a relatively  
11 smooth curve and stay below the five-degree dogleg.

12 And that's what this example shows you, and  
13 that's why we patterned it after this example. And again,  
14 we are simply concerned with, as long as the horizontal or  
15 directional lateral penetrates the producing interval  
16 within 100 feet, comes back within the producing area with  
17 600 feet of measured depth, and then the remainder of the  
18 lateral stays within the orthodox or producing area, we  
19 would ask that that be considered, for all practical  
20 purposes, as an orthodox wellbore.

21 The benefits -- again, it conserves resources  
22 by -- and encourages the use of existing wellbores. We  
23 believe there's going to be a lot of these cases. Again,  
24 it will eliminate a two-to-six-month regulatory  
25 interruption possibility of the drilling operations, due to

1 the fact that 75 percent of the time you're probably going  
2 to be several feet out of -- or up to a hundred, maybe.

3 And then again, the portion of the lateral that  
4 is outside the producing are, in all likelihood, would have  
5 been entirely within a drainage area of that vertical well,  
6 and so there really is not correlative rights issue as we  
7 see it. And that really is our recommendation. The  
8 language that we -- as you can see, would be 111.C.(5),  
9 which is an additional paragraph. We are by no means --  
10 have pride of ownership on this. If you want to put it  
11 back to the Committee to write it better, by all means, or  
12 if the Division can come up with better language.

13 But this is the general idea that we're trying to  
14 put across, and we believe that language of this type would  
15 help satisfy what we believe would be a fairly frequent  
16 occurrence.

17 If you have any questions.

18 CHAIRMAN LEMAY: Well, I'd like to first turn it  
19 over to the work group and have their comments on this.

20 MR. FOPPIANO: Chairman LeMay, I think I speak  
21 for the work group. We really have not had a chance to go  
22 through this and talk about it as a group, so at this point  
23 we really don't have any reaction to the proposal, as a  
24 group.

25 CHAIRMAN LEMAY: Yeah. It's a shame you couldn't

1 have come up with this in a very timely manner, because --

2 MR. FOPPIANO: They tried --

3 CHAIRMAN LEMAY: -- you know, I --

4 MR. FOPPIANO: -- believe me.

5 CHAIRMAN LEMAY: Yeah, our process is such, we  
6 try and encourage this kind of input at the proper time,  
7 which naturally -- when the group is formed and throughout  
8 the --

9 MR. CATE: Yes. It's a fairly new -- for Enron.  
10 We have done a few wells in Texas now. We're getting up  
11 the learning curve. We did respond to Michael Stogner's  
12 invitation on the memorandum that came out. And so it took  
13 us a little time to get up the learning curve and fully  
14 understand all of the rules.

15 And so this was one of these considerations that  
16 we found ourselves wanting to put forth. And I am sorry  
17 that it wasn't on time. I wish it could have been, so...

18 CHAIRMAN LEMAY: Your intent was to present this  
19 here for consideration. You mentioned something about next  
20 month. What was your time schedule for consideration by  
21 the Commission, I guess?

22 MR. FOPPIANO: Actually, I think several of us  
23 have applications we have on our desk, so the -- We, of  
24 course, would like, if the Division, or the Commission,  
25 doesn't have any problems with what we've proposed,

1 certainly industry supports it, and we would like to move  
2 ahead with it as quickly as possible. And, you know, that  
3 would be our preference.

4 And particularly if the version before you was  
5 acceptable -- And Enron's suggestion, I think the language  
6 they have presented, if the Commission felt like that was  
7 reasonable, could actually just be added in as another  
8 paragraph, that wouldn't be any problem at all, and still,  
9 you know, be ready for adoption in May.

10 CHAIRMAN LEMAY: If we left the record open for  
11 ten days, could you submit a comment as a group on Enron's  
12 recommendation?

13 MR. FOPPIANO: I believe we could do that.

14 CHAIRMAN LEMAY: Because I guess -- It's hitting  
15 you cold. Is this the first time you've seen it today,  
16 when they --

17 MS. WILLIAMS: Yes.

18 CHAIRMAN LEMAY: -- came up with it? Okay, we'll  
19 give you some digestion time. We'll leave the record open  
20 ten days for comments on that. I think, since it's your  
21 product, it would help to have your comments on a new  
22 proposal.

23 Yes, sir, Mr. Stogner?

24 MR. STOGNER: Mr. Chairman, in light of what Mr.  
25 Foppiano's -- wishing not to ask any questions, I'm going

1 to put another hat on --

2 CHAIRMAN LEMAY: Sure.

3 MR. STOGNER: -- as a regulatory representative.

4 This particular example that you show, was the  
5 surface location at a standard location, as shown within --  
6 what, the -- just barely the corner tolerance?

7 MR. CATE: Yes, we're saying it was drilled at  
8 the minimum setback, right at that corner tolerance, yes.

9 MR. STOGNER: Okay. Now, was this a well in New  
10 Mexico or Texas, or where --

11 MR. CATE: No, this is one of the -- hypothetical  
12 example. But I know Enron, most operators, possibly not in  
13 units or projects, but we tend to drill the minimum setback  
14 that's required. That's a fairly frequent -- I think  
15 that's common practice, and that's why we're showing this  
16 as an example.

17 MR. STOGNER: Okay, let's take a look at your  
18 example here, and let's put you on the other side of that  
19 horizontal line and put me on this side. And this  
20 situation occurred. You would feel comfortable if you had  
21 some wells over there that were producing their allowable  
22 and I had a well that I knew was 100 feet closer to you,  
23 you would not want to know that? Enron would not want to  
24 know that?

25 MR. CATE: Well, I think we believe that 100 feet



1 is probably the maximum that we're going to find, when you  
2 finally do go in these vertical --

3 MR. STOGNER: I didn't ask that. Would you be  
4 comfortable with it --

5 MR. CATE: I think so.

6 MR. STOGNER: -- if somebody was 100 foot closer  
7 to you?

8 MR. CATE: Yes, yes. We have worked through  
9 that, we believe we have -- Number one, they are not going  
10 to get any -- this example would not have a higher -- you  
11 mentioned that this -- We're producing top-allowable wells,  
12 and in this example they will not get the competitive  
13 advantage by being able to produce at a higher allowable.  
14 They will have to penetrate the next spacing unit over in  
15 order to be able to qualify for a higher allowable on a  
16 single well versus our well.

17 Hopefully we would either respond with the same  
18 type of situation and drill a horizontal lateral that is  
19 along the minimum setback. Again, we anticipated in a lot  
20 of these cases, that well will have been produced from this  
21 interval as a vertical wellbore.

22 And now to come back and head toward a more  
23 orthodox location, we just -- we don't see a change or an  
24 effect or an advantage on correlative rights.

25 MR. STOGNER: Okay, in your situation that you

1 talked about, that you recognize.

2 But how about if that's not the case in all  
3 instances? Maybe somebody wants to come in and drill a  
4 horizontal wildcat. It has been done.

5 MR. CATE: Yes. But generally, you know from the  
6 surface to the end of the well where you're at. There's  
7 really no -- I mean, you're in control of that wellbore and  
8 where you guide it through the use of directional surveys  
9 from surface to the terminus.

10 And again, what we're saying is, to encourage the  
11 use of existing wellbores that don't know exactly where  
12 they're at. Otherwise, we feel most of the existing  
13 wellbores will fall unorthodox, and we'll all be coming in  
14 to the Commission, possibly, quite frequently.

15 MR. STOGNER: Well, isn't this a requirement now,  
16 that you'd have to get an unorthodox location request?

17 MR. CATE: This one is. Had it been within 50  
18 foot, it would not have been.

19 But again, this is with the intent to  
20 directionally drill, and that will require -- So you're  
21 right, the rules as proposed would have said anything  
22 outside the producing area is considered unorthodox.

23 But we don't believe that a situation like this,  
24 that the potential for correlative rights impairment or  
25 infringement is very, very negligible compared to the

1 benefits of being able to utilize existing wellbores.

2 MR. STOGNER: Of course I get a freedom here of  
3 not only asking questions here but also offering --

4 CHAIRMAN LEMAY: You can answer your own  
5 questions.

6 MR. STOGNER: When I put this group together,  
7 this is one of the things we wanted to show everybody, is  
8 that whatever example you come up with, I guarantee you  
9 there's about a hundred other variances. And of course, to  
10 meet everything.

11 This particular item, in which is suggested as a  
12 regulatory person who has to abide by the rules and  
13 regulations, protect correlative rights, I'm going to  
14 suggest and probably go to the recommendation of the  
15 Committee that we might adopt it, this is just too much of  
16 a leeway for the correlative rights issue, without giving  
17 notification.

18 It's not that big of a deal to get an unorthodox  
19 location, even in the horizontal applications that we have  
20 had.

21 I say, Well, what kind of window do you want? Do  
22 you want the standard window or do you want to get away  
23 from it and get something else? I've even authorized some  
24 ten feet from the line, administratively, and which Mr.  
25 LeMay has signed, there again, giving everybody the

1 opportunity.

2 We are encouraging the use of existing wells, and  
3 I believe our 104 applications allow for that. There's  
4 just -- if we start giving the leeway on something like  
5 this, on correlative rights, it could lead to something  
6 else.

7 And somebody does have a potential to come in and  
8 say, You weren't protecting my correlative rights by  
9 allowing this 100-foot variance.

10 At least that's my recommendation. There again,  
11 I'm sure since the Committee will have an opportunity to  
12 voice its concern, that is just my opinion and my opinion  
13 alone at this point.

14 Thank you.

15 CHAIRMAN LEMAY: Okay. Well, we like to have  
16 that kind of input.

17 Obviously, you know, the problem with this is,  
18 there hasn't been a lot of opportunity for other people to  
19 comment on your proposal. That's a big disadvantage of it.  
20 We could have put it out, you know, in draft form for other  
21 comments, had we known what was coming. But in the absence  
22 of that, I think you raised --

23 Let me raise one more point with your  
24 recommendation. You're using the word "penetration point".  
25 So if you're going to penetrate the formation within 100

1 feet of what would be the orthodox window, you're saying  
2 allow that, as long as you're going the right direction; is  
3 that right?

4 MR. CATE: Yes, sir.

5 CHAIRMAN LEMAY: What about, rather than  
6 "penetration point", how about "producing interval"? Would  
7 you have to perforate that portion of the penetration  
8 between where you perforate -- or -- There again, you're  
9 probably speaking open hole, so maybe I'm -- If this is  
10 open hole, you don't have that kind of leeway.

11 MR. CATE: I think that -- Maybe I misunderstood.  
12 The definition, I think, of "penetration point" is the  
13 point at which it penetrates the top of the pool --

14 CHAIRMAN LEMAY: Yes.

15 MR. CATE: -- in which it is intended. I guess I  
16 took that as kind of equivalent to the producing interval.

17 CHAIRMAN LEMAY: Well, it could be in terms -- I  
18 just found out here that most of those intervals is open  
19 hole, so it would be.

20 If you're running casing in that deviated  
21 wellbore, then you could control where you perforated, you  
22 could be orthodox as far as your perforations go. That was  
23 my point.

24 MR. CATE: We -- Again, we appreciate the ten  
25 days to hear what the Committee would have to say. And

1 again, Enron will support these rules without this change.  
2 We do support adopting them as proposed by the Committee  
3 today.

4 CHAIRMAN LEMAY: Commissioner Weiss had  
5 something.

6 COMMISSIONER WEISS: Yeah, if I understand you  
7 right, what you're looking for is a grandfather clause for  
8 unorthodox wells that nobody knew about.

9 MR. CATE: Basically, I think that's right.

10 COMMISSIONER WEISS: And you don't generally  
11 drill a horizontal lateral or anything until it's depleted,  
12 right?

13 MR. CATE: Not true. Now, a lot of instances, we  
14 are finding we drilled, let's just say, a carbonate well at  
15 10,000 feet, and the well's only capable -- we put acid on  
16 it, we've encountered 50 foot of tight rock, it's only  
17 capable of 200 MCF a day.

18 Well, the horizontal is going to be a great way  
19 to now encounter more reservoir and make an economic well  
20 out of something that wasn't.

21 COMMISSIONER WEISS: Well, how long is your  
22 example here? How long has that well been vertical,  
23 producing, has your vertical well -- Is that years, months?  
24 In my mind --

25 MR. CATE: I'm not sure, maybe just since the

1 completion paper's been filed, or it was dryholed possibly,  
2 just --

3 COMMISSIONER WEISS: Uh-huh. Yeah, I wasn't  
4 thinking that way, okay.

5 MR. CATE: Because again, the intent of drilling  
6 a vertical well is not to spot a certain direction; the  
7 intent of a directional well is. And that's why we were  
8 asking for some leniencies on using these wellbores. And  
9 once we find out, I think we'll see that most of them are  
10 slightly unorthodox.

11 COMMISSIONER WEISS: Well, if they're new, that  
12 might provide incentives not to crowd the lease line so  
13 much, huh?

14 MR. CATE: We already tried.

15 COMMISSIONER WEISS: Thank you.

16 MR. CATE: Thank you.

17 COMMISSIONER WEISS: I wasn't clear about that.

18 CHAIRMAN LEMAY: Anyone else have anything?

19 Okay, let's -- We'll leave the record open for  
20 ten days for comments. And as far as the working group,  
21 you don't have to be unanimous on your comments.

22 We recognize that -- we're not saying -- I mean,  
23 the Commission will make the final decision, but you all  
24 put a lot of work and deserve a lot of credit for a fine  
25 job, and therefore we definitely want to have your input as

1 to the final rules, collectively agreeing or disagreeing  
2 with reasons why you do either.

3 MR. FOPPIANO: Well, we decided early on we would  
4 only proceed with consensus, agreement on -- because  
5 actually OXY had an idea for something that was a little  
6 more radical and it didn't fly past Texaco, so...

7 But we agreed early on that we would only present  
8 a consensus view, and if individual companies, if we wanted  
9 to carve out and -- you know, like Enron or others and say,  
10 Here's some suggested revisions, then we would do that  
11 individually.

12 But as a group we only moved forward on  
13 consensus.

14 CHAIRMAN LEMAY: Well, but it's kind of out of  
15 your hands now. I don't mean to be critical in that  
16 comment, but since we're the considering -- we'll  
17 consider it now --

18 MR. FOPPIANO: Right.

19 CHAIRMAN LEMAY: -- it will help us, if you do  
20 have a divergent view, to have both of those arguments  
21 presented to us.

22 So you don't have to just present your unanimous  
23 vote on it, so to speak.

24 MR. FOPPIANO: Okay.

25 CHAIRMAN LEMAY: We're looking for the reasons



1 for acceptance or rejection of the Enron proposal.

2 So we appreciate that.

3 Anything else?

4 If not, we'll take the case under advisement.

5 Thank you very much.

6 MS. WILLIAMS: Thank you.

7 MR. FOPPIANO: Thank you.

8 MR. HOWARD: Thank you.

9 (Thereupon, these proceedings were concluded at  
10 12:53 p.m.)

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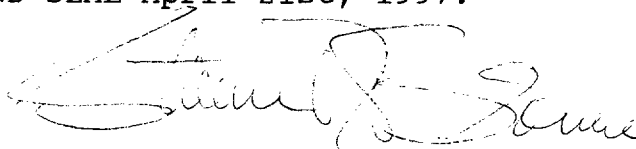
## CERTIFICATE OF REPORTER

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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 April 21st, 1997.

  
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STEVEN T. BRENNER  
CCR No. 7

My commission expires: October 14, 1998